

**SB**

**1**

<TARGET><BILL>SB 1</BILL><SUBJECT>SB  
1</SUBJECT><COMM>HJUD29</COMM></TARGET>

# Senator Peter A. Micciche

*Alaska State Legislature*

SESSION ADDRESS:

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To: Rep. Gabrielle LeDoux  
Chair, House Judiciary Committee

From: Senator Peter Micciche

A handwritten signature in blue ink that reads "A. Micciche".

Date: April 4, 2016

Re: SB 1 - Request for Hearing

I respectfully request a hearing for CSSSB 1(FIN) *An Act prohibiting smoking in certain places; relating to education on the smoking prohibition; and providing for an effective date.* Thank you.

Staff contact – Chuck Kopp (907)465-2828

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Revised March 18, 2016

## **CS SSSB 1(FIN) Sponsor Statement**

### *Regulation of smoking*

CS SSSB 1(FIN) seeks to safeguard working Alaskans and their children from the adverse health effects of secondhand smoke by providing a statewide smoke-free workplace law for businesses and public places. As a conservative Alaskan, I actively support a philosophy that works to limit the role of government in our daily lives. I process each legislative decision through a litmus test of whether the result falls under an appropriate role of government. In this case, we believe that both the right to breathe smoke-free air and the significant, documented public health risks of second hand smoke exposure compel us to view the protection of Alaska's labor force and their families as an appropriate governmental responsibility. Similar comparisons include the government role in establishing speed limits, seat belt laws, motor vehicle design safety improvements, electrical codes, pipeline safety laws and agency responsibilities ensuring industrial employee safety regulations. As judicial philosopher Zechariah Chafee said in the Harvard Law Review in 1919, "Your right to swing your arm ends just where the other man's nose begins". CS SSSB 1(FIN) helps to protect the rights of Alaskans who choose not to smoke.

Current law prohibits smoking in the workplace in many areas of the state, as well as in healthcare facilities, schools, childcare facilities and public meeting rooms in government buildings. Over one-half of the population of Alaska including those in Bethel, Anchorage, Juneau, Barrow, Dillingham, Haines, Skagway, Petersburg, Klawock, Nome, Unalaska, and Palmer are currently living under smoke-free laws similar to CS SSSB 1(FIN). These laws are well established and strongly supported by citizens and businesses. For Alaskans residing in the remaining areas of the state, CS SSSB 1(FIN) offers a uniformly applied safeguard from second hand smoke that is currently not available.

CS SSSB 1(FIN) does not prohibit outdoor smoking, except within certain areas near building entrances/exits, air intakes, and other specifically designated public gathering places and smoke-free campuses as defined in statute. The bill does not legislate hiring or employment of smokers or non-smokers. Local governments with adequate jurisdiction retain the authority to adopt more restrictive local provisions than the statewide law (e.g., provisions specific to local public gathering places or events). Free-standing tobacco and e-cigarette shops are excluded from the bill.

Why is a conservative willing to take on this issue? The reason is simply to protect the rights of the non-smoker to breathe clean air, save lives and reduce the staggering health costs of secondhand exposure to tobacco use. The 2012 Alaska Division of Public Health report, *Alaska Tobacco Facts*, found more Alaskans die annually from the direct effects of tobacco use than from suicide, motor vehicle crashes, chronic liver disease and cirrhosis, homicide, and HIV/AIDS combined.

The annual economic loss to Alaskans because of secondhand smoke is estimated to be in the millions of dollars, with an estimated 60 lives lost each year. Nationally, exposure to secondhand smoke kills more than 41,000 adult non-smokers from coronary heart disease and lung cancer each year. This is more than 4 times the number of DUI fatalities each year in America.

Many Alaskan families, including mine, continue to be adversely affected. My children prematurely lost their grandfather and I lost my father in November of 2013. My siblings suffer from the early childhood effects of secondhand smoke.

CS SSSB 1(FIN) does not remove the right of the smoker to choose to smoke. Rather, it limits a smoker's ability to adversely affect the health of Alaska's non-smoking employees and citizens. In other words, the bill simply asks smokers to "take it outside" in an effort to protect Alaskan employees.

More than eight hundred Alaskan businesses and organizations representing all regions of the state have already signed on in support of a statewide smoke-free workplace law. Through CS SSSB 1(FIN), we believe it is time to have this discussion. I urge fellow members to join me in protecting the health of innocent, non-smoking Alaskans by supporting this bill.

Staff Contact: Chuck Kopp (907)465-3792

# Senator Peter A. Micciche

Alaska State Legislature

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## CS SSSB 1(FIN) SECTION ANALYSIS

### Version "U"

**Section 1** creates new Article 4, *Prohibition of Smoking in Certain Places*, within AS 18.35 describing where smoking is prohibited or regulated.

#### 18.35.301 Prohibition of Smoking

**Page 1, lines 6 -14 & page 2, lines 1-3: (a)** prohibits smoking in enclosed areas in public places, including enclosed areas at an entertainment venue or sports arena; in vehicles used for public transportation; at public transportation facilities and depots; at a retail store or shopping center; at places of public assembly on property owned by the state or other unit of local government.

**Page 2, lines 4 - 17: (b)** prohibits smoking in certain enclosed areas: office buildings, hotels, motels, restaurants, bars, retail stores or common areas in apartment and multiple family dwellings, a place of employment, a building or residence used to provide paid childcare, at healthcare facilities, in a vehicle that is a place of employment, at a public or private educational facility; at a building or residence that is a business providing adult care; at a residence in a healthcare facility, hotel, or motel; and on a marine vessel operating as a shore-based fisheries business under AS 43.75.

**Page 2, lines 18 – 31, page 3, line 1: (c)** prohibits smoking outdoors at public or private schools; state or municipal parks primarily designated as a place for children to play; in seating areas for outdoor arenas, stadiums and amphitheatres; at place of employment or health care facility that has declared entire campus smoke-free; within 10 feet of entrance to bar or restaurant that serves alcohol; within 20 feet of an entrance, open window, or heating or ventilation system air intake vent at a place where smoking is prohibited under this section; or within a reasonable distance of an entrance, open window, or heating or ventilation air intake on a marine vessel as determined by the vessel operator in charge.

**Page 3, lines 2 – 25: (d)** allows smoking at a retail tobacco or e-cigarette store unless the owner or operator prohibits it, and defines "retail tobacco or e-cigarette store".

**Page 3, lines 26-31: (e)** permits an enclosed smoking area at Alaska International Airport System airports for international passengers who are in-transit and restricted by federal law from leaving the airport and establishes ventilation requirements.

**Page 4, lines 1-6: (f)** allows smoking in a vehicle that is a place of employment used exclusively by one person; and on a marine vessel when it is engaged in commercial fishing or sport charter fishing or is otherwise used as a place of employment.

**Page 4, lines 7-16: (g)** allows smoking in a private residence that is not a childcare or adult care business, or in a healthcare facility; and in stand-alone shelters that meet certain requirements.

#### 18.35.306 Notice of Prohibition

**Page 4, lines 17-31:** describes the obligations of employers, owners and operators of places and vehicles where smoking is prohibited to post “no smoking” signs within those places or vehicles and at or near the entrances; and establishing a \$50 fine for failure to comply; and requires the Department of Environmental Conservation to furnish signs upon request to a person who intends to display them.

#### 18.35.311 Duty of employers and building managers

**Page 5, lines 1-3 (a)** an employer may not permit an employee, customer, or other person to smoke inside an enclosed area at a place of employment;

**Page 5, lines 4-6 (b)** an owner, operator, or manager of a building or other place where smoking is prohibited may not provide ashtrays or other smoking accessories for use in that building or place.

#### 18.35.316 Powers and duties of the commissioner

**Page 5, lines 7-15:** provides that the commissioner will administer and enforce the requirements of AS 18.35.301-18.35.399, and adopt regulations if necessary; authorizes commissioner to delegate to another agency authority to implement AS 18.35.301-399.

#### 18.35.321 Public Education

**Page 5, lines 16-31:** requires the commissioner of environmental conservation to provide a program of education (including a printable brochure) regarding requirements AS 18.35.301 – 18.35.399 to employers, other affected parties and members of the public; and the commissioner will consult with the department of health and social services to achieve compliance by persons with AS 18.35.301 – 399 and to provide the program of education required in 18.35.321, and that this program may be provided in combination with the current comprehensive smoking education program established in Health and Social Services at AS 44.29.020(a)(14) which seeks in part to “prevent youth initiation of tobacco use, promote cessation among tobacco users, and educate the public about the lethal effects of exposure to secondhand smoke”, and also includes “an enforcement component” in AS 44.29.020(a)(14)(E).

### 18.35.326 Nonretaliation

**Page 6, lines 1-7:** prohibits employers from discriminating against an employee because the employee cooperated with or initiated enforcement of a requirement in AS 18.35.301-18.35.399; and similarly prohibits owners or operators of vehicles or other places subject to AS 18.35.301 – 18.35.399 from retaliating against customers or other members of the public due to their cooperation with or initiation of enforcement of the requirements in AS 18.35.301-18.35.399.

### 18.35.331 Conflicts with local requirements

**Page 6, lines 8-13:** a municipality is not prohibited from adopting and enforcing local laws with additional prohibitions on smoking or additional duties for employers, owners, operators, and other persons subject to requirements of 18.35.306 and 18.35.311.

**Section 2** – Page 6, lines 14-17: Existing AS 18.35.340(a) *Civil complaints; penalties* is reinstated and amended to incorporate the new language of 18.35.301, 18.35.306, 18.35.311 and 18.35.326 and requires the commissioner of environmental conservation to develop and maintain a procedure for processing reports of violations.

**Section 3** – Page 6, lines 18-26: Existing AS 18.35.340(b) is reinstated, adds conforming changes and establishes how the commissioner or his employee designee may enforce the provisions of Section 1.

**Section 4** – Page 6, lines 27-31, & page 7, lines 1-4: Existing AS 18.35.340(c) is reinstated, and adds conforming changes. This Section establishes a fine of \$50 for violations of 18.35.301, 18.35.311, and 18.35.326, and a fine of \$50 - \$300 for a violation of 18.35.306.

**Section 5** – Page 7, lines 5-9: Existing AS 18.35.341 (a) *Citations; penalties* is reinstated, adds conforming changes, and establishes what violations must be committed in a peace officer's presence before the peace officer may issue a citation, and the uniform citation format and procedure that must be used.

**Section 6** – Page 7, lines 10-19: Existing AS 18.35.341(b) is reinstated; adds conforming changes; establishes how designated employees of DEC may issue citations for violations of Section 1; that they will be processed in the same manner as citations issued by peace officers in 18.35.341(a); and that an employee of DEC may not arrest a person for a violation of Section 1.

**Section 7** – Page 7, lines 20-28: Existing AS 18.35.341(c) is reinstated; adds conforming changes; establishes that violations of 18.35.301, 18.35.306, 18.35.311 and 18.35.326 are non-criminal offenses; sets fines for violations of 18.35.301, 18.35.311, and 18.35.326 at \$50, and a fine of \$50 - \$300 for a violation of 18.35.306; and establishes that each day a violation of 18.35.306 continues after a citation has been issued constitutes a separate violation.

**Section 8** – Page 7, lines 29-31, & page 8, lines 1-3: Existing AS 18.35.341(d) is reinstated; adds conforming changes; establishes that the supreme court will establish a bail schedule for violations of 18.35.301, 18.35.306, 18.35.311 and 18.35.326; that bail amounts may not exceed those listed in 18.35.341(c); and that the bail amount must appear on the citation.

**Section 9** – Page 8, lines 4-7: Existing AS 18.35.342 *Multiple fines prohibited* is reinstated, and adds conforming changes. Establishes that a person may not be fined more than once for each violation of 18.35.301, 18.35.306, 18.35.311 and 18.35.326.

**Section 10** – Page 8, lines 8-11: Existing AS 18.35.343 *Injunctions* is reinstated, and adds conforming changes. Establishes that the DEC commissioner or any affected party may institute an action in the superior court to enjoin repeated violations of 18.35.301, 18.35.306, 18.35.311 and 18.35.326.

**Section 11** – Page 8, lines 12-16: Existing AS 18.35.350 *Enforcement authority* is reinstated, and adds conforming changes. Establishes that the DEC commissioner or designee is responsible to enforce the provisions of 18.35.301 – 18.35.399, and that this section does not limit the authority of peace officers.

**Section 12** – Page 8, lines 17-31, & page 9, lines 1-30: Adds a new *Definitions* section, specifically amending definitions of “commissioner” from Health and Social Services to Environmental Conservation; and “department” from Health and Social Services to Environmental Conservation.

**Section 13** – Page 9, line 31, & page 10, line 1: Repealing language.

**Section 14** – Page 10, lines 2-10: Applicability clause.

**Section 15** – Page 10, lines 11-20: Transition of regulations clause.

**Section 16** – Page 10, line 21: Immediate effective date for Section 15.

**Section 17** – Page 10, line 22: Establishes October 1, 2016 effective date, except as provided in Section 16.

29-LS0003\U  
Martin  
3/18/16

**CS FOR SPONSOR SUBSTITUTE FOR SENATE BILL NO. 1(FIN)**

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-NINTH LEGISLATURE - SECOND SESSION

BY THE SENATE FINANCE COMMITTEE

Offered:  
Referred:

Sponsor(s): SENATORS MICCICHE, McGuire, Costello, Bishop, Stevens, Meyer, Olson, Ellis, Gardner,  
Hoffman, Wielechowski

**A BILL**

**FOR AN ACT ENTITLED**

1 "An Act prohibiting smoking in certain places; relating to education on the smoking  
2 prohibition; and providing for an effective date."

3 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 \* **Section 1.** AS 18.35 is amended by adding new sections to read:

5 **Article 4. Prohibition of Smoking in Certain Places.**

6 **Sec. 18.35.301. Prohibition of smoking.** (a) Smoking is prohibited in an  
7 enclosed area in a public place, including an enclosed area

8 (1) at an entertainment venue or a sports arena;

9 (2) on a bus, in a taxicab, on a ferry, or in another vehicle used for  
10 public transportation;

11 (3) at a public transit depot, bus shelter, airport terminal, or other  
12 public transportation facility;

13 (4) at a retail store or shopping center;

14 (5) at a place of government or public assembly located on property

1 that is owned or operated by the state, a municipality, or a regional educational  
2 attendance area, or by an agent of the state, a municipality, or a regional educational  
3 attendance area.

4 (b) Smoking is prohibited in an enclosed area

5 (1) at an office building, office, hotel, motel, restaurant, bar, retail  
6 store, or common area in an apartment building or multiple-family dwelling;

7 (2) in a place of employment;

8 (3) in a building or residence that is used to provide paid child care,  
9 whether or not children are present in the building or residence;

10 (4) at a health care facility;

11 (5) in a vehicle that is a place of employment;

12 (6) at a public or private educational facility;

13 (7) in a building or residence that is the site of a business at which the  
14 care of adults is provided on a fee-for-service basis;

15 (8) at a residence in a health care facility, hotel, or motel;

16 (9) on a marine vessel operating as a shore-based fisheries business  
17 under AS 43.75.

18 (c) Smoking is prohibited outdoors

19 (1) at an area located at a public or private school or a state or  
20 municipal park that is primarily designated as a place for children to play;

21 (2) in a seating area for an outdoor arena, stadium, or amphitheater;

22 (3) at a place of employment or health care facility that has declared  
23 the entire campus or outside grounds or property to be smoke-free;

24 (4) within

25 (A) 10 feet of an entrance to a bar or restaurant that serves  
26 alcoholic beverages;

27 (B) 20 feet of an entrance, open window, or heating or  
28 ventilation system air intake vent at an enclosed area at a place where smoking  
29 is prohibited under this section; or

30 (C) a reasonable distance of an entrance, open window, or  
31 heating or ventilation system air intake vent on a marine vessel covered by this

1 section as determined by the vessel owner or operator in charge.

2 (d) Notwithstanding (a) of this section, unless the owner or operator prohibits  
3 it, smoking is allowed at a retail tobacco or e-cigarette store. In this subsection, "retail  
4 tobacco or e-cigarette store"

5 (1) means a retail store

6 (A) that sells primarily cigarettes, e-cigarettes, cigars, tobacco  
7 and products containing tobacco, and pipes and other smoking or e-cigarette  
8 accessories;

9 (B) in which the sale of other products is incidental;

10 (C) that derives at least 90 percent of its gross revenue from the  
11 sale of cigarettes, e-cigarettes, cigars, tobacco and products containing tobacco,  
12 and pipes and other smoking or e-cigarette accessories; and

13 (D) that is a freestanding building not attached to another  
14 business or to a residence;

15 (2) does not include

16 (A) a tobacco or e-cigarette department or section of a business  
17 that does not meet the criteria in (1) of this subsection;

18 (B) a business that is also a restaurant or grocery store;

19 (C) a business that is licensed under AS 04.11 to serve  
20 alcoholic beverages at an outdoor location;

21 (D) a business that is licensed under AS 05.15 to sell pull-tabs;

22 (E) a business that is licensed under AS 43.70.075 to sell  
23 tobacco but that does not meet the requirements of this subsection; or

24 (F) a retail store that is within an indoor public place or  
25 workplace.

26 (e) Notwithstanding (a) and (b) of this section, smoking may be permitted in a  
27 separate enclosed smoking area located in a terminal for international passengers who  
28 are in transit in a state-owned and state-operated international airport and who are  
29 restricted by federal law from leaving the airport, if the smoking area is vented directly  
30 to an outdoor area that is not an area where smoking is prohibited under (c) of this  
31 section.

1 (f) Notwithstanding (b) of this section, unless the owner or operator prohibits  
2 it, smoking is allowed

3 (1) in a vehicle that is a place of employment when the vehicle is used  
4 exclusively by one person;

5 (2) on a marine vessel when the vessel is engaged in commercial  
6 fishing or sport charter fishing or is otherwise used as a place of employment.

7 (g) Nothing in this section prohibits smoking

8 (1) at a private residence, except a private residence described in (b) of  
9 this section; or

10 (2) in a stand-alone shelter if the stand-alone shelter meets the  
11 following requirements:

12 (A) food or drink may not be sold in the stand-alone shelter;

13 (B) at least 50 percent of one side of the shelter is completely  
14 open to the outside; and

15 (C) the stand-alone shelter meets the minimum distance  
16 requirements in (c) of this section.

17 **Sec. 18.35.306. Notice of prohibition.** (a) A person who is in charge of a place  
18 or vehicle where smoking is prohibited under AS 18.35.301 shall conspicuously  
19 display in the place or vehicle a sign that

20 (1) reads "Smoking Prohibited by Law--Fine \$50";

21 (2) includes the international symbol for no smoking; or

22 (3) includes the words "No Puffin" with a pictorial representation of a  
23 Horned Puffin or Tufted Puffin holding a burning cigarette enclosed in a red circle  
24 crossed with a red bar.

25 (b) A person in charge of a building at which smoking is prohibited within a  
26 specific distance from the entrance of the building under AS 18.35.301(c)(4) shall  
27 conspicuously display a sign that reads "Smoking within (number of feet) Feet of  
28 Entrance Prohibited by Law--Fine \$50" visible from the outside of each entrance to  
29 the building.

30 (c) The department shall furnish signs required under this section to a person  
31 who requests them with the intention of displaying them.

1           **Sec. 18.35.311. Duty of employers and building managers.** (a) An employer  
2 may not permit an employee, customer, or other person to smoke inside an enclosed  
3 area at a place of employment.

4           (b) The owner, operator, manager, or other person who manages a building or  
5 other place where smoking is prohibited under AS 18.35.301 may not provide ashtrays  
6 or other smoking accessories for use in that building or place.

7           **Sec. 18.35.316. Powers and duties of the commissioner.** (a) The  
8 commissioner

9                   (1) shall administer and enforce the requirements of AS 18.35.301 -  
10 18.35.399;

11                   (2) may adopt regulations under AS 44.62 (Administrative Procedure  
12 Act) necessary to carry out the duties under this section.

13           (b) In addition to other powers granted the commissioner under AS 18.35.301  
14 - 18.35.399, the commissioner may delegate to another agency the authority to  
15 implement and enforce one or more provisions of AS 18.35.301 - 18.35.399.

16           **Sec. 18.35.321. Public education.** (a) The commissioner shall ensure that  
17 employers, property owners, property operators, and other members of the public are  
18 provided ongoing access to

19                   (1) a program of education regarding the requirements in AS 18.35.301  
20 - 18.35.399;

21                   (2) an electronically published printable brochure that summarizes the  
22 requirements in AS 18.35.301 - 18.35.399.

23           (b) The commissioner shall consult with the Department of Health and Social  
24 Services

25                   (1) to achieve compliance by employers, property owners, property  
26 operators, and other members of the public with the requirements of AS 18.35.301 -  
27 18.35.399;

28                   (2) to provide the program of education as required under (a) of this  
29 section; the program of education may be provided in combination with the  
30 comprehensive smoking education, tobacco use prevention, and tobacco control  
31 program established in AS 44.29.020(a)(14).

1           **Sec. 18.35.326. Nonretaliation.** (a) An employer may not discharge or in any  
2 other manner retaliate against an employee because the employee cooperates with or  
3 initiates enforcement of a requirement in AS 18.35.301 - 18.35.399.

4           (b) The owner or operator of a vehicle or other place that is subject to a  
5 requirement in AS 18.35.301 - 18.35.399 may not retaliate against a customer or other  
6 member of the public for cooperating with or initiating enforcement of a requirement  
7 in AS 18.35.301 - 18.35.399.

8           **Sec. 18.35.331. Conflicts with local requirements.** Nothing in AS 18.35.301  
9 - 18.35.399 prohibits a municipality from adopting an ordinance imposing

10                   (1) additional limitations on smoking; or

11                   (2) additional duties on employers, owners, operators, and other  
12 persons who are subject to the requirements of AS 18.35.306 or 18.35.311 related to  
13 smoking.

14 \* **Sec. 2.** AS 18.35.340(a) is amended to read:

15           (a) The commissioner shall develop and maintain a procedure for processing  
16 reports of violations of AS 18.35.301, 18.35.306, 18.35.311, and 18.35.326  
17 [AS 18.35.300, 18.35.305, AND 18.35.330].

18 \* **Sec. 3.** AS 18.35.340(b) is amended to read:

19           (b) If, after investigating a report made under this section, the commissioner  
20 determines that a violation has occurred, (1) the commissioner may file a civil  
21 complaint in the district court to enforce the provisions of AS 18.35.301 - 18.35.399  
22 [AS 18.35.300 - 18.35.365]; or (2) an employee of the department designated by the  
23 commissioner to enforce the provisions of AS 18.35.301 - 18.35.399 [AS 18.35.300 -  
24 18.35.365] may issue a citation under AS 18.35.341(b). If an employee of the  
25 department issues a citation, the violation shall be processed and disposed of under  
26 AS 18.35.341.

27 \* **Sec. 4.** AS 18.35.340(c) is amended to read:

28           (c) A person who violates AS 18.35.301, 18.35.311, or 18.35.326  
29 [AS 18.35.300 OR 18.35.305] and against whom the commissioner has filed a civil  
30 complaint under this section is punishable by a civil fine of [NOT LESS THAN \$10  
31 NOR MORE THAN] \$50. A person who violates AS 18.35.306 [AS 18.35.330] and

1 against whom the commissioner has filed a civil complaint under this section is  
2 punishable by a civil fine of not less than \$50 [\$20] nor more than \$300. Each day a  
3 violation of AS 18.35.306 [AS 18.35.330] continues after a civil complaint for the  
4 violation has been filed and served on the defendant constitutes a separate violation.

5 \* **Sec. 5.** AS 18.35.341(a) is amended to read:

6 (a) A peace officer may issue a citation for a violation of AS 18.35.301,  
7 18.35.311, or 18.35.326 [AS 18.35.300 OR 18.35.305] committed in the officer's  
8 presence or for a violation of AS 18.35.306 [AS 18.35.330]. The provisions of  
9 AS 12.25.175 - 12.25.230 apply to the issuance of a citation under this subsection.

10 \* **Sec. 6.** AS 18.35.341(b) is amended to read:

11 (b) An employee of the department designated by the commissioner to enforce  
12 the provisions of AS 18.35.301 - 18.35.399 [AS 18.35.300 - 18.35.365] may issue a  
13 citation for a violation of AS 18.35.301, 18.35.306, 18.35.311, or 18.35.326  
14 [AS 18.35.300, 18.35.305, OR 18.35.330] regardless of whether the violation was  
15 committed in the employee's presence. A citation issued under this subsection shall be  
16 in the same form and shall be processed in the same manner as a citation issued by a  
17 peace officer under (a) of this section. An employee of the department may not arrest a  
18 person for a violation of AS 18.35.301, 18.35.306, 18.35.311, or 18.35.326  
19 [AS 18.35.300, 18.35.305, OR 18.35.330].

20 \* **Sec. 7.** AS 18.35.341(c) is amended to read:

21 (c) A person who violates AS 18.35.301, 18.35.306, 18.35.311, or 18.35.326  
22 [AS 18.35.300, 18.35.305, OR 18.35.330] is guilty of a violation as defined in  
23 AS 11.81.900(b) and upon conviction is punishable by a fine of [NOT LESS THAN  
24 \$10 NOR MORE THAN] \$50 for a violation of AS 18.35.301, 18.35.311, or  
25 18.35.326 [AS 18.35.300 OR 18.35.305] and by a fine of not less than \$50 [\$20] nor  
26 more than \$300 for a violation of AS 18.35.306 [AS 18.35.330]. Each day a violation  
27 of AS 18.35.306 [AS 18.35.330] continues after a citation for the violation has been  
28 issued constitutes a separate violation.

29 \* **Sec. 8.** AS 18.35.341(d) is amended to read:

30 (d) The supreme court shall establish a schedule of bail amounts for violations  
31 of AS 18.35.301, 18.35.306, 18.35.311, and 18.35.326 [AS 18.35.300, 18.35.305,

1 AND 18.35.330], but in no event may the bail amount exceed the maximum fine that  
2 may be imposed for the violation under (c) of this section. The bail amount for a  
3 violation must appear on the citation.

4 \* **Sec. 9.** AS 18.35.342 is amended to read:

5 **Sec. 18.35.342. Multiple fines prohibited.** A person may not be fined more  
6 than once for each violation of AS 18.35.301, 18.35.306, 18.35.311, or 18.35.326  
7 [AS 18.35.300, 18.35.305, OR 18.35.330].

8 \* **Sec. 10.** AS 18.35.343 is amended to read:

9 **Sec. 18.35.343. Injunctions.** The commissioner or any affected party may  
10 institute an action in the superior court to enjoin repeated violations of AS 18.35.301,  
11 18.35.306, 18.35.311, or 18.35.326 [AS 18.35.300, 18.35.305, or 18.35.330].

12 \* **Sec. 11.** AS 18.35.350 is amended to read:

13 **Sec. 18.35.350. Enforcement authority.** The commissioner or the  
14 commissioner's designee is responsible for enforcing the provisions of AS 18.35.301 -  
15 18.35.399 [AS 18.35.300 - 18.35.365]. This section does not limit the authority of  
16 peace officers.

17 \* **Sec. 12.** AS 18.35 is amended by adding a new section to read:

18 **Sec. 18.35.399. Definitions.** In AS 18.35.301 - 18.35.399,

19 (1) "business" means a for-profit or nonprofit sole proprietorship,  
20 partnership, joint venture, corporation, professional corporation, private club, retail  
21 seller of goods or services, or other business entity;

22 (2) "commissioner" means the commissioner of environmental  
23 conservation or the commissioner's designee;

24 (3) "department" means the Department of Environmental  
25 Conservation;

26 (4) "e-cigarette" means an electronic device that uses a heating  
27 element, battery, or electronic circuit to issue a vapor or aerosol for inhalation in a  
28 manner that simulates smoking a lighted or heated cigar, cigarette, or pipe, or other  
29 lighted or heated tobacco or plant product intended for inhalation;

30 (5) "employee" means a person who is employed by a business for  
31 compensation or works for a business as a volunteer without compensation;

1 (6) "employer" means the state, a municipality, a regional educational  
2 attendance area, and a person or a business with one or more employees;

3 (7) "enclosed area" means space between a floor and a ceiling that is  
4 bounded on two or more sides by a combination of walls, doorways, windows, or  
5 other physical barriers that may be open, partially open, closed, retractable, temporary,  
6 or permanent;

7 (8) "health care facility" means an office or institution providing care  
8 or treatment for physical, mental, emotional, or other medical, dental, physiological, or  
9 psychological diseases or conditions; a private, municipal, or state hospital;  
10 independent diagnostic testing facility; primary care outpatient facility; skilled nursing  
11 facility; kidney disease treatment center, including freestanding hemodialysis units;  
12 intermediate care facility; ambulatory surgical facility; Alaska Pioneers' Home or  
13 Alaska Veterans' Home administered by the Department of Health and Social Services  
14 under AS 47.55; long-term care facility; psychiatric hospital; residential psychiatric  
15 treatment center, as defined in AS 18.07.111 or AS 47.32.900, and other facilities,  
16 places of employment or offices operated for use by doctors, nurses, surgeons,  
17 chiropractors, physical therapists, physicians, psychiatrists, or dentists or other  
18 professional health care providers to provide health care;

19 (9) "place of employment" means work areas, private offices, hotel and  
20 motel rooms, employee lounges, restrooms, conference rooms, classrooms, cafeterias,  
21 hallways, vehicles, and other employee work areas that are under the control of an  
22 employer;

23 (10) "public place" includes

24 (A) an area to which the public is invited or into which the  
25 public is admitted;

26 (B) a place where services, goods, or facilities are offered to  
27 the public;

28 (11) "smoking" means using an e-cigarette or other oral smoking  
29 device or inhaling, exhaling, burning, or carrying a lighted or heated cigar, cigarette,  
30 pipe, or tobacco or plant product intended for inhalation.

31 \* **Sec. 13.** AS 18.35.300, 18.35.305, 18.35.310, 18.35.320, 18.35.330, 18.35.355, and

1 18.35.365 are repealed.

2 \* **Sec. 14.** The uncodified law of the State of Alaska is amended by adding a new section to  
3 read:

4 APPLICABILITY. AS 18.35.301, 18.35.306, 18.35.311, 18.35.316, 18.35.321,  
5 18.35.326, and 18.35.331, added by sec. 1 of this Act, AS 18.35.340(a) - (c), as amended by  
6 secs. 2 - 4 of this Act, AS 18.35.341(a) - (d), as amended by secs. 5 - 8 of this Act,  
7 AS 18.35.342, as amended by sec. 9 of this Act, AS 18.35.343, as amended by sec. 10 of this  
8 Act, AS 18.35.350, as amended by sec. 11 of this Act, and AS 18.35.399, added by sec. 12 of  
9 this Act, apply to violations or failures to comply that occur on or after the effective date of  
10 secs. 1 - 12 of this Act.

11 \* **Sec. 15.** The uncodified law of the State of Alaska is amended by adding a new section to  
12 read:

13 TRANSITION; REGULATIONS. The Department of Environmental Conservation  
14 may adopt regulations necessary to implement AS 18.35.301, 18.35.306, 18.35.311,  
15 18.35.316, 18.35.321, 18.35.326, and 18.35.331, added by sec. 1 of this Act, AS 18.35.340(a)  
16 - (c), as amended by secs. 2 - 4 of this Act, AS 18.35.341(a) - (d), as amended by secs. 5 - 8 of  
17 this Act, AS 18.35.342, as amended by sec. 9 of this Act, AS 18.35.343, as amended by sec.  
18 10 of this Act, AS 18.35.350, as amended by sec. 11 of this Act, and AS 18.35.399, added by  
19 sec. 12 of this Act. The regulations take effect under AS 44.62 (Administrative Procedure  
20 Act), but not before the effective date of the section being implemented.

21 \* **Sec. 16.** Section 15 of this Act takes effect immediately under AS 01.10.070(c).

22 \* **Sec. 17.** Except as provided in sec. 16 of this Act, this Act takes effect October 1, 2016.

# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(STA)-DHSS-CDPHP-2-3-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Finance Committee

Department: Department of Health and Social Services  
Appropriation: Public Health  
Allocation: Chronic Disease Prevention and Health Promotion  
OMB Component Number: 2818

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017	Included in	Out-Year Cost Estimates				
	Appropriation Requested	Governor's FY2017 Request	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>	<b>FY 2017</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Fund Source (Operating Only)**

None							
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Positions**

Full-time							
Part-time							
Temporary							

<b>Change in Revenues</b>							
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 (separate supplemental appropriation required)  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 (separate capital appropriation required)  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed? n/a

**Why this fiscal note differs from previous version:**

Updated for SLA2016, only; no other changes.
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Prepared By:	Jay C. Butler, M.D., Director/ HSS Chief Medical Officer	Phone:	(907)269-6680
Division:	Public Health	Date:	01/05/2016 10:00 AM
Approved By:	Sana Efird, Asst. Commissioner, Finance and Management Services	Date:	02/03/16
Agency:	Health and Social Services		

**FISCAL NOTE ANALYSIS**

**STATE OF ALASKA  
2016 LEGISLATIVE SESSION**

**BILL NO. CSSSSB001(STA)**

**Analysis**

The bill establishes a statewide law prohibiting smoking in all indoor workplaces, businesses and public spaces and puts restrictions on allowable distance of smoking from entrances and outdoor spaces where children and adults gather.

The Department of Environmental Conservation is responsible for enforcement, signage, and education.

The Department of Health and Social Services administers the statewide comprehensive smoking education, tobacco use prevention, and tobacco control program authorized in AS 44.29.020. The department anticipates being able to implement this bill with existing resources. This is a zero fiscal note.

# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(FIN)-DEC-FSS-03-19-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Finance Committee

Department: Department of Environmental Conservation  
Appropriation: Environmental Health  
Allocation: Food Safety & Sanitation  
OMB Component Number: 2343

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017	Included in	Out-Year Cost Estimates				
	Appropriation Requested	Governor's FY2017 Request	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>	<b>FY 2017</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Fund Source (Operating Only)**

None							
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Positions**

Full-time							
Part-time							
Temporary							

<b>Change in Revenues</b>							
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

**Why this fiscal note differs from previous version:**

Updated for Senate Finance Committee Substitute.
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Prepared By:	Bob Blankenburg, Acting Director	Phone:	(907)269-7645
Division:	Environmental Health	Date:	03/19/2016 12:06 PM
Approved By:	Alice Edwards, Deputy Commissioner	Date:	03/19/16
Agency:	Department of Environmental Conservation		

## FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2016 LEGISLATIVE SESSION

BILL NO. CSSSSB 1 (STA)

### Analysis

#### **Analysis/Assumptions:**

This version of SB1 identifies the Commissioner of the Department of Environmental Conservation as responsible to implement and enforce a statewide smoking prohibition in an expanded list of enclosed public spaces. The bill allows the Commissioner to adopt regulations for filing, processing, and investigating reports of violations of the smoking prohibition, which may include filing complaints and issuing citations. This bill also expands the definition of "smoking" to include the use of electronic cigarette devices. The bill subjects a person who is in charge of a place where smoking is prohibited to a requirement to display specific signage and requires the department to furnish signs to any person who requests them. This bill also requires the Department to provide the public access to a program educating the owners of these public spaces of the requirements of the bill.

This is a zero fiscal note. The department is currently responsible for enforcing Article 3, and the department believes the expanded requirements can be accomplished with existing resources.

# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(STA)-DCCED-AMCO-03-11-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: (S) Finance

Department: Department of Commerce, Community and  
Economic Development  
Appropriation: Alcohol and Marijuana Control Office  
Allocation: Alcohol and Marijuana Control Office  
OMB Component Number: 3119

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017 Appropriation Requested	Included in Governor's FY2017 Request	Out-Year Cost Estimates				
			FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>	<b>FY 2017</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Fund Source (Operating Only)**

None							
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Positions**

Full-time							
Part-time							
Temporary							

<b>Change in Revenues</b>							
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? **YES**  
If yes, by what date are the regulations to be adopted, amended or repealed? **12/31/17**

**Why this fiscal note differs from previous version:**

Updated to FY2016 form.
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Prepared By: <u>Cynthia Franklin, Director</u>	Phone: <u>(907)269-0351</u>
Division: <u>Alcohol and Marijuana Control Office</u>	Date: <u>03/11/2016 10:45 PM</u>
Approved By: <u>Catherine Reardon, Director</u>	Date: <u>03/11/16</u>
Agency: <u>Division of Administrative Services, DCCED</u>	

**FISCAL NOTE ANALYSIS**

**STATE OF ALASKA**  
**2016 LEGISLATIVE SESSION**

**BILL NO.** CS SSSB 0001(STA)

**Analysis**

The bill could affect an ongoing regulation project of the Marijuana Control Board that will create rules that permit consumption of marijuana in licensed marijuana retail stores. The regulations project establishing consumption rules is underway and expected to be finished by September, 2016.

# Senator Peter A. Micciche

*Alaska State Legislature*

**SESSION ADDRESS:**

Alaska State Capitol, Rm. 514  
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Fax: (907) 465-4779  
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Kenai, Alaska 99611-7771  
Phone: (907) 283-7996  
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Toll Free: (800) 964-5733



## **CS for SSSB 1(FIN)**

29-LS0003\U

### **Explanation of Changes**

1. P.2 – amends **Sec. 18.35.301(b) & (c) Prohibition of smoking**  
(b) Clarifies that smoking is prohibited in a residence only if the residence is a site of a business at which paid adult care is provided; and (c), deletes 50 foot distance prohibition of smoking from an entrance to a health care facility.
2. P.5 - adds **Sec. 18.35.316 Powers and duties of the commissioner**  
Provides the Department of Environmental Conservation (DEC) commissioner the authority to adopt regulations to carry out duties under Section 1, and authorizes the commissioner to delegate to another agency the authority to implement the provisions of AS 18.35.301 – 18.35.399.
3. P.5 – amends **Sec. 18.35.321 Public education**  
Requires the DEC commissioner to consult with Department of Health & Social Services to achieve compliance of employers, property owners and members of the public; and provide the program of education required in this section as part of DHSS current comprehensive smoking education, tobacco use prevention, and tobacco control program established in AAS 44.29.020(a)(14).
4. P.6 – Sec. 4 **Civil complaints; penalties**, & p.7 – Sec. 7 **Citations; penalties** -  
Amends fine amounts from a range of \$10 - \$50, to **\$50**, for a violation of AS 18.35.301, 18.35.311, or 18.35.326, and from \$20 - \$300, to **\$50 - \$300** for a violation of AS 18.35.306.
5. P.10 – amends **Sec. 17** establish to effective date of October 1, 2016.

# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001SS-DOA-FAC-03-11-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Finance

Department: Department of Administration  
Appropriation: General Services  
Allocation: Facilities  
OMB Component Number: 2429

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017 Appropriation Requested	Included in Governor's FY2017 Request	Out-Year Cost Estimates					
			FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	
<b>OPERATING EXPENDITURES</b>								
Personal Services								
Travel								
Services								
Commodities								
Capital Outlay								
Grants & Benefits								
Miscellaneous								
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Fund Source (Operating Only)**

None								
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Positions**

Full-time								
Part-time								
Temporary								

<b>Change in Revenues</b>								
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

**Why this fiscal note differs from previous version:**

Not applicable, initial version.
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Prepared By:	Tom Mayer, Director	Phone:	(907)465-5677
Division:	General Services	Date:	03/11/2016 03:00 PM
Approved By:	Sheldon Fisher, Commissioner	Date:	03/11/16
Agency:	Department of Administration		

**FISCAL NOTE ANALYSIS**

**STATE OF ALASKA  
2016 LEGISLATIVE SESSION**

**BILL NO.** SSSB 001

**Analysis**

This bill will require the posting of no smoking signs in various buildings to regulate the act of smoking in public. The Division of General Services anticipates minimal impact and therefore submits a zero fiscal note.

# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(FIN)-DOT-CRHA-3-19-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Health & Social Services

Department: Department of Transportation and Public Facilities  
Appropriation: Highways, Aviation and Facilities  
Allocation: Central Region Highways and Aviation  
OMB Component Number: 564

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017 Appropriation Requested	Included in Governor's FY2017 Request	Out-Year Cost Estimates					
			FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>								
Personal Services								
Travel								
Services								
Commodities								
Capital Outlay								
Grants & Benefits								
Miscellaneous								
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Fund Source (Operating Only)**

None								
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Positions**

Full-time								
Part-time								
Temporary								

<b>Change in Revenues</b>								
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

**Why this fiscal note differs from previous version:**

This version of the proposal includes language on page 4, lines 20-24, which brings the majority of the Department's no-smoking signs into compliance with the intent of this bill. Lines 30 and 31 of page 4 require the Dept of Environmental Conservation to furnish any new signs the Department might need in the future at no cost to the Department.

Prepared By:	Mike Lesmann	Phone:	(907)465-4772
Division:	Commissioner's Office	Date:	03/19/2016 05:20 PM
Approved By:	Mary Siroky	Date:	03/19/16
Agency:	DOT&PF		

FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2016 LEGISLATIVE SESSION

BILL NO. SB 1

**Analysis**

This legislation would ban smoking in enclosed areas at all 247 State of Alaska rural airports including state-owned airport terminals, fuel facilities, and other enclosed areas in a place of employment (sand storage sheds, equipment storage/maintenance facilities, airport rescue/firefighting facilities). With the passage of this legislation, our current no-smoking signs will have to be replaced as they do not comply with the requirements under the Notice of Prohibition section, on lines 15-21, page 4 of this proposal. The department would provide durable signs at these locations.

Total 6" x 20" signs (\$30/sign, installation & shipping )

Central Region Highways & Aviation	160 signs	\$4.8
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# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(FIN)-DOT-SRHA-3-19-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Health & Social Services

Department: Department of Transportation and Public Facilities  
Appropriation: Highways, Aviation and Facilities  
Allocation: Southcoast Region Highways and Aviation  
OMB Component Number: 603

## Expenditures/Revenues

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017	Included in	Out-Year Cost Estimates				
	Appropriation Requested	Governor's FY2017 Request	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>	<b>FY 2017</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

## Fund Source (Operating Only)

None							
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

## Positions

Full-time							
Part-time							
Temporary							

<b>Change in Revenues</b>							
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

## ASSOCIATED REGULATIONS

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

## Why this fiscal note differs from previous version:

This version of the proposal includes language on page 4, lines 20-24, which brings the majority of the Department's no-smoking signs into compliance with the intent of this bill. Lines 30 and 31 of page 4 require the Dept of Environmental Conservation to furnish any new signs the Department might need in the future at no cost to the Department.

Prepared By: <u>Mike Lesmann</u>	Phone: (907)465-4772
Division: <u>Commissioner's Office</u>	Date: 03/19/2016 05:20 PM
Approved By: <u>Mary Siroky</u>	Date: 03/19/16
Agency: <u>DOT&amp;PF</u>	

FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2016 LEGISLATIVE SESSION

BILL NO. SB 1

**Analysis**

This legislation would ban smoking in enclosed areas at all 247 State of Alaska rural airports including state-owned airport terminals, fuel facilities, and other enclosed areas in a place of employment (sand storage sheds, equipment storage/maintenance facilities, airport rescue/firefighting facilities). With the passage of this legislation, our current no-smoking signs will have to be replaced as they do not comply with the requirements under the Notice of Prohibition section, on lines 15-21, page 4 of this proposal. The department would provide durable signs at these locations.

Total 6" x 20" signs (\$30/sign, installation & shipping )

Southcoast Region Highways & Aviation	65 signs	\$2.0
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# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(FIN)-DOT-NRHA-3-19-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Health & Social Services

Department: Department of Transportation and Public Facilities  
Appropriation: Highways, Aviation and Facilities  
Allocation: Northern Region Highways and Aviation  
OMB Component Number: 2068

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017 Appropriation Requested	Included in Governor's FY2017 Request	Out-Year Cost Estimates					
			FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>								
Personal Services								
Travel								
Services								
Commodities								
Capital Outlay								
Grants & Benefits								
Miscellaneous								
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Fund Source (Operating Only)**

None								
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Positions**

Full-time								
Part-time								
Temporary								

<b>Change in Revenues</b>								
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

**Why this fiscal note differs from previous version:**

This version of the proposal includes language on page 4, lines 20-24, which brings the majority of the Department's no-smoking signs into compliance with the intent of this bill. Lines 30 and 31 of page 4 require the Dept of Environmental Conservation to furnish any new signs the Department might need in the future at no cost to the Department.

Prepared By:	Mike Lesmann	Phone:	(907)465-4772
Division:	Commissioner's Office	Date:	03/19/2016 05:20 PM
Approved By:	Mary Siroky	Date:	03/19/16
Agency:	DOT&PF		

FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2016 LEGISLATIVE SESSION

BILL NO. SB 1

**Analysis**

This legislation would ban smoking in enclosed areas at all 247 State of Alaska rural airports including state-owned airport terminals, fuel facilities, and other enclosed areas in a place of employment (sand storage sheds, equipment storage/maintenance facilities, airport rescue/firefighting facilities). With the passage of this legislation, our current no-smoking signs will have to be replaced as they do not comply with the requirements under the Notice of Prohibition section, on lines 15-21, page 4 of this proposal. The department would provide durable signs at these locations.

Total 6" x 20" signs (\$30/sign, installation & shipping )

Northern Region Highways & Aviation	125 signs	\$3.8
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# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(FIN)-DOT-MVO-3-19-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Health & Social Services

Department: Department of Transportation and Public Facilities  
Appropriation: Marine Highway System  
Allocation: Marine Vessel Operations  
OMB Component Number: 2604

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017	Included in	Out-Year Cost Estimates				
	Appropriation Requested	Governor's FY2017 Request	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>	<b>FY 2017</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Fund Source (Operating Only)**

None							
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Positions**

Full-time							
Part-time							
Temporary							

<b>Change in Revenues</b>							
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

**Why this fiscal note differs from previous version:**

This version of the proposal includes language on page 4, lines 20-24, which brings the majority of the Department's no-smoking signs into compliance with the intent of this bill. Lines 30 and 31 of page 4 require the Dept of Environmental Conservation to furnish any new signs the Department might need in the future at no cost to the Department.

Prepared By: Mike Lesmann  
Division: Commissioner's Office  
Approved By: Mary Siroky  
Agency: DOT&PF

Phone: (907)465-4772  
Date: 03/19/2016 05:20 PM  
Date: 03/19/16

FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2016 LEGISLATIVE SESSION

BILL NO. SB 1

**Analysis**

This legislation would ban smoking in enclosed areas onboard the Alaska Marine Highway System (AMHS) ferries, inside of AMHS terminals and other buildings belonging to the AMHS. With the passage of this legislation, current no-smoking signs at terminals as well as onboard the 11 vessels of the fleet will have to be replaced as they do not comply with the requirements under the Notice of Prohibition section, on lines 15-21, page 4 of this proposal.

26 12" x 12" building signs at terminals @ \$25/signs	\$ .7
66 (6 per vessel) 12" x 12" signs onboard @ \$25/sign	\$1.7
Total one time cost	\$2.4

# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(FIN)-DOT-IASO-3-19-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Health & Social Services

Department: Department of Transportation and Public Facilities  
Appropriation: International Airports  
Allocation: International Airport Systems Office  
OMB Component Number: 1649

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017	Included in	Out-Year Cost Estimates				
	Appropriation Requested	Governor's FY2017 Request	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>	<b>FY 2017</b>	<b>FY 2017</b>					
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Fund Source (Operating Only)**

None							
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Positions**

Full-time							
Part-time							
Temporary							

<b>Change in Revenues</b>							
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

**Why this fiscal note differs from previous version:**

This version of the proposal includes language on page 4, lines 20-24, which brings the majority of the Department's no-smoking signs into compliance with the intent of this bill. Lines 30 and 31 of page 4 require the Dept of Environmental Conservation to furnish any new signs the Department might need in the future at no cost to the Department.

Prepared By:	Mike Lesmann	Phone:	(907)465-4772
Division:	Commissioner's Office	Date:	03/19/2016 05:20 PM
Approved By:	Mary Siroky	Date:	03/19/16
Agency:	DOT&PF		

FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2016 LEGISLATIVE SESSION

BILL NO. SB 1

**Analysis**

This legislation would ban smoking in enclosed areas of the Fairbanks International Airport terminal and the Ted Stevens Anchorage International Airport terminal as well as within airport fuel facilities. It also prohibits smoking in other enclosed areas in a place of employment at these airports.

Title 17 currently prohibits smoking within 50 ft of an aircraft on airport property. The international airports follow municipal codes prohibiting smoking in public buildings and displays signage and have periodic public address system announcements in the terminals.

Currently smokers are provided with a designated outside smoking area adjacent to the terminals, but away from any building entrances. Additionally, a smoking room equipped with ventilation is provided in the North Terminal of the Ted Stevens Anchorage International Airport for passengers that deplane and cannot leave the terminal secure area before re-boarding their through-flight (some international flights and military charters).

With the passage of this legislation, the airport will be required to remove current signage and replace with new signs that meet the newly proposed requirements under Section 18.35.306 at the terminals and other state managed buildings on the properties.

Total 100 12" x 12" signs (\$10/sign)

Ted Stevens Anchorage International Airport	80 signs	\$800.00
Fairbanks International Airport	20 signs	\$200.00
Total one time cost	100 signs	\$1,000.00

# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001SSCS(STA)-ACS-TRC-3-15-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Finance Committee

Department: Judiciary  
Appropriation: Alaska Court System  
Allocation: Trial Courts  
OMB Component Number: 768

### Expenditures/Revenues

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017 Appropriation Requested	Included in Governor's FY2017 Request	Out-Year Cost Estimates					
			FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	
<b>OPERATING EXPENDITURES</b>								
Personal Services								
Travel								
Services								
Commodities								
Capital Outlay								
Grants & Benefits								
Miscellaneous								
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

### Fund Source (Operating Only)

None								
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

### Positions

Full-time								
Part-time								
Temporary								

<b>Change in Revenues</b>								
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

### ASSOCIATED REGULATIONS

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

### Why this fiscal note differs from previous version:

Updated for 2016 and CS ; fiscal impact remains zero.
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Prepared By:	Nancy Meade, General Counsel	Phone:	(907)463-4736
Division:	Alaska Court System	Date:	03/15/2016 05:00 PM
Approved By:	Nancy Meade for Christine Johnson, Administrative Director	Date:	03/15/16
Agency:	Alaska Court System		

FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2016 LEGISLATIVE SESSION

BILL NO. SB1

**Analysis**

The Committee Substitute (State Affairs) for the Sponsor Substitute for Senate Bill 1 repeals a number of current statutes under the article captioned "Regulation of Smoking in Public Facilities" (AS 18.35.300-.330, .355, and .365), adopts new provisions, and amends other provisions that regulate smoking. The bill would prohibit smoking in more public places and in more circumstances than are regulated in the current statutes.

CSSSSB 1 provides that the Department of Health and Social Services may file civil complaints in the district court to enforce the law, and may issue citations for certain offenses established by the bill (section 3). In Section 8, AS 18.35.341(d) requires the Supreme Court to establish a schedule of bail amounts for violations of offenses established in the bill.

The court system is unable to predict the number of new civil complaints that may be filed under CSSSSB 1 alleging violations of the prohibitions on smoking, or the number of new citations that may be filed with the court under the bill. Nonetheless, the court system anticipates that the number of new case filings and the number of additional citations that will result from this bill will be relatively small, and that the courts can absorb the additional workload without fiscal impact. In addition, the Supreme Court currently has in place a schedule of bail amounts for smoking violations, and anticipates that it can amend that schedule as required under section 8 without fiscal impact. The court system therefore submits a zero fiscal note.

# Fiscal Note

State of Alaska  
2016 Legislative Session

Bill Version: SB 1  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: SB001CSSS(FIN)-DOT-SEF-3-19-16  
Title: REGULATION OF SMOKING  
Sponsor: MICCICHE  
Requester: Senate Health & Social Services

Department: Department of Transportation and Public Facilities  
Appropriation: State Equipment Fleet  
Allocation: State Equipment Fleet  
OMB Component Number: 2791

### Expenditures/Revenues

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017 Appropriation Requested	Included in Governor's FY2017 Request	Out-Year Cost Estimates					
			FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>OPERATING EXPENDITURES</b>								
Personal Services								
Travel								
Services								
Commodities								
Capital Outlay								
Grants & Benefits								
Miscellaneous								
<b>Total Operating</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

### Fund Source (Operating Only)

None								
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

### Positions

Full-time								
Part-time								
Temporary								

<b>Change in Revenues</b>								
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**Estimated SUPPLEMENTAL (FY2016) cost:** 0.0 (separate supplemental appropriation required)  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2017) cost:** 0.0 (separate capital appropriation required)  
*(discuss reasons and fund source(s) in analysis section)*

### ASSOCIATED REGULATIONS

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No  
If yes, by what date are the regulations to be adopted, amended or repealed?

### Why this fiscal note differs from previous version:

This version of the proposal includes language on page 4, lines 20-24, which brings the majority of the Department's no-smoking signs into compliance with the intent of this bill. Lines 30 and 31 of page 4 require the Dept of Environmental Conservation to furnish any new signs the Department might need in the future at no cost to the Department.

Prepared By:	Mike Lesmann	Phone:	(907)465-4772
Division:	Commissioner's Office	Date:	03/19/2016 05:20 PM
Approved By:	Mary Siroky	Date:	03/19/16
Agency:	DOT&PF		

**FISCAL NOTE ANALYSIS**

**STATE OF ALASKA  
2016 LEGISLATIVE SESSION**

**BILL NO. SB 1** \_\_\_\_\_

**Analysis**

This legislation would ban smoking in state-owned vehicles under (a)(4) - other enclosed area in a place of employment. Current No Smoking placards in state-owned vehicles do not comply with the requirements under the Notice of Prohibition section, on lines 15-21, page 4 of this proposal.

5653 vehicles in the state equipment fleet  
\$1.5 for decals for entire state equipment fleet vehicles



**TESTIMONY ON THE SCIENTIFIC EVIDENCE ON THE PUBLIC HEALTH EFFECTS OF  
SECONDHAND SMOKE AND ELECTRONIC NICOTINE DELIVERY SYSTEMS AEROSOL**

**BRIAN KING, PHD, MPH  
DEPUTY DIRECTOR FOR RESEARCH TRANSLATION (ACTING)  
OFFICE ON SMOKING AND HEALTH  
NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION  
U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION**

**ALASKA STATE LEGISLATURE  
JUNEAU, ALASKA**

**February 12, 2015**

Thank you for the opportunity to submit testimony today about the health impact of secondhand smoke exposure and aerosol from electronic nicotine delivery systems, including e-cigarettes. I am Dr. Brian King with the Office on Smoking and Health, Centers for Disease Control and Prevention (CDC), the lead Federal agency for comprehensive tobacco prevention and control. I am the author of over 50 peer-reviewed scientific articles on tobacco prevention and control. I am also a contributing author to the 50<sup>th</sup> anniversary Surgeon General's report, *The Health Consequences of Smoking—50 Years of Progress*, as well as the lead author of CDC's 2014 evidence-based state guide, *Best Practices for Comprehensive Tobacco Control Programs*. I am an international subject matter expert on the issue of secondhand smoke, and have worked for nearly a decade to provide sound scientific evidence to inform tobacco control policy and practice, as well as to effectively communicate this information to key stakeholders at the national, state, and local levels. I am also an international subject matter expert on electronic nicotine delivery systems and have authored multiple peer-reviewed publications on the issues of electronic nicotine delivery system use among adults and youth, susceptibility among youth, and public health policy related to these products.

For the record, I am submitting expert written testimony today at the request of Alison Kulas, Program Manager of the state of Alaska's Tobacco Prevention and Control Program, to discuss the scientific evidence for eliminating exposure to secondhand smoke, as well as the public health effects of electronic nicotine delivery systems, including exposure to the aerosol emitted from these products.

Also for the record, this testimony is not for or against any specific legislative proposal.

### **The Health Effects of Secondhand Smoke Exposure**

I will begin by discussing the harms of secondhand smoke exposure, which has a robust scientific evidence base reflecting decades of research.

Secondhand smoke from burning tobacco products is deadly. In adults, secondhand smoke exposure causes stroke, lung cancer, and coronary heart disease, as well as nasal irritation and reproductive effects in women, such as low birth weight.<sup>1</sup> Children who are exposed to secondhand smoke are at an increased risk for sudden infant death syndrome (SIDS), acute respiratory infections such as pneumonia and bronchitis, middle ear disease, more severe asthma, respiratory symptoms, and slowed lung growth.<sup>1</sup>

The scientific evidence on the harmful effects of secondhand smoke exposure is well-documented. The Surgeon General first concluded that secondhand smoke causes lung cancer in 1986.<sup>2</sup> In 2006, the Surgeon General's Report on *The Health Consequences of Involuntary Exposure to Tobacco Smoke* concluded that there is no risk-free level of secondhand smoke exposure.<sup>3</sup> Separating smokers and nonsmokers, using designated smoking areas, cleaning or filtering the air, and using separately ventilated areas do not work.<sup>3</sup>

In 2010, the Surgeon General's Report on *How Tobacco Smoke Causes Disease* reaffirmed the conclusion that there is no risk-free level of exposure to tobacco smoke.<sup>4</sup> The report and subsequent findings also documented how the complex mix of chemicals in tobacco smoke causes disease, including finding that cigarette smoke contains 7,000 chemicals, 250 of which are toxic and nearly 70 of which cause cancer.<sup>1,4</sup>

In 2014, the 50<sup>th</sup> Anniversary Surgeon General's Report on *The Health Consequences of Smoking* further affirmed these findings.<sup>1</sup> The report estimates that secondhand smoke exposure increases the risk of stroke by 20 to 30%.<sup>1</sup>

The effects of secondhand smoke exposure on the body are immediate.<sup>3</sup> A 2011 study reported that secondhand smoke exposure can produce adverse inflammatory and respiratory effects within 60 minutes of exposure and that these effects persist for at least three hours after the exposure.<sup>5</sup> These findings are significant; the concern is not just secondhand smoke exposure for guests during a meal at a restaurant, but also the compounded health effects for an employee working an eight-hour shift in a smoke-filled restaurant or bar.<sup>3</sup>

## **The Burden of Secondhand Smoke Exposure**

Secondhand smoke exposure costs nonsmokers—especially vulnerable populations, such as children—their health and wellbeing. These costs are born not just by individuals, but by society: exposure to secondhand smoke costs the United States billions of dollars in lost productivity and medical expenses every year.<sup>1</sup>

As a result of the considerable body of evidence documenting the adverse effects of secondhand smoke, substantial progress has been made toward eliminating nonsmokers' exposure to this preventable health hazard over the last 50 years.<sup>1</sup> Recent assessments of cotinine, a metabolite of nicotine and biomarker of recent secondhand smoke exposure, indicates that about 1 in 4 Americans continue to be exposed to secondhand smoke.<sup>6</sup>

In the past 50 years, secondhand smoke exposure is estimated to have caused nearly 2.5 million deaths in nonsmoking Americans.<sup>1</sup> Each year, an estimated 7,330 lung cancer deaths and 33,950 coronary heart disease deaths are attributable to secondhand smoke exposure.<sup>1</sup> The smoking-attributable economic costs in the United States also include about \$5.6 billion in lost productivity every year due to secondhand smoke exposure.<sup>1</sup> Many of these deaths and this lost productivity could be prevented if comprehensive smokefree laws prohibiting smoking in all indoor areas of worksites, restaurants, and bars were implemented nationwide.<sup>1</sup>

## **Preventing Secondhand Smoke Exposure**

We know what works to prevent these harms. In 2006, the Surgeon General concluded that eliminating smoking in indoor spaces is the only way to fully protect nonsmokers from secondhand smoke exposure.<sup>3</sup> In 2009, the World Health Organization's International Agency for Research on Cancer reiterated these findings, concluding that smokefree policies lead to substantial declines in secondhand smoke exposure, citing air quality improvements of up to 90% in high-risk settings, such as bars.<sup>7</sup>

The latest Surgeon General's report delved deeper into the science behind the success of smokefree laws in protecting people's health. Specifically, the report concluded that smokefree laws directly cause reductions in coronary events (especially heart attacks), making comprehensive smokefree laws one of the most effective and cost-effective approaches for reducing heart disease—the leading cause of death—in the country.<sup>1</sup>

Finally, beyond reducing exposure to secondhand smoke, smokefree laws also lower smoking rates as a whole, especially among vulnerable youth and young adults.<sup>1</sup> Both the Surgeon General and the U.S. Guide to Community Preventive Services conclude that smokefree laws in workplaces and communities help smokers quit and reduce tobacco use.<sup>1,8</sup> In addition, smokefree workplaces and communities make youth and young adults less likely to start smoking due to a number of factors, including lower visibility of people who smoke, fewer opportunities to smoke alone or with others, and reduced social acceptability for smoking.<sup>1</sup> The implementation of smokefree laws also increase the adoption of voluntary smokefree rules in homes, which can further protect nonsmokers—especially the most vulnerable that are exposed to secondhand smoke in the home, such as children.<sup>1</sup>

CDC defines a comprehensive smokefree law as one that prohibits smoking at all times, in all indoor areas of all workplaces and public places, including restaurants and bars. If a law allows exemptions for designated or ventilated smoking areas in workplaces, restaurants or bars, the state or community is not considered to have a comprehensive smokefree law. As of January 2015, CDC has determined that 26 states, Puerto Rico, the District of Columbia, and over 697 other communities in the United States have comprehensive smokefree laws in effect.<sup>9,10</sup>

Smokefree policies in hospitality venues such as restaurants, bars, and casinos protect employees and patrons from the health effects of secondhand smoke. These policies are associated with improved indoor air quality and with reduced secondhand smoke exposure, reduced sensory and respiratory symptoms, and improved lung function in nonsmoking employees, which translates into improved productivity.<sup>2</sup> Comprehensive smokefree laws

are also associated with rapid reductions in hospitalizations due to heart attacks and strokes.<sup>11</sup> These improvements occur within months after implementation.<sup>12,13</sup> For instance, in Colorado, following the implementation of a comprehensive smokefree law in 2006, the state saw a 23 percent drop in ambulance calls from these venues.<sup>14</sup> However, there was no change in ambulance calls from casinos until the law was expanded in 2008 to include casinos—after which, ambulance calls from casinos dropped nearly 20 percent.<sup>14</sup> Again, this illustrates that these health improvements are lifesaving and nearly immediate.

### **The Business Case for Smokefree Laws**

The evidence concerning the economic impact of smokefree laws is also well-documented. In 2006, the Surgeon General concluded that “evidence from peer-reviewed studies shows that smokefree policies and regulations do not have an adverse economic impact on the hospitality industry.”<sup>3</sup>

These findings have been replicated numerous times at the international, state, and local levels.<sup>1,3,7</sup> In 2009, the International Agency for Research on Cancer conducted a comprehensive review of 97 studies from eight countries on the economic impact of smokefree policies and found that studies consistently conclude that smokefree policies do not harm business.<sup>7</sup>

At the state and local level, studies consistently reiterate these conclusions. The largest analysis of the impact of local smokefree ordinances, which examined nine states (Alabama, Indiana, Kentucky, Mississippi, Missouri, South Carolina, Texas, and West Virginia), found that smokefree laws do not have a negative impact on either employment or sales in restaurants and bars.<sup>15</sup> A study of El Paso, Texas’s smokefree policy found that the law had no effect on restaurant and bar revenue.<sup>16</sup> Furthermore, a 2007 study on the economic impact of a smokefree law in Lexington-Fayette County, Kentucky found that “no important economic harm stemmed from the smoke-free legislation...despite the fact that Lexington is located in a tobacco-producing state with higher-than-average smoking rates.”<sup>17</sup>

Further reviews of the literature have also found that, in some cases, a smokefree policy produces positive effects for local businesses.<sup>18,19,20</sup> A number of cities and localities have experienced these positive effects. For instance, an in-depth analysis of tax revenue data in California after the state implemented their smokefree restaurant law (in 1995) and bar law (in 1998) found that the smokefree restaurant law was associated with an increase in restaurant revenues, and the smokefree bar law was associated with an increase in bar revenues.<sup>21</sup> Additionally, just one year after implementation of the New York City smokefree law, an evaluation found that restaurant and bar revenues in New York City increased by 8.7% from April 2003 through January 2004.<sup>22</sup>

These economic impact studies highlight one of the key benefits to implementing a comprehensive smokefree law, rather than relying on voluntary policies: an equal playing field for businesses. Businesses can compete fully on their merits, while protecting the health of their workers and patrons and promoting healthy communities.

### **Electronic Nicotine Delivery Systems**

I will now summarize the current market and regulation of electronic nicotine delivery systems, or ENDS, as well as the current scientific literature on these products, including the effect of ENDS aerosol on nonusers.

#### **The Current Regulation of Electronic Nicotine Delivery Systems**

E-cigarettes are part of a class of products often referred to as electronic nicotine delivery systems (ENDS), which are battery-powered devices that provide doses of nicotine and other additives to the user in an aerosol.<sup>23</sup> There are currently multiple types of ENDS on the U.S. market, including e-cigarettes, e-hookahs, hookah pens, vape pens, e-cigars, and others. Some of these products are disposable varieties, while others can be refilled or recharged for repeated use.

ENDS, including e-cigarettes, are currently not regulated by the U.S. Food and Drug Administration (FDA) under the Family Smoking Prevention and Tobacco Control Act (FSPTCA), although FDA issued a proposed rule in April 2014 to regulate them under its tobacco product authorities.<sup>24</sup> FDA's authority, however, does not extend to certain key policy interventions related to ENDS, such as use in public places.<sup>24</sup>

Absent federal regulation, the current landscape of ENDS—including product design and availability, sales, marketing, use, and related legislation—is one of rapid change and high variability. Furthermore, given that ENDS have only recently entered the U.S. market, significant questions remain regarding ENDS' safety.

### **Scientific Evidence of the Health Effects of Electronic Nicotine Delivery Systems**

We have very little information about the ingredients of ENDS liquids, or the exposure to harmful and potentially harmful constituents when using electronic cigarettes over the short-term or long-term. To date, manufacturers are not required to publish what chemicals are in the ENDS solution, or to perform or reveal results from systematic testing. Studies have demonstrated wide variability in design, operation, and contents and emissions of carcinogens, other toxicants, and nicotine from ENDS.<sup>1</sup> Depending on the brand, ENDS cartridges typically contain nicotine, a component to produce the aerosol (e.g., propylene glycol or glycerol), and flavorings (e.g., fruit, mint, or chocolate).<sup>25</sup> Harmful or potentially harmful constituents have also been documented in some ENDS, including tobacco-specific nitrosamines, aldehydes, metals, volatile organic compounds, phenolic compounds, polycyclic aromatic hydrocarbons, and tobacco alkaloids, but at lower levels than in conventional cigarettes.<sup>26</sup> However, because there are hundreds of manufacturers and no manufacturing standards, there is no way to ensure that all ENDS have acceptably low levels of toxicants.

### **Smokefree Laws and ENDS**

ENDS aerosol is not “water vapor.” It contains nicotine and can contain additional toxins, and thus, it is not as safe as clean air.<sup>27</sup>

Although nicotine exposure in the absence of combustion is less hazardous than exposure to combusted conventional tobacco products, nicotine itself is not without risk.<sup>1,28</sup> Nicotine is addictive.<sup>1</sup> Pregnant women can transfer nicotine to their developing fetus, which can be toxic.<sup>1</sup> The evidence is also suggestive that nicotine exposure during adolescence may have lasting adverse consequences for brain development.<sup>1</sup> And for non-smokers, nicotine is an acute irritant, potentially causing headache, nausea, and discomfort; for former smokers, nicotine exposure can trigger cravings jeopardizing their abstinence.<sup>29,30</sup>

Furthermore, beyond the concerns of nonuser exposure to nicotine, there are also reports in the news media about the potential for e-cigarettes to be altered to deliver other psychoactive substances such as THC, the active ingredient in marijuana.<sup>31,32</sup> Like nicotine, in an aerosolized form, THC is largely odorless, making it very difficult for the public to discern if they have been exposed.

Air containing ENDS aerosol is less safe than clean air, and ENDS use has the potential to involuntarily expose children and adolescents, pregnant women, and non-users to aerosolized nicotine and, if the products are altered, to other psychoactive substances. In fact, research has documented the presence of secondhand nicotine exposure using environmental monitoring and the measurement of biomarkers among exposed nonusers.<sup>33</sup> Therefore, clean air—free of both smoke and ENDS aerosol—remains the standard to protect health.

As of November 2014, three states and over 200 localities nationwide have incorporated ENDS into their smokefree laws.<sup>34</sup> In fact, North Dakota, the most recent state to pass a comprehensive statewide smokefree law, included the prohibition of ENDS use in indoor public places, including restaurants and bars.<sup>34</sup>

### **Conclusion**

ENDS have a range of potential impacts on individual and population health, and significant questions remain regarding their safety. However, given that these products emit nicotine—a psychoactive drug that can harm those involuntarily exposed—and other toxins, ENDS use should be prohibited in all places where smoking is prohibited in order to: protect children and adolescents, pregnant women, and non-smokers from involuntary exposure to aerosolized nicotine and potentially to other psychoactive substances, support enforcement of clean indoor air policies, and prevent renormalization of tobacco use.<sup>1,34</sup>

While we continue to learn more about the specific health effects of ENDS, the evidence shows that secondhand smoke causes considerable death and disease, costing the United States billions every year in direct health care costs and lost productivity. And unlike many other health hazards, these harms are completely preventable.

Thank you.

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<sup>1</sup> U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

<sup>2</sup> U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Smoking: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1986.

<sup>3</sup> U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.

<sup>4</sup> U.S. Department of Health and Human Services. *How Tobacco Smoke Causes Disease: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010.

<sup>5</sup> Flouris AD, Koutedakis Y. Immediate and short-term consequences of secondhand smoke exposure on the respiratory system. *Current Opinion in Pulmonary Medicine* 2011;17(2):110–5.

<sup>6</sup> Homa DM, Neff LJ, King BA, Caraballo RS, Bunnell RE, Babb SD, Garrett BE, Sosnoff CS, Wang L. Vital Signs: Disparities in Nonsmokers' Exposure to Secondhand Smoke—United States, 1999–2012. *Morbidity and Mortality Weekly Report* 2015;64(4):103–8.

<sup>7</sup> International Agency for Research on Cancer. *Handbook of Cancer Prevention: Evaluating the Effectiveness of Smoke-free Policies*. Geneva, Switzerland: International Agency for Research on Cancer, World Health Organization, 2009.

<sup>8</sup> Guide to Community Preventive Services. Decreasing tobacco use among workers: smoke-free policies to reduce tobacco use (2005 archived review). [www.thecommunityguide.org/tobacco/smokefreepolicies\\_archive.html](http://www.thecommunityguide.org/tobacco/smokefreepolicies_archive.html). Accessed January 14, 2015.

<sup>9</sup> Centers for Disease Control and Prevention. State Tobacco Activities Tracking and Evaluation (STATE) System. Available from: <http://apps.nccd.cdc.gov/statesystem/Default/Default.aspx>. Accessed January 14, 2015.

<sup>10</sup> Americans for Nonsmokers Rights Foundation. U.S. Tobacco Control Laws Database. Available from: <http://www.no-smoke.org/goingsmokefree.php?id=519#ords>. Accessed January 14, 2015.

<sup>11</sup> Tan CE, Glantz SA. Association between Smoke-Free Legislation and Hospitalization for Cardiac, Cerebrovascular, and Respiratory Diseases. *Circulation* 2012;126:2177–83.

<sup>12</sup> Semple S, Creely KS, Naji A, Miller BG, Ayres JG. Secondhand smoke levels in Scottish pubs: The effect of smoke-free legislation. *Tobacco Control* 2007;16:127–32.

<sup>13</sup> Centers for Disease Control and Prevention. Indoor air quality in hospitality venues before and after implementation of a clean indoor air law—Western New York, 2003. *Morbidity and Mortality Weekly Report* 2004;53(44):1038–41.

<sup>14</sup> Glantz SA, Gibbs E. Changes in Ambulance Calls Following Implementation of a Smokefree Law and its Extension to Casinos. *Circulation* 2013;doi: 10.1161/CIRCULATIONAHA.113.003455.

<sup>15</sup> Loomis BR, Shafer PR, van Hasselt M. The economic impact of smoke-free laws on restaurants and bars in 9 states. *Preventing Chronic Disease* 2013;10:120327. DOI: <http://dx.doi.org/10.5888/pcd10.120327>.

<sup>16</sup> CDC. Impact of a smoking ban on restaurant and bar revenues—El Paso, Texas, 2002. *Morbidity and Mortality Weekly Report* 53(107):150–2; 2004.

<sup>17</sup> Pyle M, et al. Economic effect of a smoke-free law in a tobacco-growing community. *Tobacco Control* 16:66–8, 2007.

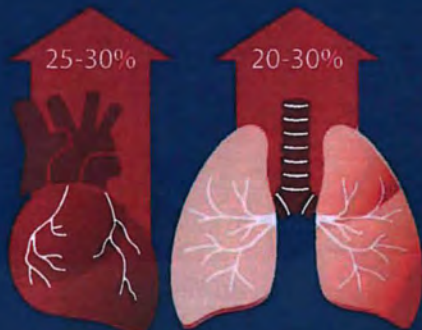
<sup>18</sup> Hahn EJ. Smokefree legislation: A review of health and economic outcomes research. *American Journal of Preventive Medicine* 39(6S1):S66–S76, 2010.

- <sup>19</sup> Eriksen M, Chaloupka F. The economic impact of clean indoor air laws. *CA: A Cancer Journal for Clinicians* 57:367–78, 2007.
- <sup>20</sup> Scollo M, et al. Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tobacco Control* 12:13–20, 2003.
- <sup>21</sup> Cowling DW, Bond P. Smoke-free laws and bar revenues in California: The last call. *Health Economics* 14(12):1273–81, 2005.
- <sup>22</sup> NYC Department of Finance, NYC Department of Health and Mental Hygiene, NYC Department of Small Business Services, NYC Economic Development Corporation. *The State of Smoke-Free New York City: A One-Year Review*. March 2004, <http://www.nyc.gov/html/doh/downloads/pdf/smoke/sfaa-2004report.pdf>. Accessed March 31, 2014.
- <sup>23</sup> Centers for Disease Control and Prevention (2013). Notes from the field: electronic cigarette use among middle and high school students—United States, 2011–2012. *Morbidity and Mortality Weekly Report* 2013;62(35): 729–730.
- <sup>24</sup> Food and Drug Administration. “Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Regulations on the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Products; Proposed Rule.” 79 Federal Register 80 (25 April 2014), pp. 23142–23207.
- <sup>25</sup> Cobb NK, Byron MJ, Abrams DB, and Shields PG. Novel nicotine delivery systems and public health: the rise of the “e-cigarette.” *American Journal of Public Health* 2010;100(12): 2340–2342.
- <sup>26</sup> Cheng T. Chemical evaluation of electronic cigarettes. *Nicotine & Tobacco Research*; 2014; 23, ii11–17. doi: 10.1136/tobaccocontrol-2013-051482.
- <sup>27</sup> Goniewicz ML, Kuma T, Gawron M, Knysak J, Kosmider L. Nicotine levels in electronic cigarettes. *Nicotine & Tobacco Research* 2013;15(1): 158–166.
- <sup>28</sup> Goniewicz, ML, Knysak J, Gawron M, Kosmider L, Sobczak A, Kurek J, Prokopowicz A, Jablonska-Czapla M, Rosik-Dulewska C, Havel C, Jacob P, Benowitz N. Levels of selected carcinogens and toxicants in vapour from electronic cigarettes. *Tobacco Control* 2014;23(2): 133–139.
- <sup>29</sup> Benowitz, NL. Clinical pharmacology of nicotine. *Annual Review of Medicine* 1986;37: 21–32.
- <sup>30</sup> 2008 PHS Guideline Update Panel. Treating tobacco use and dependence: 2008 Update U.S. Public Health Service Clinical Practice Guideline executive summary. *Respiratory Care* 2008;53(9): 1217–1222.
- <sup>31</sup> CBS Los Angeles (2014). “More Young Students Using Electronic Cigarettes, Marijuana Oil to get High During Class.” January 14, 2014. Available at: <http://losangeles.cbslocal.com/2014/01/14/more-young-students-using-electronic-cigarettes-marijuana-oil-to-get-high-during-class/>. Accessed January 14, 2015.
- <sup>32</sup> Welch, William M. (2014). “Vaporizers, e-cigs of the pot world, are booming.” *USA Today*. March 17, 2014. Available at: <http://www.usatoday.com/story/money/business/2014/03/15/marijuana-vaporizing-gains/6042675/>
- <sup>33</sup> Ballbé M, Martínez-Sánchez JM, Sureda X, et al. Cigarettes vs. e-cigarettes: passive exposure at home measured by means of airborne marker and biomarkers. *Environmental Research* 2014;135C:76–80. Epub ahead of print.
- <sup>34</sup> Marynak K, Holmes CB, King BA, Promoff G, Bunnell R, McAfee T. State Laws Prohibiting Sales to Minors and Indoor Use of Electronic Nicotine Delivery Systems—United States, November 2014. *Morbidity and Mortality Weekly Report* 2014;63(49);1145–50.

# Secondhand Smoke

Secondhand smoke (SHS) is the combination of smoke from the burning end of a cigarette, cigar or pipe tip and the smoke exhaled by the smoker. SHS is harmful to the health of everyone who comes in contact with it.<sup>1</sup>

## Health Effects: Adults and Workers



Nonsmokers who are exposed to SHS at work or home increase their risk of heart disease by 25-30% and risk of lung cancer by 20-30%.<sup>2</sup>

Smokefree workplace laws lead to less smoking, increases in quit attempts and an increase in cessation rates among protected workers.



Nine out of 10 Alaska adults think smoking should be prohibited in Alaska workplaces.<sup>3</sup>



For every eight smokers who die from smoking, one nonsmoker dies from exposure to SHS.<sup>4</sup>

**BOTTOM LINE:** There is no risk-free level of secondhand smoke; even brief exposure can be harmful.<sup>2</sup> Eliminating smoking in indoor spaces is the only way to fully protect nonsmokers from SHS exposure. Separating smokers from nonsmokers, cleaning the air and ventilating rooms or buildings does not eliminate SHS exposure.<sup>2</sup>



## What Can You Do?

- Encourage businesses to go smokefree.
- Before signing a lease or purchase agreement, ensure the rental property or association has a smokefree housing policy.
- Maintain a 100% smokefree home and car, even if you smoke.
- Choose restaurants and bars that are smokefree.
- Support federal, statewide and local tobacco-prevention efforts like smokefree laws, higher tobacco taxes and funding for tobacco prevention programs.

## If You Smoke, Take Precautions

- Always smoke outdoors – never in the home or other enclosed environments.
- Do not smoke around others, especially pregnant women, infants, the elderly and children.
- Consider using a nicotine replacement therapy (NRT) such as patches or gum, which help to lessen nicotine withdrawal and cravings and make it easier to quit.
- If you smoke, quit. If you can't quit, keep trying.

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1. U.S. Department of Health and Human Services. A Report of the Surgeon General: How Tobacco Smoke Causes Disease: What It Means to You. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010 [accessed 2011 Mar 11].

2. U.S. Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006 [accessed 2011 Mar 11].

3. Alaska Department of Health and Social Services. Alaska Tobacco Facts 2013.

4. Schoenmarklin, S. Tobacco Control Consortium. 2004. Infiltration of Secondhand Smoke into Condominiums, Apartments, and Other Multi-Use Dwellings. St. Paul, MN: Tobacco Control Legal Consortium.



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## Secondhand Smoke (SHS) Facts

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- [Overview](#)
- [Health Effects: Children](#)
- [Health Effects: Adults](#)
- [Estimates of Secondhand Smoke Exposure](#)
- [Disparities in Secondhand Smoke Exposure](#)
- [References](#)
- [For Further Information](#)

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### Overview

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Secondhand smoke is a mixture of gases and fine particles that includes:

- Smoke from a burning tobacco product such as a cigarette, cigar, or pipe<sup>1,2</sup>
- Smoke that has been exhaled or breathed out by the person or people smoking<sup>2</sup>
- More than 7,000 chemicals, including hundreds that are toxic and about 70 that can cause cancer<sup>1</sup>

Most exposure to secondhand smoke occurs in homes and workplaces. Secondhand smoke exposure also continues to occur in public places such as restaurants, bars, and casinos, as well as multiunit housing and vehicles.<sup>3</sup>

Eliminating smoking in indoor spaces is the only way to fully protect nonsmokers from secondhand smoke exposure.<sup>3</sup>

Separating smokers from nonsmokers within the same air space, cleaning the air, opening windows, and ventilating buildings does not eliminate secondhand smoke exposure.<sup>3</sup>

Since 1964, 2.5 million nonsmokers have died from exposure to secondhand smoke.<sup>1</sup>

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### Health Effects: Children

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**In children, secondhand smoke causes the following:<sup>1,3</sup>**

- Ear infections
- More frequent and severe asthma attacks
- Respiratory symptoms (e.g., coughing, sneezing, shortness of breath)
- Respiratory infections (i.e., bronchitis, pneumonia)
- A greater risk for sudden infant death syndrome (SIDS)

**In U.S. children aged 18 months or younger, secondhand smoke exposure is responsible for:<sup>3</sup>**

- An estimated 150,000–300,000 new cases of bronchitis and pneumonia annually
- Approximately 7,500–15,000 hospitalizations annually

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## Health Effects: Adults

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**In adults who have never smoked, secondhand smoke can cause cardiovascular disease and lung cancer.<sup>1,5</sup>**

### Cardiovascular Disease

- For nonsmokers, breathing secondhand smoke has immediate harmful effects on the cardiovascular system that can increase the risk for heart attack. People who already have heart disease are at especially high risk.<sup>1,3</sup>
- Nonsmokers who are exposed to secondhand smoke increase their heart disease risk by 25–30%.<sup>3</sup>
- It is estimated that secondhand smoke exposure caused nearly 34,000 heart disease deaths annually (during 2005–2009) among adult nonsmokers in the United States.<sup>1</sup>
- Stroke is caused by exposure to secondhand smoke.<sup>1</sup>

### Lung Cancer

- Nonsmokers who are exposed to secondhand smoke at home or work increase their lung cancer risk by 20–30%.<sup>3</sup>
- Secondhand smoke exposure causes an estimated more than 7,300 lung cancer deaths annually (for 2005–2009) among adult nonsmokers in the United States.<sup>1</sup>

**There is no risk-free level of secondhand smoke exposure; even brief exposure can be harmful to health.<sup>1,3,4</sup>**

## **Smoke-free laws can reduce the risk of heart disease and lung cancer among nonsmokers.<sup>1</sup>**

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### **Estimates of Secondhand Smoke Exposure**

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When a nonsmoker breathes in secondhand smoke, the body begins to metabolize or break down the nicotine that was in the smoke. During this process, a nicotine byproduct called cotinine is created. Exposure to nicotine and secondhand smoke can be measured by testing saliva, urine, or blood for the presence of cotinine.<sup>3</sup>

#### **Secondhand Smoke Exposure Has Decreased in Recent Years**

- Measurements of cotinine have shown how exposure to secondhand smoke has steadily decreased in the United States over time.<sup>5\*</sup>
  - During 1988–1991, approximately 87.9% of nonsmokers had measurable levels of cotinine.
  - During 1999–2000, approximately 52.5% of nonsmokers had measurable levels of cotinine.
  - During 2007–2008, approximately 40.1% of nonsmokers had measurable levels of cotinine.
- The decrease in exposure to secondhand smoke is due to the growing number of laws that prohibit smoking in workplaces and public places, including restaurants and bars, the increase in the number of households with voluntary smoke-free home rules, and the decreases in adult and youth smoking rates.<sup>1,5,6,7,8</sup>

\*This information will be updated in 2014.

#### **Many in the United States Continue to be Exposed to Secondhand Smoke\***

- An estimated 88 million nonsmokers in the United States were exposed to secondhand smoke in 2007–2008.<sup>5</sup>
- Children are at particular risk for exposure to secondhand smoke: 53.6% of young children (aged 3–11 years) were exposed to secondhand smoke in 2007–2008.<sup>5</sup>
- While only 5.4% of adult nonsmokers in the United States lived with someone who smoked inside their home, 18.2% of children (aged 3–11 years) lived with someone who smoked inside their home in 2007–2008.<sup>5</sup>
- Among children who live in homes in which no one smokes inside, those who live in multiunit housing have 45% higher cotinine levels compared to those who live in detached homes.<sup>9</sup>
- Today about half of the children between ages 3 and 18 in the U.S. are exposed to cigarette smoke regularly, either at home or in places such as restaurants that still allow smoking.<sup>10</sup>

\*This information will be updated in 2014.

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## Disparities in Secondhand Smoke Exposure

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### Racial and Ethnic Groups<sup>5</sup>

- Although declines in cotinine levels have occurred in all racial and ethnic groups, cotinine levels have consistently been found to be higher in non-Hispanic black Americans than in non-Hispanic white Americans and Mexican Americans. In 2007–2008:
  - 55.9% of non-Hispanic blacks were exposed to secondhand smoke.
  - 40.1% of non-Hispanic whites were exposed to secondhand smoke.
  - 28.5% of Mexican Americans were exposed to secondhand smoke.

### Low Income<sup>5</sup>

- Secondhand smoke exposure tends to be high for persons with low incomes: 60.5% of persons living below the poverty level in the United States were exposed to secondhand smoke in 2007–2008.

### Occupational Disparities<sup>8</sup>

- Occupational disparities in secondhand smoke exposure decreased over the past two decades, but substantial differences in exposure among workers remain.
- African-American male workers, construction workers, and blue collar workers and service workers are some of the groups who continue to experience particularly high levels of secondhand smoke exposure relative to other workers.

**Eliminating smoking in indoor spaces is the only way to fully protect nonsmokers from secondhand smoke exposure. Separating smokers from nonsmokers within the same air space, cleaning the air, opening windows, and ventilating buildings does not eliminate secondhand smoke exposure.<sup>3</sup>**

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## References

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1. U.S. Department of Health and Human Services. [The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General](http://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/index.htm) ([http://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/index.htm)). Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention,

- National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014 [accessed 2014 Apr 11].
2. National Toxicology Program. Report on Carcinogens, Twelfth Edition (<http://ntp.niehs.nih.gov/ntp/roc/twelfth/roc12.pdf>). [PDF-7.22 MB] Research Triangle Park (NC): U.S. Department of Health and Human Sciences, National Institute of Environmental Health Sciences, National Toxicology Program, 2011 [accessed 2014 Apr 11].
  3. U.S. Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006 [cited 2014 Apr 11].
  4. Institute of Medicine. Secondhand Smoke Exposure and Cardiovascular Effects: Making Sense of the Evidence (<http://www.iom.edu/~media/Files/Report%20Files/2009/Secondhand-Smoke-Exposure-and-Cardiovascular-Effects-Making-Sense-of-the-Evidence/Secondhand%20Smoke%20%20Report%20Brief%203.pdf>) [PDF-707.47 KB]. Washington: National Academy of Sciences, Institute of Medicine, 2009 [accessed 2014 Apr 11].
  5. Centers for Disease Control and Prevention. Vital Signs: Nonsmokers' Exposure to Secondhand Smoke—United States, 1999–2008 ([http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5935a4.htm?s\\_cid=mm5935a4\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5935a4.htm?s_cid=mm5935a4_w)). *Morbidity and Mortality Weekly Report* 2010;59(35):1141–6 [accessed 2014 Apr 11].
  6. Pirkle JL, Bernert JT, Caudill SP, Sosnoff CS, Pechacek TF. Trends in the Exposure of Nonsmokers in the U.S. Population to Secondhand Smoke: 1988–2002 (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1480505/?tool=pmcentrez>). *Environmental Health Perspectives* 2006;114(6):853–8 [accessed 2014 Apr 11].
  7. Centers for Disease Control and Prevention. Fourth National Report on Human Exposure to Environmental Chemicals (<http://www.cdc.gov/exposurereport/pdf/FourthReport.pdf>). [PDF-6.36 MB] Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Environmental Health, 2009 [accessed 2014 Apr 11].
  8. Arheart KL, Lee DJ, Dietz NA, Wilkinson JD, Clark III JD, LeBlanc WG, Serdar B, Fleming LE. Declining Trends in Serum Cotinine Levels in U.S. Worker Groups: The Power of Policy. *Journal of Occupational and Environmental Medicine* 2008;50(1):57–63 [cited 2014 Apr 11].
  9. Wilson KM, Klein JD, Blumkin AK, Gottlieb M, Winickoff JP. Tobacco Smoke Exposure in Children Who Live in Multiunit Housing (<http://pediatrics.aappublications.org/content/early/2010/12/13/peds.2010-2046.full.pdf+html>). [PDF-575 KB] *Pediatrics* 2011;127(1):85–92 [accessed 2014 Apr 11].

10. U.S. Department of Health and Human Services. Let's Make the Next Generation Tobacco-Free: Your Guide to the 50th Anniversary Surgeon General's Report on Smoking and Health (<http://www.surgeongeneral.gov/library/reports/50-years-of-progress/consumer-guide.pdf>). [PDF-795 KB] Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014 [accessed 2014 Apr 11].

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## For Further Information

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Centers for Disease Control and Prevention  
 National Center for Chronic Disease Prevention and Health Promotion  
 Office on Smoking and Health  
 E-mail: [tobaccoinfo@cdc.gov](mailto:tobaccoinfo@cdc.gov) (<mailto:tobaccoinfo@cdc.gov>)  
 Phone: 1-800-CDC-INFO

Media Inquiries: Contact CDC's Office on Smoking and Health press line at 770-488-5493.

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Lancet. 2014 May 3;383(9928):1549-60. doi: 10.1016/S0140-6736(14)60082-9. Epub 2014 Mar 28.

## Effect of smoke-free legislation on perinatal and child health: a systematic review and meta-analysis.

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### Author information

#### Abstract

**BACKGROUND:** Smoke-free legislation has the potential to reduce the substantive disease burden associated with second-hand smoke exposure, particularly in children. We investigated the effect of smoke-free legislation on perinatal and child health.

**METHODS:** We searched 14 online databases from January, 1975 to May, 2013, with no language restrictions, for published studies, and the WHO International Clinical Trials Registry Platform for unpublished studies. Citations and reference lists of articles of interest were screened and an international expert panel was contacted to identify additional studies. We included studies undertaken with designs approved by the Cochrane Effective Practice and Organisation of Care that reported associations between smoking bans in workplaces, public places, or both, and one or more predefined early-life health indicator. The primary outcomes were preterm birth, low birthweight, and hospital attendances for asthma. Effect estimates were pooled with random-effects meta-analysis. This study is registered with PROSPERO, number CRD42013003522.

**FINDINGS:** We identified 11 eligible studies (published 2008-13), involving more than 2·5 million births and 247,168 asthma exacerbations. All studies used interrupted time-series designs. Five North American studies described local bans and six European studies described national bans. Risk of bias was high for one study, moderate for six studies, and low for four studies. Smoke-free legislation was associated with reductions in preterm birth (four studies, 1,366,862 individuals; -10·4% [95% CI -18·8 to -2·0]; p=0·016) and hospital attendances for asthma (three studies, 225,753 events: -10·1% [95% CI -15·2 to -5·0]; p=0·0001). No significant effect on low birthweight was identified (six studies, >1·9 million individuals: -1·7% [95% CI -5·1 to 1·6]; p=0·31).

**INTERPRETATION:** Smoke-free legislation is associated with substantial reductions in preterm births and hospital attendance for asthma. Together with the health benefits in adults, this study provides strong support for WHO recommendations to create smoke-free environments.

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### **The Economic Impact of Clean Indoor Air Laws**

Michael Eriksen and Frank Chaloupka

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# The Economic Impact of Clean Indoor Air Laws

Michael Eriksen, ScD; Frank Chaloupka, PhD

**ABSTRACT** Clean indoor air laws are easily implemented, are well accepted by the public, reduce nonsmoker exposure to secondhand smoke, and contribute to a reduction in overall cigarette consumption. There are currently thousands of clean indoor air laws throughout the United States, and the majority of Americans live in areas where smoking is completely prohibited in workplaces, restaurants, or bars. The vast majority of scientific evidence indicates that there is no negative economic impact of clean indoor air policies, with many studies finding that there may be some positive effects on local businesses. This is despite the fact that tobacco industry-sponsored research has attempted to create fears to the contrary. Further progress in the diffusion of clean indoor air laws will depend on the continued documentation of the economic impact of clean indoor air laws, particularly within the hospitality industry. This article reviews the spread of clean indoor air laws, the effect on public health, and the scientific evidence of the economic impact of implementation of clean indoor air laws. (*CA Cancer J Clin* 2007;57:367-378.) © American Cancer Society, Inc., 2007.

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## THE SPREAD OF CLEAN INDOOR AIR LAWS

States and localities have restricted smoking in a variety of places for many years. The earliest policies usually restricted smoking in a few venues (eg, theaters or food preparation areas) and were intended to prevent fires or food contamination rather than to protect the health of nonsmokers. As evidence emerged about the health consequences of smoking, including limited evidence on the consequences of exposure of nonsmokers to tobacco smoke, the public health community and advocates called for protection from exposure to secondhand smoke. In 1971, Surgeon General Jesse Steinfeld called for a complete ban on smoking in confined public places and went on to tell the Interagency Committee on Smoking and Health, "Nonsmokers have as much right to clean air and wholesome air as smokers have to their so-called right to smoke, which I would define as a 'right to pollute.' It is high time to ban smoking from all confined public places such as restaurants, theaters, airplanes, trains and buses."<sup>1</sup>

The next year, Surgeon General Steinfeld released the 1972 Surgeon General's Report<sup>2</sup> and sparked national awareness of the possible adverse health effects due to "public exposure to air pollution from tobacco smoke."

Policy makers ultimately listened and adopted new policies limiting smoking, with the specific intent of protecting nonsmokers. The earliest of these state policies was the 1973 law in Arizona that limited smoking in a number of public places. This was soon followed by the 1974 Connecticut law restricting smoking in restaurants and the 1975 Minnesota law that was the first comprehensive clean indoor air law that included restrictions on smoking in private workplaces.<sup>3</sup>

Perhaps surprisingly given that California has been at the leading edge of state tobacco-control efforts, statewide clean indoor air referenda were defeated in California in 1978 and 1980. These defeats resulted in a shift from statewide to local efforts to restrict public smoking in the state. In the early 1980s, local clean indoor air ordinances were passed in San Francisco, Los Angeles, Sacramento, and San Diego. This focus on local municipalities started in California and spread throughout the nation.

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As public advocacy and scientific discovery advanced, the tobacco industry took note. In 1978, the Tobacco Institute commissioned the Roper Organization to conduct a national public-opinion survey on smoking.<sup>4</sup> The Roper Organization warned the Tobacco Institute that the tobacco industry should give serious consideration to public concerns about secondhand smoke, stating, "...what the smoker does to himself may be his business, but what the smoker does to the nonsmoker is quite a different matter." The Roper Report went on to conclude the following:

"Nearly six out of ten believe that smoking is hazardous to the nonsmoker's health, up sharply over the last four years. More than two-thirds of nonsmokers believe it and nearly one half of all smokers believe it. This we see as the most dangerous development to the viability of the tobacco industry that has yet occurred."<sup>4</sup>

Momentum for clean indoor air policies grew following the release of the 1986 Surgeon General's report, *The Health Consequences of Involuntary Smoking*, which concluded that exposure to tobacco smoke caused diseases, including lung cancer, and that children of smoking parents were at increased risk of respiratory diseases.<sup>3</sup> Importantly, the report concluded that the simple separation of smokers and nonsmokers might reduce but did not eliminate the health risks from nonsmokers' exposure to tobacco smoke. In the years following the report, new federal regulations were adopted banning smoking on domestic flights of 2 hours or fewer and, eventually, virtually all domestic flights (in 1990) and all international flights departing from or arriving in the United States (in 2000). The report spurred more action at the state and local level as governments strengthened existing policies and adopted new policies, including complete bans on smoking in some venues (eg, health care facilities). At the same time, it led numerous private companies to adopt policies governing smoking in their workplaces. Much of the push for strong state and local policies was the result of effective grassroots advocacy efforts of groups like the Americans for Nonsmokers' Rights Foundation and the coalitions supported by the American Stop Smoking Intervention Study and SmokeLess States programs.<sup>3</sup>

As evidence grew about the health consequences of exposure to tobacco smoke, state and local policies became stronger and stronger. The 1997 release of the California Environmental Protection Agency's report on the health consequences of exposure<sup>5</sup> was followed in 1998 by California's law banning smoking in bars without separately ventilated smoking areas. In 2002, New York City made history by banning smoking in bars, restaurants, and virtually all other workplaces beginning in July 2003, while Florida voters overwhelmingly supported a ballot initiative that with some exceptions (most notably bars) did the same. By 2003, every state and thousands of localities had adopted policies limiting or banning smoking in a variety of locales. The growth and strengthening of these state policies is illustrated in Figure 1.

Most recently, the 2006 Surgeon General's Report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke*,<sup>3</sup> stimulated further action, leading a growing number of states and communities to adopt comprehensive bans on cigarette smoking in virtually all public places and private worksites. In some places, these policies have included some outdoor spaces (eg, sports stadiums, beaches, and public parks). As of July 2007, 23 states, Puerto Rico, and Washington, DC, have laws in effect that require 100% smoke-free workplaces, restaurants, or bars (or some combination thereof), with another 6 states having enacted similar laws that are not yet in effect. There are also over 2,500 municipalities with clean indoor air laws.<sup>6</sup> The growth in these comprehensive policies since 1985 is illustrated in Figure 2.

These comprehensive state policies (including those scheduled to take effect in the future), along with comparable local policies, currently apply to well over half of the US population.<sup>6</sup> Further limits on smoking are being considered, including extending the policies to a greater variety of outdoor spaces and prohibiting smoking in private cars when children are present. In addition, as awareness of the health consequences of exposure to tobacco smoke grew and as public and private policies were implemented and strengthened, a growing number of households, including those of smokers, have adopted rules governing smoking in the home. By 2003, nearly

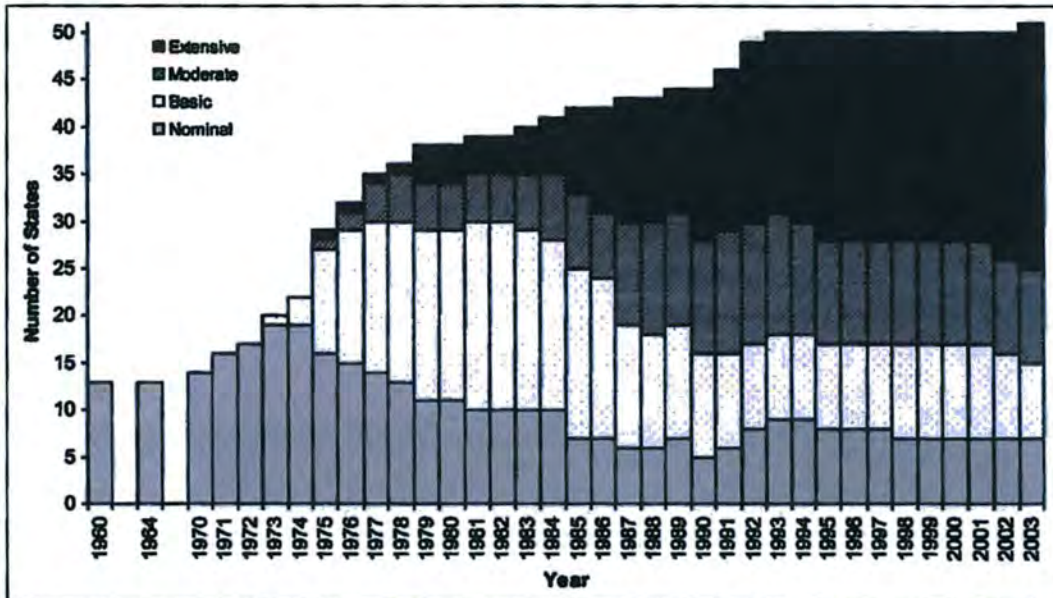


FIGURE 1 Restrictiveness of State Laws Regulating Smoking in Public Places, 1960 to 2003. Note: classification scheme from 1989 Surgeon General's Report (US Department of Health and Human Services, 1989) used to define restrictiveness as follows: nominal indicates 1 to 3 public places, not including restaurants or worksites; basic, 4 or more public places, not including restaurants or worksites; moderate, regulates smoking in restaurants, but not worksites; extensive, regulates smoking in private worksites. Figure courtesy of Roswell Park Cancer Institute and the ImpacTeen Project.

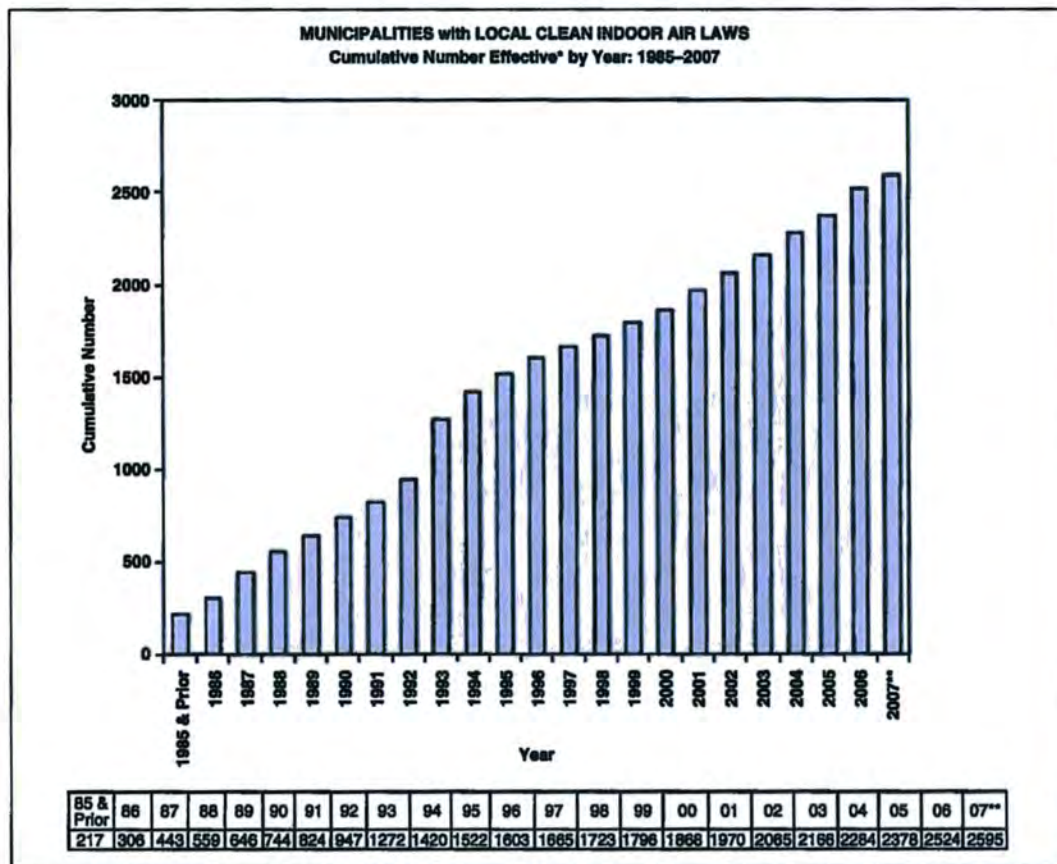
three fourths of US households had smoke-free home rules in place.<sup>7</sup>

#### GLOBAL CLEAN INDOOR AIR LAWS

In March 2004, Ireland became the first country to implement laws prohibiting smoking in enclosed workplaces, including bars and restaurants. Although some feared that the policy would be harmful to the economy and that people would not adhere to the law, the majority of the public supported the ban, and over 26,000 inspections reported a 94% compliance level.<sup>8</sup> In addition, there was an 11% increase in the number of customers who visited Dublin pubs after the ban.<sup>9</sup> Other studies have supported positive findings from Ireland's ban, including the following: (1) increase of public support of smoke-free laws from 67% to 89%, (2) increase of support from smokers from 40% to 70%, (3) high compliance to the smoke-free laws, (4) decreases of particulate concentrations and benzene levels in indoor air, and (5) improvements in nonsmokers' pulmonary functions.<sup>10</sup> Since the enactment of Ireland's smoke-free laws, other countries have followed

suit or are planning to do so, such as New Zealand, Bermuda, Iran, Italy, South Africa, Finland, and others.<sup>11</sup>

On May 21, 2003, the world's first international public health treaty, the Framework Convention on Tobacco Control (FCTC), was adopted unanimously by the World Health Assembly. Article 8 of the FCTC addresses secondhand-smoke exposure as a health risk and identifies interventions to reduce the exposure. The FCTC calls for ratifying parties to implement clean indoor air laws that will protect citizens from secondhand-smoke exposure in indoor workplaces and public places.<sup>12</sup> On August 14, 2007, Grenada became the 149th country to ratify the FCTC.<sup>13</sup> Unfortunately, while the United States signed the treaty in May 2004, it has not yet been sent to the Senate for ratification. At the second meeting of the Conference of Parties in July 2007 in Bangkok, the countries that ratified the FCTC adopted standards for implementation of the smoke-free provisions as outlined in Article 8 of the FCTC. The standards acknowledge that only 100% smoke-free environments provide effective protection from secondhand



**FIGURE 2** Municipalities with Local Clean Indoor Air Laws, Cumulative Number Effective\* by Year: 1985–2007.  
\*Includes ordinances effective for any part of the year (ie, if an ordinance was effective for the first half of 2001, but then repealed halfway through the year, that ordinance still gets counted in 2001 since it was in effect for part of the year).<sup>8</sup>  
\*\*Year to date.  
Reprinted with permission from the American Nonsmokers' Rights Foundation.

smoke and that there is no safe level of exposure, which is consistent with the conclusions of the 2006 Surgeon General's Report.<sup>14</sup>

**PROGRESS IN REDUCING EXPOSURE TO SECONDHAND SMOKE**

Not only have clean indoor air laws become prevalent, their implementation has had a positive effect on public health. For example, Healthy People 2010 has established objectives to help achieve the goal of reducing illness, disability, and death related to tobacco use and exposure to secondhand smoke.<sup>15</sup> There are 17 specific objectives, with 5 pertaining to reducing exposure to secondhand smoke in the United States. During the Healthy People 2010 Midcourse Review,<sup>16</sup> progress toward all the tobacco objectives was

assessed, and the *only* objective that was actually met was reducing the proportion of nonsmokers exposed to secondhand smoke from 88% to 54% (Objective 27–10), exceeding its target by 36%.

The Centers for Disease Control and Prevention's *Third National Report on Human Exposure to Environmental Chemicals*<sup>17</sup> shows that the presence of serum cotinine in nonsmokers has decreased dramatically over the past decade. Cotinine is a metabolite of nicotine and is primarily present in nonsmokers as a result of inhaling secondhand tobacco smoke. Compared with 1988 to 1991, the 1999 to 2002 data illustrate that cotinine levels in nonsmokers have decreased by approximately 70% (see Figure 3).<sup>18</sup> These investigators reported that nearly all (88%) of nonsmokers had measurable levels of cotinine in their blood in 1988 to 1991, but

only 43% had measurable cotinine levels in 1999 to 2002.

To better understand the reason for this precipitous drop in serum cotinine levels since 1988, Pickett and her colleagues<sup>20</sup> analyzed the National Health and Nutrition Examination Survey data in the 57 locations in which the survey was conducted and compared serum cotinine levels in relation to the presence of clean indoor air laws. These investigators found a dose-response relationship between exposure to secondhand smoke (as measured by serum cotinine) and the extensiveness of the clean indoor air law in the subject's county of residence. In counties with extensive laws, 12.5% of the residents had serum cotinine levels consistent with secondhand smoke exposure compared with 35.1% in counties with limited coverage and 45.9% in counties with no clean indoor air law at all. Recent data from New York State indicate a reduction of nearly 50% in serum cotinine levels following the implementation of a comprehensive statewide smoking ban and an increase from under one third to over one half of the study population with undetectable levels of cotinine.<sup>21</sup>

In general, research suggests that these policies are self-enforcing and that compliance is high within a short time after their implementation.<sup>22,23</sup> As a result, these policies are highly effective in reducing nonsmokers' exposure to tobacco smoke.<sup>3,24</sup> Somewhat surprisingly perhaps, even many smokers residing in communities with comprehensive smoke-free policies indicate that they support such bans.<sup>23</sup> For example, in one recent survey, 83% of Irish smokers indicated that the comprehensive smoking ban implemented in Ireland in March 2004 was a good or very good policy.<sup>25</sup>

In addition to protecting nonsmokers from exposure to tobacco smoke, these policies are effective in reducing cigarette smoking both by encouraging adult smokers to quit smoking and preventing youth from initiating smoking. These reductions result, in part, from the strengthening of social norms against smoking that follows the adoption of these policies, as well as from limiting opportunities for smoking and raising the "costs" of smoking (eg, the inconvenience or discomfort associated with smoking outdoors). Comprehensive reviews of the research evidence

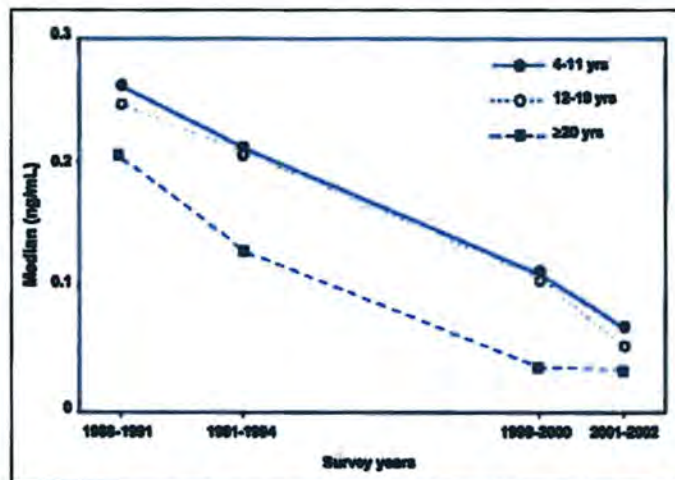


FIGURE 3 Median Serum Cotinine Levels in Nonsmokers, by Age Group—National Health and Nutrition Examination Survey (NHANES), United States, 1988–1991 through 2001–2002.<sup>18</sup> Reprinted with permission from the Centers for Disease Control and Prevention, Department of Health and Human Services.<sup>19</sup>

on the impact of smoke-free workplace policies by the National Cancer Institute,<sup>26</sup> the Task Force on Community Preventive Services,<sup>24,27</sup> and the Surgeon General<sup>3</sup> find that these policies are effective in inducing some smokers to quit smoking and in reducing the number of cigarettes consumed by some smokers who continue to smoke.

Likewise, among youth and young adults, these policies are associated with stronger perceptions of the risks from smoking and lower perceived smoking prevalence among adults. These factors and the increased "costs" of smoking associated with the policies help explain the consistent findings from a growing number of studies showing that comprehensive smoke-free air policies are effective in reducing youth smoking prevalence, initiation, and uptake.<sup>3</sup>

The association between state smoke-free air policies and adult smoking prevalence is illustrated in Figure 4. While this simple graph does not control for the other factors that affect smoking prevalence or for the potential reverse causality between prevalence and state policies, it is consistent with the extensive and growing body of research that does take these into account. The figure uses an index developed by the ImpacTeen project that reflects both the number of places covered by state smoke-free air policies and the extent of the restrictions in each of these places (ranging from no restrictions to a complete ban).

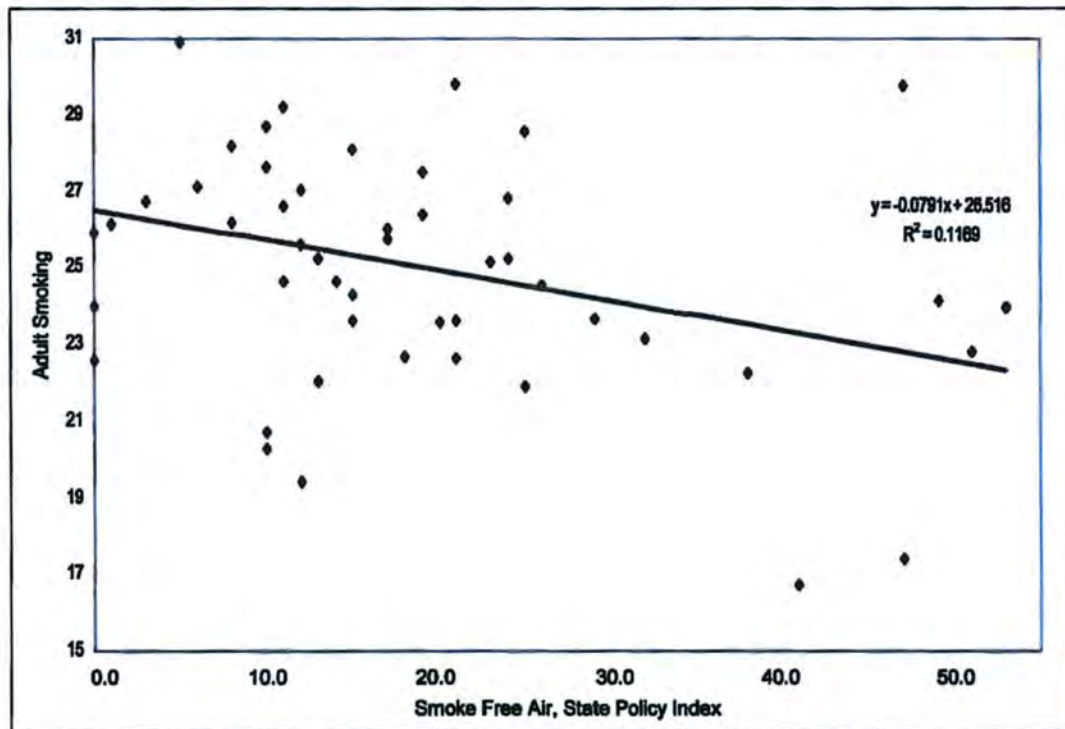


FIGURE 4 Strength of Smoke-free Air Policies and Adult Smoking Prevalence, 2003 to 2004. Figure courtesy of Substance Abuse and Mental Health Services Administration, Roswell Park Cancer Institute, and the ImpactTeen Project.

The actual experience in implementing clean indoor air laws has confirmed the anticipated public health benefit. Levy and colleagues<sup>28</sup> estimate that state clean indoor air laws adopted between 1993 and 2003 accounted for about 9% of the decline in adult smoking prevalence during this period. Levy<sup>29</sup> further predicts that prevalence would decline by an additional 4.2% by 2025 if all states that had not implemented comprehensive clean indoor air laws by the end of 2005 did so. While not the subject of this review, the 2006 Surgeon General's Report reviews the health benefits to nonsmokers as a result of reducing exposure to secondhand smoke and concludes "... that smoke-free workplace laws appear to yield health benefits soon after implementation."<sup>3</sup> As with active smoking, the health benefits associated with clean indoor air laws can be simply attributed to reduced exposure to the toxins contained in tobacco smoke. For example, a recent study in the Pacific Northwest found significantly higher levels of a tobacco-specific lung carcinogen (NNAL) in nonsmoking bar and restaurant workers exposed

to secondhand smoke compared with workers employed in smoke-free establishments.<sup>30</sup>

#### THE ECONOMIC COSTS OF EXPOSURE TO SECONDHAND SMOKE

In addition to the morbidity and mortality associated with chronic exposure to secondhand smoke, there are also real and substantial economic costs. In 2005, the Society of Actuaries<sup>31</sup> analyzed the costs associated with involuntary exposure to secondhand smoke and concluded that such exposure imposes significant costs on nonsmokers and society as a whole. Total annual costs for conditions with well-documented increases in morbidity are estimated at nearly \$5 billion in direct medical costs and nearly \$5 billion in indirect costs (See Table 1).

#### ECONOMIC IMPACT OF SMOKE-FREE AIR LAWS

The spread of smoke-free air policies at the local, state, and national levels has been slowed by concerns about the economic impact of these

TABLE 1 Estimated Annual Direct Medical Cost and Economic Value of Lost Wages, Fringe Benefits, and Services for the Nonsmoking US Population Based on Present Value<sup>31</sup>

Major Disease Category	Specific Health Condition	Medical Cost (\$1,000,000)	Indirect Costs (\$1,000,000)	Total Annual US Combined Costs (\$1,000,000)
Cancer	Lung cancer	191	469	660
Cancer	Cervical cancer	14	110	124
Respiratory system	Asthma	773	161	934
Respiratory system	Otitis media	53	N/A	53
Respiratory system	Chronic obstructive pulmonary disease	1,215	886	2,101
Cardiovascular system	Coronary heart disease	2,452	2,752	5,204
Perinatal manifestations	Low birth weight	284	174	458
Postnatal manifestations	Sudden infant death syndrome	N/A	131	131
Total		4,982	4,683	9,665

N/A = not applicable.

policies, particularly on the hospitality industry. Some restaurant and bar owners, for example, thought that smoking restrictions or bans would result in lost revenues as their smoking patrons would cut short their stay or seek other venues (including those in other jurisdictions) where smoking was unrestricted. Others felt that the decision about smoking in their establishments was a business decision that was best left up to them, rather than one that required policy intervention. As the evidence on the health consequences of exposure to tobacco smoke amassed, arguments against smoke-free air policies became increasingly focused on their economic impact, rather than on the need to protect nonsmokers.

The tobacco industry has fueled this debate with its claims that smoke-free air policies will result in declining restaurant, bar, and other hospitality industry revenues; lost jobs in the hospitality sector; and business closings.<sup>32,33</sup> This was not a new strategy—the industry has long made and continues to make the same arguments about the dire economic consequences of other tobacco-control policies, most notably increased tobacco taxes and comprehensive bans on advertising, despite the growing evidence to the contrary.<sup>34,35</sup>

#### Studies Based on Objective Data

The spread of smoke-free air policies has provided numerous natural experiments that have allowed researchers to assess the economic impact of these policies on the hospitality industry, generally, and on restaurants, bars, casinos, and tourism, specifically. The best of these studies use objective

data on outcomes such as sales tax revenues, employment, and the number of licensed establishments from the periods before and after the implementation of the policy, along with comparable data from other jurisdictions where there was no policy change as a control group. Given the volatility of the hospitality industry, inclusion of appropriate controls is critical to separating any effects of these policies from the economic and other factors that impact on business activity.

The first such study, by Glantz and Smith,<sup>36</sup> focused on the effects of local smoke-free restaurant ordinances adopted between 1985 and 1992 in 15 California and Colorado communities. The authors used multiple regression methods to look at taxable restaurant sales revenues as a share of total revenues before and after the implementation of smoke-free policies in these communities and in 15 comparable communities that did not have a smoke-free restaurant policy. The authors found no evidence that the ordinances had a negative economic impact on the restaurant business in communities that had banned smoking in restaurants. In a follow-up study,<sup>37</sup> the authors updated their analysis and also examined the impact of local smoke-free bar ordinances in 7 California localities that had also banned smoking in drinking establishments, using a comparable measure of revenues from businesses licensed to serve alcohol. Again, the authors found no significant economic impact of the local ordinances on either restaurants or bars.

Other studies have used measures of employment to assess the economic impact of smoke-free

policies. Hyland and Cummings,<sup>38</sup> for example, looked at employment in New York City restaurants before and after the adoption of the city's smoke-free restaurant ordinance in April 1995, comparing trends in the city to those in neighboring counties and the rest of the state. They found that between April 1993 and April 1997, there was an 18% rise in restaurant employment in New York City compared with a 5% increase in the rest of the state, leading them to conclude that the policy did not result in the job losses opponents had argued would occur. In a follow-up analysis, Hyland and Tuk<sup>39</sup> presented similar evidence of employment growth following the adoption of smoke-free restaurant policies in nearby counties (Nassau, Westchester, and Rockland). Similarly, Connolly and his colleagues<sup>40</sup> found that the Massachusetts smoke-free workplace law that went into effect in July 2004 and included restaurants and bars had no statistically significant impact on employment in food and drinking establishments. Likewise, in the heart of tobacco country, Pyles and his colleagues<sup>41</sup> found that employment in restaurants rose significantly while bar employment was unchanged following the implementation of Lexington-Fayette County Kentucky's comprehensive smoke-free policy in April 2004. In addition, they found no impact on employment in contiguous counties, contrary to opponents' arguments that the county ordinance would drive smokers to restaurants and bars in nearby jurisdictions where smoking was not restricted.

Still other studies have analyzed the impact of smoke-free policies on the number of licensed restaurants and/or bars. In their analysis of the New York City smoke-free restaurant policy, Hyland and Cummings,<sup>38</sup> for example, found that the rate of growth in restaurants in the city was equivalent to that in nearby counties and the rest of the state. Similarly, in their analysis of the Lexington-Fayette County ordinance, Pyles and his colleagues<sup>41</sup> found no effects on the overall rate of business openings and closings in the affected sector, as well as for both establishments licensed to serve alcohol and those that do not serve alcohol.

In 2 recent innovative studies, researchers looked at the impact of local smoke-free air policies on the economic value of restaurants<sup>42</sup> and bars<sup>43</sup> where economic value is determined by the sale price of these establishments. Alamar

and Glantz found a median increase of 16% in the sale prices of restaurants covered by a smoke-free air restaurant policy, while finding no significant differences in the sale prices of bars subject to a smoke-free bar policy. Given this, the authors conclude that these policies increase the profitability of restaurants, while not adversely affecting the profitability of bars.

The impact of smoke-free air policies on tourism has been the subject of several studies over the past decade. Glantz and Charlesworth,<sup>44</sup> for example, looked at hotel revenues as a share of total retail sales revenues in 3 states and 6 cities that had adopted smoke-free restaurant policies. They concluded that there was no adverse impact on the hotel business in any jurisdiction studied, while finding a statistically significant increase in revenues in several of them. In addition, they looked at the impact of policies in California, Utah, and New York City on the number of international tourists visiting each, again finding either no impact of the policies or, in some cases, increases following the implementation of a smoke-free restaurant policy. Similarly, Hyland and his colleagues<sup>45</sup> looked at hotel revenues and employment in their analysis of the impact of local smoke-free policies in several New York state jurisdictions. Their multivariate analyses showed that both hotel revenues and employment rose in the year following the implementation of the policies. In a relatively comprehensive analysis of Florida's voter-approved smoke-free air law that went into effect in July 2003, Dai and his colleagues<sup>46</sup> examined a number of outcomes, including revenues from recreational admissions and employment in the hospitality industry, concluding that there was no adverse economic impact of the law on tourism in the state.

Relatively few studies have looked at the impact of smoke-free policies on gaming establishments given that most policies provide exceptions for smoking in these venues; nevertheless, a few studies provide some mixed evidence. Glantz and Wilson-Loots,<sup>47</sup> for example, looked at the impact of local smoke-free policies in Massachusetts that limit smoking in bingo halls and gambling events sponsored by local charities. While profits from these activities fell during the period covered by the analysis (given increased availability of other gambling opportunities), the authors found no

relationship between the local smoke-free policies and profits from bingo and charitable games. Similarly, Connolly and his colleagues<sup>40</sup> found no impact on Keno sales following the implementation of the statewide smoke-free air law in July 2004. However, 2 recent studies reach opposing conclusions concerning the impact of Delaware's comprehensive smoke-free air law that went into effect in November 2002 and included the state's 3 racetracks that offered video lottery gambling. In their linear regression analysis, Mandel and colleagues<sup>48</sup> found no impact of the state law on either total revenues from the video lottery machines or the average revenues per machine. After correcting a data entry error, the authors reaffirmed this conclusion in a subsequent letter.<sup>49</sup> In contrast, Pakko's<sup>50</sup> reanalysis of the same data using somewhat different methods and a more complete approach to modeling seasonality in gambling concludes that the state law led to an almost 13% drop in gaming revenues in the year following implementation compared with the previous year. In a response, Alamar and Glantz<sup>51</sup> note that the state attributed the observed decline in revenues to inclement weather, not the smoke-free air law, and that at least one of the racetracks was advertising its smoke-free environment, in contrast to what would be expected if the racetrack viewed this as harmful to its business.

To summarize, numerous studies using objective measures of economic activity have been done over the past 10+ years looking at the impact of local, state, or national smoke-free policies on restaurants, bars, and tourism. From small towns such as West Lake Hills, Texas,<sup>52</sup> to large cities like New York,<sup>38,53,54</sup> in states as diverse as Arkansas,<sup>55</sup> Oregon,<sup>56</sup> and Texas,<sup>57</sup> the vast majority of studies find that there is no negative economic impact of clean indoor air policies, with many finding that there may be some positive effects on local businesses (see Scollo and Lal<sup>58</sup> for a comprehensive review of studies published through mid-2005). While the early evidence is mixed on the impact on gaming establishments, the recent expansion of smoke-free policies to cover these venues will provide new natural experiments for researchers to examine.

#### Studies Based on Survey Data

In addition to the extensive studies based on objective data, a number of studies have used sur-

vey data to assess the economic impact of smoke-free air policies. These include surveys of restaurant and bar owners, as well as the patrons of these establishments. In general, these studies collect subjective data about owners' perceptions of the impact of smoke-free policies on their businesses, self-report measures of business revenues, individual dining and drinking-out patterns and/or expected changes in these behaviors in response to a smoke-free air policy, individual preferences for smoke-free dining/drinking, and related outcomes.

Studies based on subjective data from surveys of business owners and managers are more likely to produce mixed findings on the economic impact of smoke-free air policies than are studies based on objective measures of business activity. In their comprehensive review of studies published through August 2002, Scollo and her colleagues<sup>59</sup> estimated that the odds of finding a negative economic impact in studies based on this type of subjective data are 4 times greater than in studies based on objective measures. Glantz<sup>60</sup> provides some explanation for why this would be the case, arguing that there is a "negative placebo effect" created during the debate over smoke-free policies by the tobacco industry—often through restaurant, bar, and other hospitality industry associations stoking fears of economic losses among those in the hospitality industry. Similarly, it seems likely that owners of businesses that are faring poorly in a highly volatile market may be more likely to blame external forces (such as the adoption of a smoke-free policy) rather than their own business decisions for their problems.

Despite this, the findings from many of these studies are consistent with the conclusion that there is no negative economic impact of smoke-free air policies on the hospitality sector. Hyland and Cummings,<sup>53</sup> for example, surveyed 434 restaurant owners/managers in New York City in late 1996 as one component of their comprehensive assessment of the impact of the city's smoke-free restaurant policy adopted in 1995 and concluded from the survey that there was no evidence of a negative impact on New York City's restaurants.

Surveys that collect information on individual dining/drinking-out behavior and other entertainment activities are helpful in explaining the absence of any adverse economic impact (and, in many studies, a small positive impact) of smoke-free air

policies. The best of these surveys will use random samples of the general population rather than convenience samples of selected patrons from a nonrandom sample of establishments affected by the policies. In general, most respondents in population-based surveys indicate that their dining/drinking-out practices do not change following the adoption of a smoke-free policy. Among those who do indicate some change, the fraction who dine/drink out more frequently is well above that for those indicating that they go out less often. Cowling and Bond<sup>61</sup> hypothesized that this would be the case given that smokers have relatively few opportunities to substitute alternative venues when smoke-free policies are adopted. As a result, few smokers would alter their behavior in response to these policies, while these same policies would be more likely to attract more nonsmokers to the now smoke-free venues. This was the pattern observed by Hyland and Cummings<sup>54</sup> in their survey of New York City residents following the implementation of the city's 1995 smoke-free restaurant policy. The same happened after the expansion of the city's Smoke-Free Air Act in 2003. Zagat's 2004 New York City restaurant survey found that almost a quarter of respondents were dining out more often compared with 4% who indicated they dined out less often following the implementation of the city's comprehensive smoke-free workplace policy that covered all restaurants and bars.

#### Tobacco Industry-sponsored Research

Despite the strong and growing evidence to the contrary, the fear of economic consequences continues to deter many state and local governments from adopting strong, comprehensive smoke-free policies. Much of the "evidence" used to oppose these policies comes from studies that have been supported by tobacco companies or by groups that are supported by the tobacco industry. In their thorough analysis of this literature, Scollo and her colleagues<sup>59</sup> report that all of the studies concluding that smoke-

free policies had a negative economic impact were supported by the tobacco industry and that the overwhelming majority (94%) of industry-sponsored studies reached this conclusion. They go on to note that in contrast with the research discussed above, these studies are much less likely to be published in the peer-reviewed literature, with the odds of a study not being peer-reviewed 20 times larger for studies that find a negative economic impact.

#### SUMMARY

Clean indoor air laws creating completely smoke-free environments are rapidly spreading throughout the world and are low-cost, safe, and effective, many of the characteristics associated with rapidly diffusing innovations. Experience to date demonstrates that clean indoor air laws protect nonsmokers from involuntary exposure to secondhand smoke, contribute to a reduction in overall cigarette consumption, protect hospitality workers from adverse respiratory conditions, and are well accepted by the general public. Contrary to the fears raised by the tobacco industry and others, comprehensive reviews of research on the economic impact of smoke-free air policies from the Surgeon General,<sup>3</sup> the Task Force on Community Preventive Services,<sup>24</sup> and others<sup>58,59</sup> consistently conclude that these policies do not have a negative economic impact. The 2006 Surgeon General's Report, for example, states that "evidence from peer-reviewed studies shows that smoke-free policies and regulations do not have an adverse economic impact on the hospitality industry."<sup>3</sup>

It is likely that clean indoor air laws will continue to spread throughout the United States and around the globe, where smoke-free environments will be the norm and smoking in indoor public areas will be the rare exception. Future progress can be expected in creating smoke-free environments in homes, multifamily dwellings, cars in which children are riding, and outdoor public venues.

#### REFERENCES

1. Steinfeld JL. Women and children last? Attitudes toward cigarette smoking and nonsmokers' rights. 1971. *NY State J Med* 1983;83:1257-1258.
2. US Department of Health, Education, and Welfare. The Health Consequences of Smoking;

A Report of the Surgeon General: 1972. Washington, DC: US Department of Health, Education, and Welfare, Public Health Service, Health Services and Mental Health Administration; 1972.

3. US Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon

General. Atlanta, GA: US Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006.

4. Roper Organization. A Study of Public Attitudes Toward Cigarette Smoking and the Tobacco

Industry in 1978. New York, NY: Roper Organization; 1978.

5. California Environmental Protection Agency. Health Effects of Exposure to Environmental Tobacco Smoke. Sacramento, CA: California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Reproductive and Cancer Hazard Assessment Section and Air Toxicology and Epidemiology Section; 1997.
6. American Nonsmokers' Rights Foundation. Smokefree Lists, Maps, and Data. Available at: <http://www.no-smoke.org/goingsmokefree.php?id=519>. Accessed July 8, 2007.
7. Centers for Disease Control and Prevention (CDC). State-specific prevalence of smoke-free home rules—United States, 1992–2003. *MMWR Morb Mortal Wkly Rep* 2007;56:501–504.
8. Howell F. Smoke-free bars in Ireland: a run-away success. *Tob Control* 2005;14:73–74.
9. McCaffrey M, Goodman PG, Kelleher K, Clancy L. Smoking, occupancy and staffing levels in a selection of Dublin pubs pre and post a national smoking ban, lessons for all. *Ir J Med Sci* 2006; 175:37–40.
10. Clancy L. Ireland's workplace smoking ban. *Breathe* 2007;3:237–295.
11. Koh H, Joossens L, Connolly G. Making smoking history worldwide. *N Engl J Med* 2007;356: 1496–1498.
12. World Health Organization. WHO Framework Convention on Tobacco Control. Available at: [http://www.who.int/tobacco/framework/WHO\\_FCTC\\_english.pdf](http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf). Accessed July 8, 2007.
13. World Health Organization. Updated status of the WHO Framework Convention on Tobacco Control. Available at: <http://www.who.int/tobacco/framework/countrylist/en/index.html>. Accessed August 31, 2007.
14. Global Smokefree Partnership. Nations at International Tobacco Control Conference Seize Opportunity to Protect People from Secondhand Smoke and Save Lives. Available at: [http://www.ftc.org/x/documents/COP2PressRelease\\_FCA-GSP\\_3July.pdf](http://www.ftc.org/x/documents/COP2PressRelease_FCA-GSP_3July.pdf). Accessed July 7, 2007.
15. Office of Disease Prevention and Health Promotion, US Department of Health and Human Services. Healthy People 2010. Available at: <http://www.healthypeople.gov/>. Accessed July 8, 2007.
16. Office of Disease Prevention and Health Promotion, US Department of Health and Human Services. Healthy People 2010: Midcourse Review. Available at: <http://www.healthypeople.gov/data/midcourse/pdf/fa27.pdf>. Accessed July 7, 2007.
17. Department of Health and Human Services, Centers for Disease Control and Prevention. National Report on Human Exposure to Environmental Chemicals: Third Report. Available at: <http://www.cdc.gov/exposurereport/>. Accessed July 7, 2007.
18. Pirkle JL, Bernert JT, Caudill SP, et al. Trends in the exposure of nonsmokers in the U.S. population to secondhand smoke: 1988–2002. *Environ Health Perspect* 2006;114:853–858.
19. Centers for Disease Control and Prevention, Department of Health and Human Services. QuickStats: Median Serum Cotinine Levels in Nonsmokers, by Age Group—National Health and Nutrition Examination Survey (NHANES), United States, 1988–1991 through 2001–2002. *MMWR Weekly* 2006 55:1130. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5541a7.htm>. Accessed September 6, 2007.
20. Pickett MS, Schober SE, Brody DJ, et al. Smoke-free laws and secondhand smoke exposure in US non-smoking adults, 1999–2002. *Tob Control* 2006;15:302–307.
21. Centers for Disease Control and Prevention (CDC). Reduced secondhand smoke exposure after implementation of a comprehensive statewide smoking ban—New York, June 26, 2003–June 30, 2004. *MMWR Morb Mortal Wkly Rep* 2007;56: 705–708.
22. Jacobson PD, Wasserman J. The implementation and enforcement of tobacco control laws: policy implications for activists and the industry. *J Health Polit Policy Law* 1999;24:567–598.
23. Borland R, Yong HH, Siahpush M, et al. Support for and reported compliance with smoke-free restaurants and bars by smokers in four countries: findings from the International Tobacco Control (ITC) Four Country Survey. *Tob Control* 2006;15:iii34–iii41.
24. Task Force on Community Preventive Services. The Guide to Community Preventive Services: What Works to Promote Health? New York, NY: Oxford University Press; 2005.
25. Fong GT, Hyland A, Borland R, et al. Reductions in tobacco smoke pollution and increases in support for smoke-free public places following the implementation of comprehensive smoke-free workplace legislation in the Republic of Ireland: findings from the ITC Ireland/UK Survey. *Tob Control* 2006;15:iii51–iii58.
26. National Cancer Institute. Population Based Smoking Cessation: Proceedings of a Conference on What Works to Influence Cessation in the General Population. Smoking and Tobacco Control Monograph No. 12. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2000. NIH Pub. No. 00-4892.
27. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *Am J Prev Med* 2001;20:1–88.
28. Levy DT, Nikolayev L, Mumford E. Recent trends in smoking and the role of public policies: results from the SimSmoke tobacco control policy simulation model. *Addiction* 2005;100: 1526–1536.
29. Levy DT. The role of public policies in reducing smoking prevalence: results from the SimSmoke tobacco policy simulation model, in Bonnie RJ, Stratton K, Wallace RB (eds). *Ending the Tobacco Problem: A Blueprint for the Nation*. Washington, DC: Institute of Medicine; 2007.
30. Stark MJ, Rohde K, Maher JE, et al. The impact of clean indoor air exemptions and pre-emption policies on the prevalence of a tobacco-specific lung carcinogen among nonsmoking bar and restaurant workers. *Am J Public Health* 2007;97: 1457–1463.
31. Behan DF, Eriksen MP, Lin Y. Economic Effects of Environmental Tobacco Smoke. Society of Actuaries. Available at: [http://www.soa.org/research/files/pdf/ETSRreportFinalDraft\(Final%203\).pdf](http://www.soa.org/research/files/pdf/ETSRreportFinalDraft(Final%203).pdf). Accessed July 8, 2007.
32. Deloitte & Touche LLP. The Impact of Non-smoking Ordinances on Restaurant Financial Performance. Washington, DC: Deloitte & Touche LLP; 2003.
33. KPMG Peat Marwick. Effects of 1998 California Smoking Ban on Bars, Taverns and Night Clubs. Washington, DC: American Beverage Institute; 1998.
34. Chaloupka FJ, Warner KE. The economics of smoking, in Cuyler AJ, Newhouse JP (eds). *The Handbook of Health Economics*. New York, NY: North-Holland, Elsevier Science B.V.; 2000.
35. Jha P, Chaloupka FJ. Curbing the Epidemic: Governments and the Economics of Tobacco Control. Washington, DC: The International Bank for Reconstruction and Development/The World Bank; 1999.
36. Glantz SA, Smith LR. The effect of ordinances requiring smoke-free restaurants on restaurant sales. *Am J Public Health* 1994;84:1081–1085.
37. Glantz SA, Smith LR. The effect of ordinances requiring smoke-free restaurants and bars on revenues: a follow-up. *Am J Public Health* 1997;87: 1687–1693.
38. Hyland A, Cummings KM. Restaurant employment before and after the New York City Smoke-Free Air Act. *J Public Health Manag Pract* 1999;5: 22–27.
39. Hyland A, Tuk J. Restaurant employment boom in New York City. *Tob Control* 2001;10:199.
40. Connolly GN, Carpenter C, Alpert HR, et al. Evaluation of the Massachusetts Smoke-Free Workplace Law: A Preliminary Report. Cambridge, MA: Harvard School of Public Health; 2005.
41. Pyles MK, Mullineaux DJ, Okoli CT, Hahn EJ. Economic effect of a smoke-free law in a tobacco-growing community. *Tob Control* 2007;16:66–68.
42. Alamar B, Glantz SA. Smoke-free ordinances increase restaurant profit and value. *Contemp Econ Policy* 2004;22:520–525.
43. Alamar B, Glantz SA. Effect of smoke-free laws on bar value and profits. *Am J Public Health* 2007;97:1400–1402.
44. Glantz SA, Charlesworth A. Tourism and hotel revenues before and after passage of smoke-free restaurant ordinances. *JAMA* 1999;281:1911–1918.
45. Hyland A, Puli V, Cummings KM, Sciandra R. New York's smoke-free regulations: effects on employment and sales in the hospitality industry. *Cornell Hotel Restaur Adm Q* 2003;44:9–16.
46. Dai C, Denslow D, Hyland A, Lofinia B. The Economic Impact of Florida's Smoke-Free Workplace Law. Gainesville, FL: Bureau of Economic and Business Research, Warrington College of Business Administration, University of Florida; 2004.
47. Glantz SA, Wilson-Loots R. No association of smoke-free ordinances with profits from bingo and charitable games in Massachusetts. *Tob Control* 2003;12:411–413.

48. Mandel LL, Alamar BC, Glantz SA. Smoke-free law did not affect revenue from gaming in Delaware. *Tob Control* 2005;14:10-12.
49. Glantz SA, Alamar BC. Correction to Mandel LL, Alamar BC, Glantz SA. Smoke-free law did not affect revenue from gaming in Delaware. *Tob Control* 2005;14:360.
50. Pakko MR. Smoke-free law did affect revenue from gaming in Delaware. *Tob Control* 2006;15:68-69.
51. Alamar B, Glantz SA. Authors' response to MR Pakko. *Tob Control* 2006;15:69.
52. Centers for Disease Control and Prevention (CDC). Assessment of the impact of a 100% smoke-free ordinance on restaurant sales—West Lake Hills, Texas, 1992-1994. *MMWR Morb Mortal Wkly Rep* 1995;44:370-372.
53. Hyland A, Cummings KM. Restaurateur reports of the economic impact of the New York City Smoke-Free Air Act. *J Public Health Manag Pract* 1999;5:37-42.
54. Hyland A, Cummings KM. Consumer response to the New York City Smoke-Free Air Act. *J Public Health Manag Pract* 1999;5:28-36.
55. Collins JT. Assessing the Economic Impact of the Fayetteville, Arkansas Smoking Ban. Fayetteville, AR: Center for Business and Economic Research, Sam M. Walton College of Business, University of Arkansas; 2005.
56. Dress J, Boles S, Lichtenstein E, Strycker L. Multiple Impacts of a Bar Smoking Prohibition Ordinance in Corvallis, Oregon. San Francisco, CA: Pacific Research Institute; 1999.
57. Hayslett J, Huang P. Impact of clean indoor air ordinances on restaurant revenues in four Texas cities. Austin, TX: Bureau of Disease, Injury and Tobacco Prevention, Texas Department of Health; 2000.
58. Scollo M, Lal A. Summary of Studies Assessing the Economic Impact of Smoke-Free Policies in the Hospitality Industry. Carlton, Victoria: VicHealth Centre for Tobacco Control; 2005.
59. Scollo M, Lal A, Hyland A, Glantz S. Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tob Control* 2003;12:13-20.
60. Glantz SA. Commentary: Assessing the effects of the Scottish Smokefree Law—the placebo effect and the importance of obtaining unbiased data. *Int J Epidemiol* 2007;36:155-156.
61. Cowling DW, Bond P. Smoke-free laws and bar revenues in California—the last call. *Health Econ* 2005;14:1273-1281.



# E-cigarette Ads and Youth

About 2.4 million middle and high school students were current (past 30-day) users of electronic cigarettes, or e-cigarettes, in 2014. Most e-cigarettes contain nicotine, which causes addiction, may harm brain development, and could lead to continued tobacco product use among youth. Tobacco product advertising can entice youth to use tobacco, and spending to advertise e-cigarettes has increased rapidly since 2011. About 69% of middle and high school students were exposed to e-cigarette advertisements in retail stores, on the Internet, in magazines/newspapers, or on TV/movies. Exposure to e-cigarette advertisements may be contributing to increases in e-cigarette use among youth. Efforts by states, communities, and others could reduce this exposure.

## States and communities can:

- Fund tobacco prevention and control programs at CDC-recommended levels to prevent youth use of all tobacco products, including e-cigarettes.
- Work to limit where and how all tobacco products, including e-cigarettes, are sold to reduce youth e-cigarette use, as well as ad exposure.
- Support efforts to implement and sustain proven youth tobacco prevention actions such as tobacco price increases, comprehensive smoke-free laws, and high-impact mass media campaigns.

## 18 Million

More than 18 million (7 in 10) US middle and high school youth were exposed to e-cigarette ads in 2014.

## 1 in 2

More than 1 in 2 middle and high school youth were exposed to e-cigarette ads in retail stores.

## 2 in 5

Nearly 2 in 5 middle and high school youth saw e-cigarette ads online.

Want to learn more? [www.cdc.gov/vitalsigns/ecigarette-ads](http://www.cdc.gov/vitalsigns/ecigarette-ads)



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Health Promotion

# Problem:

## Youth are vulnerable to e-cigarette ads.



### 18 million youth were exposed to e-cigarette ads in 2014.

- More than 10 million high school students and nearly 8 million middle school students were exposed to e-cigarette ads in 2014.
- More than half of high school students (about 8 million) saw e-cigarette ads in retail stores, and more than 6 million saw them on the Internet.
- More than half of middle school students (6 million) saw e-cigarettes ads in retail stores, and more than 4 million saw them on the Internet.
- About 15% of all students reported seeing e-cigarette ads from all four sources, including retail stores, the Internet, magazines/newspapers, and TV/movies.

### Exposure to e-cigarette ads may contribute to youth e-cigarette use:

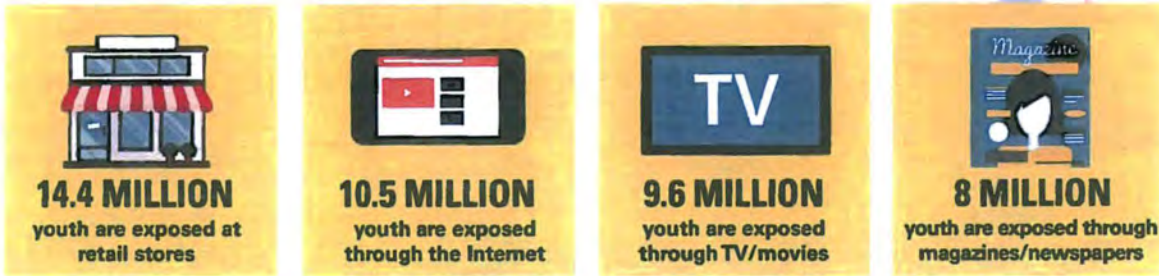
- E-cigarette companies have rapidly increased advertising spending, from \$6.4 million in 2011 to \$115 million in 2014.
- Many of the themes used in advertising for cigarettes are also now used to advertise e-cigarettes – including sex, independence, and rebellion.
- During the time e-cigarette ads have increased, there are also increases in e-cigarette use among US youth. From 2011-2014, e-cigarette use in the past 30 days increased from less than 1% to almost 4% among middle school students and from less than 2% to 13% among high school students.

**Most e-cigarettes contain NICOTINE, which causes ADDICTION, may harm brain development, and could lead to continued tobacco product use among youth.**

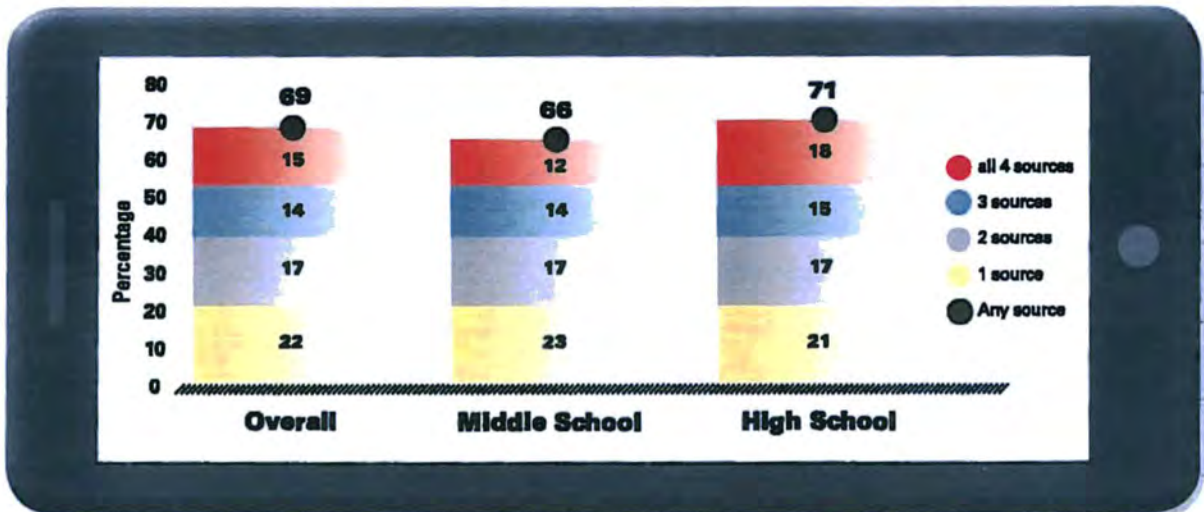


# Youth are exposed to e-cigarette advertisements from multiple sources.

## Sources of e-cigarette advertisement exposure



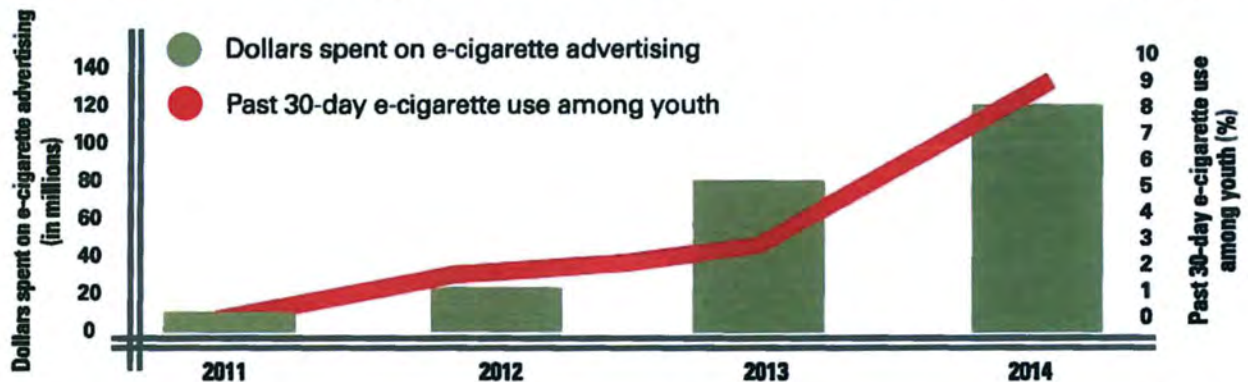
## US students exposed to e-cigarette advertisements, by school type and number of sources of exposure



\* Percentages may not add up exactly to any source due to rounding.

SOURCE: National Youth Tobacco Survey 2014

## E-cigarette use among youth is rising as e-cigarette advertising grows



SOURCE: National Youth Tobacco Survey, 2011-2014; Kim et al (2014), Truth Initiative (2015).

# What Can Be Done?

## The Federal government is

- Supporting state tobacco prevention and control programs to prevent any youth use of tobacco products, including e-cigarettes.
- Tracking e-cigarette use; supporting research on the health effects and factors contributing to youth e-cigarette use; and providing information to the public, including health care providers.
- Developing regulations for e-cigarettes and other currently unregulated tobacco products to reduce the disease and death from tobacco use, including by preventing youth tobacco use.
- Funding and promoting campaigns that inform people about the dangers of tobacco use, such as FDA's *The Real Cost* and *Fresh Empire* for youth and CDC's *Tips From Former Smokers* for adults.

## States and communities can

- Fund tobacco prevention and control programs at CDC-recommended levels to prevent youth use of all tobacco products, including e-cigarettes.
- Work to limit where and how all tobacco products, including e-cigarettes, are sold to reduce youth e-cigarette use, as well as ad exposure. This may include:
  - ▶ Requiring age verification to enter e-cigarette vendor's websites, make purchases, and accept deliveries of e-cigarettes.
  - ▶ Restricting the number of stores that sell tobacco and how close they can be to schools.
  - ▶ Requiring that e-cigarettes be sold only through face-to-face transactions, not on the Internet.
  - ▶ Limiting tobacco product sales to facilities that never admit youth.
- Support efforts to implement and continue proven youth tobacco prevention approaches, including tobacco price increases, comprehensive smoke-free laws, and high-impact mass media campaigns.

## Pediatricians, nurses, and other health care providers can

- Ask about youths' e-cigarette use and counsel them about the dangers of nicotine, e-cigarettes, and all other tobacco use.
- Ask all patients whether they use tobacco products, encourage those who do to quit, and provide help with quitting.
- Ask about youths' media and Internet use. Advise parents and caregivers to take an active role in deciding which websites and media children may view and teaching critical viewing skills.

## Parents and caregivers can

- Set a positive example by being tobacco-free. For free help, call 1-800-QUIT-NOW or visit [www.smokefree.gov](http://www.smokefree.gov)
- Talk to youth about why they shouldn't use any tobacco products, including e-cigarettes.
- Know what media their children are viewing, and decide what programs and websites are appropriate for their age. Watch programs together and discuss content.

1-800-CDC-INFO (232-4636)

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Centers for Disease Control and Prevention

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## Vital Signs: Exposure to Electronic Cigarette Advertising Among Middle School and High School Students — United States, 2014

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On January 5, 2016, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).

### Abstract

**Introduction:** Electronic cigarette (e-cigarette) use has increased considerably among U.S. youths since 2011. Tobacco use among youths in any form, including e-cigarettes, is unsafe. Tobacco product advertising can persuade youths to start using tobacco. CDC analyzed data from the 2014 National Youth Tobacco Survey to estimate the prevalence of e-cigarette advertisement exposure among U.S. middle school and high school students.

**Methods:** The 2014 National Youth Tobacco Survey, a school-based survey of middle school and high school students in grades 6–12, included 22,007 participants. Exposure to e-cigarette advertisements (categorized as “sometimes,” “most of the time,” or “always”) was assessed for four sources: retail stores, Internet, TV and movies, and newspapers and magazines. Weighted exposure estimates were assessed overall and by school type, sex, race/ethnicity, and grade.

**Results:** In 2014, 68.9% of middle and high school students (18.3 million) were exposed to e-cigarette advertisements from at least one source. Among middle school students, exposure was highest for retail stores (52.8%), followed by Internet (35.8%), TV and movies (34.1%), and newspapers and magazines (25.0%). Among high school students, exposure was highest for retail stores (56.3%), followed by Internet (42.9%), TV and movies (38.4%), and newspapers and magazines (34.6%). Among middle school students, 23.4% reported exposure to e-cigarette advertising from one source, 17.4% from two sources, 13.7% from three sources, and 11.9% from four sources. Among high school students, 21.1% reported exposure to e-cigarette advertising from one source, 17.0% from two sources, 14.5% from three sources, and 18.2% from four sources.

**Conclusions and Implications for Public Health Practice:** Approximately seven in 10 U.S. middle and high school students were exposed to e-cigarette advertisements in 2014. Exposure to e-cigarette advertisements might contribute to increased use of e-cigarettes among youths. Multiple approaches are warranted to reduce youth e-cigarette use and exposure to e-cigarette advertisements, including efforts to reduce youth access to settings where tobacco products, such as e-cigarettes, are sold, and regulation of youth-oriented e-cigarette marketing.

### Introduction

Electronic cigarettes (e-cigarettes) are battery-powered devices capable of delivering nicotine and other additives (e.g., flavorings) to the user in an aerosol form. E-cigarette use has increased considerably among U.S. youths in recent years. During 2011–2014, past-30-day e-cigarette use increased from 0.6% to 3.9% among middle school students and from 1.5% to 13.4% among high school students; in 2014, e-cigarettes became the most commonly used tobacco product among middle school and high school students (1). Youth use of tobacco in any form (combustible, noncombustible, or electronic) is unsafe (2,3). E-cigarettes typically deliver nicotine derived from tobacco, which is highly addictive, might harm brain development, and could lead to sustained tobacco product use among youths (2). In April 2014, the Food and Drug Administration

(FDA) issued a proposed rule to deem all products made or derived from tobacco subject to FDA jurisdiction (4).

In the United States, e-cigarette sales have increased rapidly since entering the U.S. marketplace in 2007, reaching an estimated \$2.5 billion in sales in 2014 (5,6). Corresponding increases have occurred in e-cigarette advertising expenditures, which increased from \$6.4 million in 2011 to an estimated \$115 million in 2014 (7,8). Tobacco product advertising is causally related to tobacco product initiation among youths (9). Many of the themes used in conventional tobacco product advertising, including independence, rebellion, and sexual attractiveness, also are used to advertise e-cigarettes (9,10). Moreover, almost all tobacco use begins before age 18 years, during which time there is great vulnerability to social

influences, such as youth-oriented advertisements and youth-generated social media posts (9). This report assesses exposure to e-cigarette advertisements among U.S. middle school and high school students.

## Methods

Data from the 2014 National Youth Tobacco Survey (NYTS) were analyzed to assess exposure to e-cigarette advertisements from four sources: retail stores (convenience stores, supermarkets, or gas stations); Internet; TV and movies; and newspapers and magazines. NYTS is a cross-sectional, school-based, self-administered, pencil-and-paper questionnaire administered to U.S. middle school (grades 6–8) and high school (grades 9–12) students.\* A three-stage cluster sampling procedure was used to generate a nationally representative sample of U.S. students who attend public and private schools in grades 6–12. In 2014, 207 of 258 selected schools (80.2%) participated, yielding a sample of 22,007 participants (91.4%) among 24,084 eligible students; the overall response rate was 73.3%.

Sources of exposure to e-cigarette advertisements were assessed by participants' responses to the following four questions: 1) Internet: "When you are using the Internet, how often do you see advertisements or promotions for electronic cigarettes or e-cigarettes?" 2) Newspapers and magazines: "When you read newspapers or magazines, how often do you see advertisements or promotions for electronic cigarettes or e-cigarettes?" 3) Retail stores: "When you go to a convenience store, supermarket, or gas station, how often do you see advertisements or promotions for electronic cigarettes or e-cigarettes?" 4) TV and movies: "When you watch TV or go to the movies, how often do you see advertisements or promotions for electronic cigarettes or e-cigarettes?" For each question, respondents could select the following options: they do not use the specific source (e.g., "I do not read newspapers or magazines"), "never," "rarely," "sometimes," "most of the time," or "always." Respondents who said they saw promotions or advertisements "sometimes," "most of the time," or "always" were considered to have been exposed to advertisements from the source; those who selected "never" or "rarely" were considered not exposed. Respondents who did not use a source were also classified as not exposed.† Data were weighted to account for the complex survey design and adjusted for nonresponse. National prevalence estimates with 95% confidence intervals and population estimates were computed; population estimates

were rounded down to the nearest tenth of a million. Estimates of exposure for each source were assessed overall and by school type, sex, race/ethnicity, and grade. T-tests were used to calculate differences between groups; a p-value <0.05 was considered statistically significant. The number of exposure sources were summed for each student and reported as the proportion who were exposed to one, two, three, or four sources.

## Results

**All students.** Overall, 68.9% of participants (an estimated 18.3 million students) were exposed to e-cigarette advertisements from ≥1 source (Figure). Retail stores were the most frequently reported exposure source (54.8% of respondents, or an estimated 14.4 million students), followed by the Internet (39.8%, 10.5 million), TV and movies (36.5%, 9.6 million), and newspapers and magazines (30.4%, 8.0 million) (Table). Exposure to e-cigarette advertisements on the Internet and in newspapers and magazines was reported more frequently by females than males. Exposure in retail stores was higher among non-Hispanic whites (whites) than non-Hispanic blacks (blacks) and students of other non-Hispanic races/ethnicities. Exposure from TV and movies was higher among blacks and Hispanics than whites. Exposure was higher among students in higher grade levels for all sources. Overall, 22.1% of participants (5.8 million students) reported exposure to e-cigarette advertising from one source, 17.2% (4.5 million) from two sources, 14.1% (3.7 million) from three sources, and 15.4% (4.1 million) from four sources (Figure).

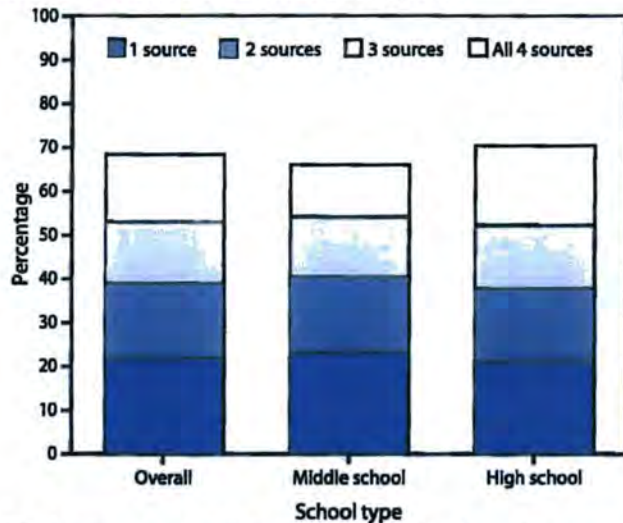
**Middle school students.** Among middle school students, 66.4% (7.7 million) were exposed to e-cigarette advertisements from at least one source (Figure). Retail stores were the most frequently reported source of exposure (52.8% of respondents, or an estimated 6.0 million middle school students), followed by the Internet (35.8%, 4.1 million), TV and movies (34.1%, 3.9 million), and newspapers and magazines (25.0%, 2.8 million) (Table). Exposure to e-cigarette advertisements on the Internet was higher among female than male middle school students. Exposure in retail stores was higher among whites than blacks and other non-Hispanic race/ethnicities. Exposure from TV or movies was higher among blacks than whites. A single source of exposure was reported by 23.4% of participants (2.7 million middle school students); two sources by 17.4% (2.0 million), three sources by 13.7% (1.5 million), and four sources by 11.9% (1.3 million) (Figure).

**High school students.** Among high school students, 70.9% of respondents (an estimated 10.5 million high school students) reported exposure to e-cigarette advertisements from at least one source (Figure). Similar to middle school students, more than half of reported e-cigarette advertising exposures (56.3%, 8.3 million) occurred in retail stores, followed by the Internet

\* Additional information available at [http://www.cdc.gov/tobacco/data\\_statistics/surveys/nyts/index.htm](http://www.cdc.gov/tobacco/data_statistics/surveys/nyts/index.htm).

† Respondents who indicated that they did not use the specified source, and who were reclassified as not exposed, included 717 (3.3%) who did not visit retail stores, 715 (3.3%) who did not use the Internet, 697 (3.2%) who did not watch TV/movies, and 5,567 (25.3%) who did not read newspapers/magazines.

FIGURE. Proportion of U.S. students exposed to electronic cigarette (e-cigarette) advertisements, by school type and number of exposure sources\* — National Youth Tobacco Survey, 2014



\* The four sources were retail stores, Internet, TV and movies, and newspapers and magazines.

(42.9%, 6.3 million), TV and movies (38.4%, 5.6 million), and newspapers and magazines (34.6%, 5.1 million) (Table). Exposure in retail stores was higher among whites than blacks and other non-Hispanic race/ethnicities. Exposure from TV and movies was higher among blacks than whites. One source of exposure was reported by 21.1% of participants (3.1 million high school students), two sources by 17.0% (2.5 million), three sources by 14.5% (2.1 million), and four sources by 18.2% (2.7 million) (Figure).

### Conclusions and Comments

In 2014, nearly seven in 10 (18.3 million) U.S. middle school and high school students were exposed to e-cigarette advertisements from at least one source, and approximately 15%, or 4.1 million students, were exposed to e-cigarette advertisements from all four sources. Approximately half were exposed to e-cigarette advertisements in retail stores, whereas approximately one in three were exposed on the Internet, on TV or at the movies, or while reading newspapers or magazines. Although there were slight variations by sex and race/ethnicity, the magnitude of exposure was consistent across groups. Implementation of comprehensive efforts to reduce youth exposure to e-cigarette advertising and promotion is critical to reduce e-cigarette experimentation and use among youths.

Retail store exposure to e-cigarette advertising in this study (54.8%) was lower than levels of exposure to conventional cigarette and other tobacco product advertising reported in the NYTS in 2014 (80.6%), but comparable to exposure on the

Internet (39.8% versus 46.8%, respectively) and in newspapers and magazines (30.4% versus 34.3%, respectively) (11).<sup>5</sup> Advertising for conventional tobacco products, such as cigarettes, has been shown to prompt experimentation as well as increase and maintain tobacco product use among youths (9). Similarly, according to a recent randomized controlled study, adolescents who were exposed to e-cigarette advertisements on TV were 54% more likely to say they would try an e-cigarette soon, and 43% more likely to say they would try an e-cigarette within the next year, compared with adolescents who were not exposed to e-cigarette advertisements (12). The study also determined that youths exposed to e-cigarette advertisements were more likely to agree that e-cigarettes can be used in places where smoking is not allowed (12). This is consistent with findings that certain e-cigarette marketers are using advertising tactics similar to those used in the past to market conventional cigarettes, including youth-oriented themes, and promoting e-cigarette use as an alternative in places where smoking is not allowed (2,9,10). An analysis of 57 online e-cigarette vendors determined that 70.2% of vendors used more than one social network service to market e-cigarettes (13). Moreover, 61.4% of vendors only required users to click a pop-up or dialog box to self-verify age, and 35.1% of vendors had no detectable age verification process. This unrestricted marketing of e-cigarettes, coupled with rising use of these products among youths (1), has the potential to compromise decades of progress in preventing tobacco use and promoting a tobacco-free lifestyle among youths (2,9).

Research supports the importance of a multifaceted approach to youth tobacco prevention involving multiple levels of government (2,9,14). Local, state, and federal efforts to reduce youth access to the settings where tobacco products, including e-cigarettes, are sold could reduce youth e-cigarette initiation and consumption, as well as advertising exposure. Potential strategies include requiring that tobacco products, including e-cigarettes, be sold only in facilities that never admit youths; limiting tobacco outlet density or proximity to schools; and requiring that e-cigarette purchases be made only through face-to-face transactions. Adding e-cigarettes and other tobacco products to the list of current tobacco products prohibited from being sent through U.S. mail and requiring age verification for online sales at purchase and delivery could also prevent sales to youths. In addition, potential strategies at the federal or state level include regulation of e-cigarette advertising in media, Internet, and retail settings that are demonstrated to appeal to youths or are viewed by a substantial number of youths. The evidence base for restricting advertisements for conventional

<sup>5</sup> A question assessing exposure to advertisements for cigarettes and other tobacco products from TV and movies is not available for the 2014 NYTS.

**TABLE. Electronic cigarette (e-cigarette) advertisement exposure among U.S. middle school and high school students, by sources of exposure — National Youth Tobacco Survey, 2014**

Characteristic	Retail stores		Internet		TV and movies		Newspapers and magazines	
	% (95% CI)	Population estimate (millions)*	% (95% CI)	Population estimate (millions)	% (95% CI)	Population estimate (millions)	% (95% CI)	Population estimate (millions)
<b>Overall</b>								
<b>Total</b>	54.8 (53.6–56.0)	14.4	39.8 (38.5–41.1)	10.5	36.5 (35.3–37.7)	9.6	30.4 (29.3–31.6)	8.0
<b>Sex</b>								
Female (referent)	54.9 (53.5–56.3)	7.2	41.1 (39.4–42.9)	5.4	36.4 (34.8–38.0)	4.7	32.1 (30.2–34.1)	4.2
Male	54.6 (52.9–56.4)	7.1	38.5 <sup>†</sup> (37.1–39.8)	5.0	36.7 (35.2–38.2)	4.8	28.7 <sup>†</sup> (27.6–29.9)	3.7
<b>Race/Ethnicity</b>								
Non-Hispanic white (referent)	56.7 (55.0–58.4)	8.4	40.2 (38.5–42.0)	5.9	35.2 (33.7–36.6)	5.2	31.1 (29.7–32.5)	4.6
Non-Hispanic black	51.7 <sup>‡</sup> (49.4–53.9)	1.9	41.3 (38.5–44.2)	1.5	42.2 <sup>§</sup> (40.0–44.3)	1.5	32.2 (30.0–34.5)	1.2
Hispanic	55.6 (53.8–57.4)	3.0	39.4 (37.8–41.1)	2.1	37.4 <sup>§</sup> (35.6–39.4)	2.0	29.2 (27.1–31.3)	1.5
Other (non-Hispanic)	44.4 <sup>§</sup> (39.2–49.7)	0.5	32.6 <sup>§</sup> (28.3–37.2)	0.3	29.9 <sup>§</sup> (26.1–33.9)	0.3	25.3 <sup>§</sup> (22.1–28.7)	0.2
<b>Grade</b>								
6	50.6 <sup>¶</sup> (47.2–54.0)	1.8	32.8 <sup>¶</sup> (30.8–34.8)	1.1	31.8 <sup>¶</sup> (29.4–34.3)	1.1	24.1 <sup>¶</sup> (22.1–26.2)	0.8
7	55.0 (51.7–58.3)	2.1	36.7 <sup>¶</sup> (34.4–39.0)	1.4	35.6 (32.8–38.5)	1.4	25.9 <sup>¶</sup> (24.0–28.0)	1.0
8	52.6 (48.9–56.3)	2.0	37.6 <sup>¶</sup> (34.7–40.5)	1.4	34.6 (32.2–37.1)	1.3	25.0 <sup>¶</sup> (21.5–28.9)	0.9
9	54.7 (52.1–57.2)	2.1	39.2 <sup>¶</sup> (37.0–42.8)	1.5	37.2 (32.2–37.1)	1.4	32.0 <sup>¶</sup> (30.1–34.0)	1.2
10	56.2 (53.6–58.8)	2.1	43.4 (40.9–45.8)	1.6	38.9 (36.5–41.3)	1.4	34.0 <sup>¶</sup> (31.6–36.5)	1.2
11	57.8 (54.9–60.6)	2.0	45.5 (43.3–47.6)	1.6	39.9 (37.1–42.7)	1.4	35.9 (33.7–38.1)	1.2
12 (referent)	56.8 (54.2–59.3)	1.9	44.1 (41.7–46.6)	1.5	37.8 (34.5–41.3)	1.3	37.1 (34.7–39.5)	1.2
<b>Middle School</b>								
<b>Total</b>	52.8 (50.9–54.7)	6.0	35.8 (34.2–37.4)	4.1	34.1 (32.3–35.8)	3.9	25.0 (23.8–26.3)	2.8
<b>Sex</b>								
Female (referent)	52.1 (50.0–54.1)	2.9	37.6 (35.4–39.8)	2.1	33.3 (31.4–35.3)	1.8	26.2 (23.8–28.8)	1.4
Male	53.5 (50.8–56.2)	3.1	34.0 <sup>§</sup> (32.1–36.0)	1.9	34.9 (32.4–37.4)	2.0	24.0 (22.4–25.6)	1.4
<b>Race/Ethnicity</b>								
Non-Hispanic white (referent)	55.1 (52.7–57.5)	3.4	36.5 (34.4–38.5)	2.3	32.6 (30.2–35.2)	2.0	25.7 (23.9–27.5)	1.6
Non-Hispanic black	50.6 <sup>§</sup> (47.6–53.5)	0.7	36.4 (33.2–39.7)	0.5	40.4 <sup>§</sup> (36.8–44.1)	0.6	26.5 (23.6–29.7)	0.4
Hispanic	53.7 (50.9–56.5)	1.3	36.0 (33.9–38.2)	0.9	35.1 (33.1–37.1)	0.8	24.5 (22.3–26.9)	0.6
Other (non-Hispanic)	41.2 <sup>§</sup> (32.9–50.1)	0.2	28.8 <sup>§</sup> (23.7–34.6)	0.1	30.3 (24.8–36.6)	0.1	21.0 <sup>§</sup> (16.9–25.8)	0.1
<b>High School</b>								
<b>Total</b>	56.3 (54.7–57.9)	8.3	42.9 (41.4–44.4)	6.3	38.4 (36.8–40.1)	5.6	34.6 (33.3–36.0)	5.1
<b>Sex</b>								
Female (referent)	57.1 (55.0–59.1)	4.2	43.8 (41.5–46.1)	3.2	38.8 (36.6–41.0)	2.8	36.7 (34.7–38.7)	2.7
Male	55.5 (53.5–57.5)	4.0	42.0 (40.4–43.6)	3.0	38.1 (36.0–40.2)	2.7	32.5 <sup>§</sup> (42.2–45.5)	2.3
<b>Race/Ethnicity</b>								
Non-Hispanic white (referent)	57.8 (55.6–60.0)	4.9	43.0 (40.7–45.4)	3.6	37.1 (35.2–39.1)	3.1	35.2 (33.8–36.6)	3.0
Non-Hispanic black	52.4 <sup>§</sup> (49.4–55.4)	1.1	44.6 (41.0–48.4)	0.9	43.3 <sup>§</sup> (39.7–46.9)	0.9	36.1 (32.8–39.5)	0.8
Hispanic	57.3 (54.9–59.7)	1.6	42.3 (40.1–44.5)	1.2	39.5 (36.4–42.7)	1.1	33.1 (30.0–36.4)	0.9
Other (non-Hispanic)	46.6 <sup>§</sup> (41.6–51.5)	0.3	35.2 <sup>§</sup> (29.8–40.9)	0.2	29.5 <sup>§</sup> (25.9–33.4)	0.1	28.7 <sup>§</sup> (24.6–33.2)	0.1

Abbreviation: CI = confidence interval.

\* Population estimate (rounded down to the nearest 0.1 million).

<sup>†</sup> Statistically significant difference from referent (female) (p-value <0.05).

<sup>‡</sup> Statistically significant difference from referent (non-Hispanic white) (p-value <0.05).

<sup>§</sup> Statistically significant difference from referent (12th grade) (p-value <0.05).

tobacco products indicates that these interventions would be expected to contribute to reductions in e-cigarette advertisement exposure and use among youths as well (2,9). To effectively implement these strategies, there is a need for fully funded and sustained comprehensive state tobacco control programs that address all forms of tobacco use, including e-cigarettes (14). These programs are critical to support the

implementation and maintenance of proven population-based interventions to reduce tobacco use among youths, including tobacco price increases, comprehensive smoke-free laws, and high impact mass media campaigns (14). However, in 2015, states appropriated only 1.9% (\$490.4 million) of combined revenues of \$25.6 billion from settlement payments and tobacco taxes for all states on comprehensive tobacco control

## Key Points

- E-cigarette advertising expenditures have increased dramatically in the United States in recent years, from approximately \$6.4 million in 2011 to \$115 million in 2014.
- Approximately 18.3 million U.S. middle school and high school students were exposed to at least one source of e-cigarette advertising in 2014.
- Approximately half of all middle school and high school students (an estimated 14.4 million students) were exposed to e-cigarette advertisements in retail stores.
- Approximately one third of middle school and high school students were exposed to e-cigarette advertisements on the Internet (10.5 million), on TV or at the movies (9.6 million), or while reading newspapers or magazines (8.0 million).
- Tobacco product advertising can entice youth to start using tobacco. Comprehensive efforts to reduce youth exposure to e-cigarette marketing would be expected to reduce this burden, and consequently reduce youth use of these products.
- Additional information is available at <http://www.cdc.gov/vitalsigns>.

programs,<sup>‡</sup> representing <15% of the CDC-recommended level of funding (\$3.3 billion) for all states combined (14). Only two states (Alaska and North Dakota) currently fund tobacco control programs at CDC-recommended levels. Additionally, parents, caregivers, and health care providers can talk to children about the dangers of tobacco use, encourage or set limits on media use, and teach children critical media viewing skills to increase their resistance to pro-tobacco messages (15).

These findings are subject to at least three limitations. First, advertising exposure was self-reported and is subject to recall bias. Second, data were collected only from students who attended public or private schools and might not be generalizable to middle school- and high school-aged youths who are being homeschooled, youths who have dropped out of school, or youths in detention centers. However, data from the Current Population Survey indicate that 97.5% of U.S. youths aged 10–13 years and 95.4% of those aged 14–17 years were enrolled in a traditional school in 2014.\*\* Finally, exposure to

e-cigarette advertisements might have been underestimated, as survey questions asked only about exposure from four sources, and did not assess exposure from other potential sources such as sporting events, radio, or billboards.

This report highlights youth exposure to e-cigarette advertisements, which might be contributing to increasing youth experimentation with and use of e-cigarettes in recent years. Multiple approaches are warranted to reduce youth e-cigarette use and exposure to e-cigarette advertisements, including efforts to reduce youth access to the settings where tobacco products, including e-cigarettes, are sold, and regulation of youth-oriented e-cigarette marketing. The implementation of these approaches, in coordination with fully funded and sustained comprehensive state tobacco control programs, has the potential to reduce all forms of tobacco use among youths, including e-cigarette use.

<sup>1</sup>Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC; <sup>2</sup>Epidemic Intelligence Service, CDC.

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## References

1. Arrazola RA, Singh T, Corey CG, et al. Tobacco use among middle and high school students—United States, 2011–2014. *MMWR Morb Mortal Wkly Rep* 2015;64:381–5.
2. US Department of Health and Human Services. The health consequences of smoking—50 years of progress. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. Available at [http://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/index.htm).
3. England LJ, Bunnell RE, Pechacek TR, Tong VT, McAfee TA. Nicotine and the developing human: a neglected element in the electronic cigarette debate. *Am J Prev Med* 2015;49:286–93.
4. Food and Drug Administration. Deeming tobacco products to be subject to the Federal Food, Drug, and Cosmetic Act, as amended by the Family Smoking Prevention and Tobacco Control Act; regulations on the sale and distribution of tobacco products and required warning statements for tobacco products. *Federal Register* 2014;79:1–67. Available at <https://www.gpo.gov/fdsys/pkg/FR-2014-04-25/pdf/2014-09491.pdf>.
5. Herzog B, Gerber J, Scott A. Tobacco—Nielsen c-store data—e-cig \$ sales decline moderates. Charlotte, NC: Wells Fargo Securities; 2014. Available at <http://www.c-storecanada.com/attachments/article/153/Nielsen%20C-Stores%20-%20Tobacco.pdf>.
6. Herzog B, Gerber J, Scott A. Tobacco talk: vapors/tanks driving next wave of e-vapor growth. Charlotte, NC: Wells Fargo Securities; 2014. Available at [http://www.vaporworldexpo.com/PDFs/Tobacco\\_Talk\\_Vapors\\_Tanks\\_%20March%202014.pdf](http://www.vaporworldexpo.com/PDFs/Tobacco_Talk_Vapors_Tanks_%20March%202014.pdf).
7. Kim AE, Arnold KY, Makarenko O. E-cigarette advertising expenditures in the US, 2011–2012. *Am J Prev Med* 2014;46:409–12.
8. Truth Initiative. Vaporized: majority of youth exposed to e-cigarette advertising. Washington, DC: Truth Initiative; 2015. Available at <http://truthinitiative.org/research/vaporized-majority-youth-exposed-e-cigarette-advertising>.
9. US Department of Health and Human Services. Preventing tobacco use among youth and young adults: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at [http://www.cdc.gov/tobacco/data\\_statistics/sgr/2012/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/2012/index.htm).

<sup>‡</sup> Available at <http://www.tobaccofreekids.org/microsites/statereport2015/>.

\*\* Available at <http://www.census.gov/hhes/school/data/cps/2014/tables.html>.

10. Legacy for Health. Vaporized: e-cigarettes, advertising, and youth. Washington, DC: Truth Initiative; 2014. Available at [http://truthinitiative.org/sites/default/files/LEG-Vaporized-E-cig\\_Report-May2014.pdf](http://truthinitiative.org/sites/default/files/LEG-Vaporized-E-cig_Report-May2014.pdf).
11. CDC. National Youth Tobacco Survey; 2014. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. Available at [http://www.cdc.gov/tobacco/data\\_statistics/surveys/nyts/](http://www.cdc.gov/tobacco/data_statistics/surveys/nyts/).
12. Farrelly MC, Duke JC, Crankshaw EC, et al. A randomized trial of the effect of e-cigarette TV advertisements on intentions to use e-cigarettes. *Am J Prev Med* 2015;49:686–93.
13. Mackey TK, Miner A, Cuomo RE. Exploring the e-cigarette e-commerce marketplace: identifying Internet e-cigarette marketing characteristics and regulatory gaps. *Drug Alcohol Depend* 2015;156:97–103.
14. CDC. Best practices for comprehensive tobacco control programs, 2014. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. Available at [http://www.cdc.gov/tobacco/stateandcommunity/best\\_practices/index.htm](http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm).
15. American Academy of Pediatrics. Committee on Public Education. Media education. *Pediatrics* 1999;104:341–3.

**Electronic Nicotine Delivery Systems: Key Facts**  
**CDC Office on Smoking and Health**

**July 2015**

This document outlines key facts related to electronic nicotine delivery systems (ENDS), including e-cigarettes.

- **Youth use of ENDS continues to rise rapidly in the U.S.**
  - From 2011 to 2014, past 30-day use of e-cigarettes increased nine-fold for high school students (1.5% to 13.4%) and more than six-fold for middle school students (0.6% to 3.9%).<sup>1</sup>
  - Nearly 2.5 million U.S. middle and high school students were past 30-day e-cigarette users in 2014, including about 1 in 7 high school students.<sup>1</sup>
  - In 2013, more than a quarter of a million (263,000) middle and high school students who had never smoked cigarettes had ever used e-cigarettes.<sup>2</sup>
  
- **Most adult ENDS users also smoke conventional cigarettes, which is referred to as “dual use.”**
  - In 2012/2013, 1.9% of adults were past 30 day e-cigarette users, including 9.4% of conventional cigarette smokers.<sup>3</sup> Among adult past 30 day e-cigarette users, 76.8% were also current cigarette smokers (i.e., “dual users”) in 2012/2013.<sup>3</sup>
  
- **Nicotine poses dangers to pregnant women and fetuses, children, and adolescents. Youth use of nicotine in any form, including ENDS, is unsafe.<sup>4,5</sup>**
  - Nicotine is highly addictive.<sup>4</sup>
  - Nicotine is toxic to developing fetuses and impairs fetal brain and lung development.<sup>4,5</sup>
  - Because the adolescent brain is still developing, nicotine use during adolescence can disrupt the formation of brain circuits that control attention, learning, and susceptibility to addiction.<sup>5</sup>
  - Poisonings have resulted among users and non-users due to ingestion of nicotine liquid, absorption through the skin, and inhalation.<sup>6</sup> E-cigarette exposure calls to poison centers increased from one per month in September 2010 to 215 per month in February 2014, and over half of those calls were regarding children ages 5 and under.<sup>6</sup>
  - According to the Surgeon General, the evidence is already sufficient to warn pregnant women, women of reproductive age, and adolescents about the use of nicotine-containing products such as smokeless tobacco, dissolvables, and ENDS as alternatives to smoking.<sup>4</sup>

- **Any combusted tobacco use at any age is dangerous.**
  - The burden of death and disease from tobacco use in the U.S. is overwhelmingly caused by cigarettes and other combusted tobacco products.<sup>4</sup>
  - There is no safe level of exposure to secondhand tobacco smoke.<sup>7</sup>
  
- **In order for adult smokers to benefit from ENDS, they must completely quit combusted tobacco use. Smoking even a few cigarettes per day is dangerous to your health.**
  - Smokers who cut back on cigarettes by using ENDS, but who don't completely quit smoking cigarettes, aren't fully protecting their health:
    - Smoking just 1-4 cigarettes a day doubles the risk of dying from heart disease.<sup>8</sup>
    - Heavy smokers who reduce their cigarette use by half still have a very high risk for early death.<sup>9</sup>
  - Benefits of quitting smoking completely:
    - Heart disease risk is cut in half 1 year after quitting and continues to drop over time.<sup>4</sup>
    - Even quitting at age 50 cuts your risk in half for early death from a smoking-related disease.<sup>4</sup>
  
- **ENDS are not an FDA-approved quit aid.**
  - The evidence is currently insufficient to conclude that ENDS are effective for smoking cessation.
  - Seven medicines are approved by the FDA for smoking cessation, and are proven safe and effective when used as directed.<sup>10</sup>
  
- **ENDS aerosol is NOT harmless “water vapor” and is NOT as safe as clean air.<sup>18</sup>**
  - ENDS generally emit lower levels of dangerous toxins than combusted cigarettes. However, in addition to nicotine, ENDS aerosols can contain heavy metals, ultrafine particulate, and cancer-causing agents like acrolein.<sup>11</sup>
  - ENDS aerosols also contain propylene glycol or glycerin and flavorings. Some ENDS manufacturers claim that the use of propylene glycol, glycerin, and food flavorings is safe because they meet the FDA definition of “Generally Recognized as Safe” (GRAS). However, GRAS status applies to additives for use in foods, NOT for inhalation. The health effects of inhaling these substances are currently unknown.
  
- **ENDS are aggressively marketed using similar tactics as those proven to lead to youth cigarette smoking.**
  - Although the advertisement of cigarettes has been banned from television in the United States since 1971, ENDS are now marketed on television and other mainstream media channels.

- Spending on advertising of ENDS tripled each year from 2011 to 2013.<sup>12,13</sup> Sales of ENDS also increased dramatically over a similar period.<sup>14</sup>
  - ENDS marketing has included unproven claims of safety and use for smoking cessation, and statements that they are exempt from clean air policies that restrict smoking.<sup>4</sup> These messages could:
    - Promote situational substitution of ENDS when smokers cannot smoke cigarettes, rather than complete substitution of ENDS for cigarettes.
    - Undermine clean indoor air standards, smokefree policy enforcement, and tobacco-free social norms.
  - In a randomized controlled trial, adolescents who viewed e-cigarette TV advertisements reported a significantly greater likelihood of future e-cigarette use compared with the control group. They were also more likely to agree that e-cigarettes can be used in places where smoking is not allowed.<sup>15</sup>
  - Some ENDS companies are using techniques similar to those used by cigarette companies that have been shown in the 2012 Surgeon General's Report to increase use of cigarettes by youth, including: candy-flavored products; youth-resonant themes such as rebellion, glamour, and sex; celebrity endorsements; and sports and music sponsorships.<sup>13,16</sup>
  - Visual depictions of ENDS use in advertisements may serve as smoking cues to smokers and former smokers, increasing the urge to smoke and undermining efforts to quit or abstain from smoking.<sup>17</sup>
- **Given the currently available evidence on ENDS, several policy levers are appropriate to protect public health:**
    - Prohibitions on marketing or sales of ENDS that result in youth use of any tobacco product, including ENDS.
      - States laws prohibiting sales of ENDS to minors that feature strong enforcement provisions and allow localities to develop more stringent policies are more likely to help prevent youth access.<sup>18</sup>
    - Prohibitions on ENDS use in indoor areas where conventional smoking is not allowed could:<sup>18</sup>
      - Preserve clean indoor air standards and protect bystanders from exposure to secondhand ENDS aerosol.
      - Support tobacco-free norms.
      - Support enforcement of smoke-free laws.
    - When addressing potential public health harms associated with ENDS, it is important to simultaneously uphold and accelerate strategies found by the Surgeon General to prevent and reduce combustible tobacco use, including tobacco price increases, comprehensive smoke-free laws, high-impact media campaigns, barrier-free cessation treatment and services, and comprehensive statewide tobacco control programs.<sup>4,18</sup>

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- <sup>1</sup> Centers for Disease Control and Prevention. Tobacco Use Among Middle and High School Students — United States, 2011–2014. *MMWR* 64(14):381-385.
- <sup>2</sup> Bunnell, Agaku, Arrazola, Apelberg, Caraballo, Corey, Coleman, Dube, and King. Intentions to smoke cigarettes among never-smoking U.S. middle and high school electronic cigarette users, National Youth Tobacco Survey, 2011-2013 *Nicotine Tob Res.*
- <sup>3</sup> King, Patel, Nguyen, and Dube. Trends in Awareness and Use of Electronic Cigarettes among U.S. Adults, 2010-2013 *Nicotine Tob Res* ntu191 first published online September 19, 2014 doi:10.1093/ntr/ntu191
- <sup>4</sup> USDHHS. *The Health Consequences of Smoking – 50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA.: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.
- <sup>5</sup> England, L. et al. Nicotine and the Developing Human: A Neglected Element of the E-cigarette Debate. *Am J Prev Med* 2015 Mar 7. [Epub ahead of print].
- <sup>6</sup> Centers for Disease Control and Prevention. Notes from the field: calls to poison centers for exposures to electronic cigarettes—United States, September 2010 – February 2014. *MMWR* 63(13):292-3.
- <sup>7</sup> USDHHS. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA.: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.
- <sup>8</sup> Bjartveit K, Tverdal A. Health Consequences of Smoking 1–4 Cigarettes per Day. *Tobacco Control* 2005; 14(5):315-20.
- <sup>9</sup> Tverdal A, Bjartveit K. Health Consequences of Reduced Daily Cigarette Consumption. *Tobacco Control*. 2006; 15(6): 472–80.
- <sup>10</sup> FDA 101: Smoking Cessation Products. Available at: <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm198176.htm#learn>
- <sup>11</sup> Goniewicz, ML, Knysak J, Gawron M, Kosmider L, Sobczak A, Kurek J, Prokopowicz A, Jablonska-Czapla M, Rosik-Dulewska C, Havel C, Jacob P, Benowitz N. Levels of selected carcinogens and toxicants in vapour from electronic cigarettes. *Tobacco Control* 2014,23(2): 133–9.
- <sup>12</sup> Kim AE, Arnold KY, Makarenko O. E-cigarette advertising expenditures in the U.S., 2011–2012. *Am J Prev Med* 2014;46:409–12.
- <sup>13</sup> Legacy. Vaporized: E-cigarettes, advertising, and youth. May 2014. Available at: [http://legacyforhealth.org/content/download/4542/63436/version/1/file/LEG-Vaporized-E-cig\\_Report-May2014.pdf](http://legacyforhealth.org/content/download/4542/63436/version/1/file/LEG-Vaporized-E-cig_Report-May2014.pdf).
- <sup>14</sup> Loomis B et al. National and State-Specific Sales and Prices for Electronic Cigarettes—U.S., 2012–2013. *Am J Prev Med* 2015 July 7 [Epub ahead of print].
- <sup>15</sup> Farrelly MC et al. A Randomized Trial of the Effect of E-cigarette TV Advertisements on Intentions to Use E-cigarettes. *Am J Prev Med* 2015 July 8. [Epub ahead of print].
- <sup>16</sup> U.S. Department of Health and Human Services (2012). Reports of the Surgeon General. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta (GA), Centers for Disease Control and Prevention (US).
- <sup>17</sup> Maloney EK, Cappella JN. Does Vaping in E-Cigarette Advertisements Affect Tobacco Smoking Urge, Intentions, and Perceptions in Daily, Intermittent, and Former Smokers? *Health Commun*. 2015 Mar 11:1-10.
- <sup>18</sup> Centers for Disease Control and Prevention. State Laws Prohibiting Sales to Minors and Indoor Use of Electronic Nicotine Delivery Systems — United States, November 2014. *MMWR* 63(49):1145-1150.

**CDC Office on Smoking and Health  
E-cigarette Information  
November 2015**

E-cigarettes have the potential for harm and benefit to the public’s health. It is important to consider their effects on specific populations, including youth, pregnant women, and adult smokers.

**Table: Examples of how e-cigarettes could benefit or harm the public’s health**

<b>E-cigarettes could cause public health HARM if they:</b>	<b>E-cigarettes could lead to public health BENEFIT if:</b>
<ul style="list-style-type: none"> <li>• Lead to use of nicotine and/or other tobacco products by youth and nontobacco users.</li> <li>• Are used by pregnant women.</li> <li>• Lead former smokers to relapse to nicotine use or use of other tobacco products.</li> <li>• Delay complete smoking cessation among current smokers.</li> <li>• Result in nicotine poisonings (e.g., through ingestion of e-cigarette liquid, absorption of e-cigarette liquid through the skin, or inhalation of e-cigarette aerosol).</li> <li>• Expose nonusers to secondhand aerosol.</li> </ul>	<ul style="list-style-type: none"> <li>• Individual adult smokers switch <i>completely</i> from combustible tobacco products to e-cigarettes.</li> <li>• They assist in rapid transition to a society with little or no combustible tobacco use.</li> </ul>

**For YOUTH:**

- Use of tobacco and nicotine pose known harms for youth. Therefore, youth should not use *any* tobacco product, regardless of whether it’s combustible, noncombustible, or electronic.
  - Nicotine is highly addictive.
  - Nicotine exposure may harm the developing adolescent brain.
  - E-cigarette use by youth could also cause harm if it leads to use of other tobacco products.

**For NON-PREGNANT ADULT SMOKERS:**

- Any combusted tobacco use at any age is dangerous. According to the US Surgeon General, the burden of death and disease from tobacco use in the United States is overwhelmingly caused by cigarettes and other combusted tobacco products.
- For adult smokers to benefit from e-cigarettes, they must *completely* quit combusted tobacco use. Smoking even a few cigarettes per day is dangerous to health.
- E-cigarettes are not an FDA-approved smoking cessation aid.
  - The US Preventive Services Task Force, a group of health experts that makes recommendations about preventive health care, has concluded that evidence is insufficient to recommend e-cigarettes for smoking cessation in adults, including pregnant women.

**For PREGNANT WOMEN:**

- Nicotine is a health danger for pregnant women and their developing fetuses.
- Pregnant women should not use any tobacco product, including e-cigarettes, because nicotine is toxic to developing fetuses and impairs fetal brain and lung development.

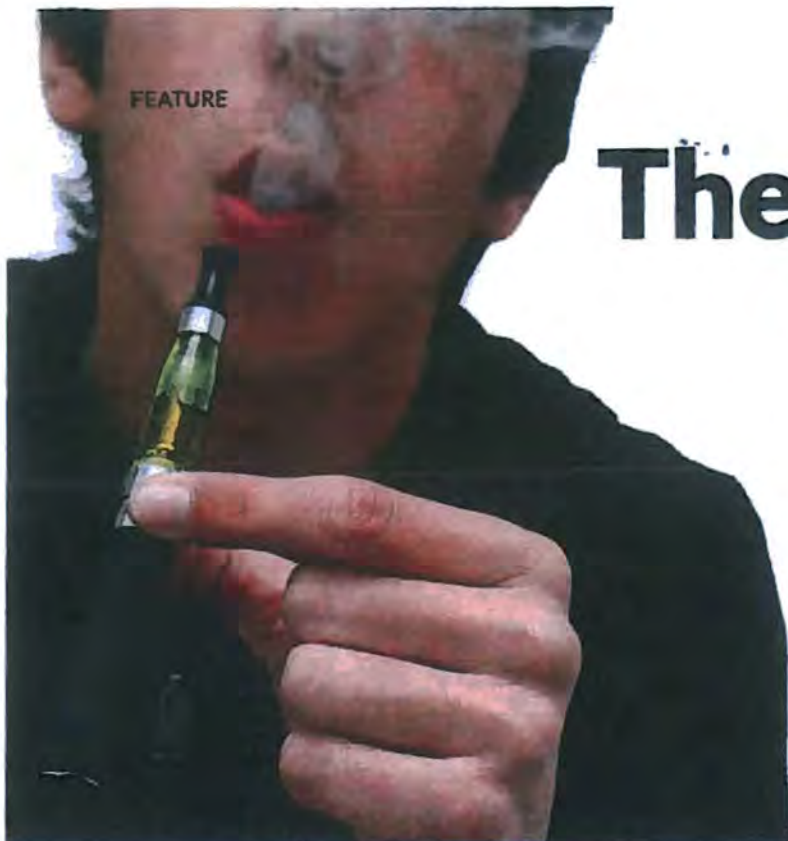
**CDC Office on Smoking and Health  
E-cigarette Information  
November 2015**

- Pregnant women who haven't been able to quit smoking on their own or with counseling can discuss the risks and benefits of using cessation products, such as nicotine replacement therapy, with their health care provider.

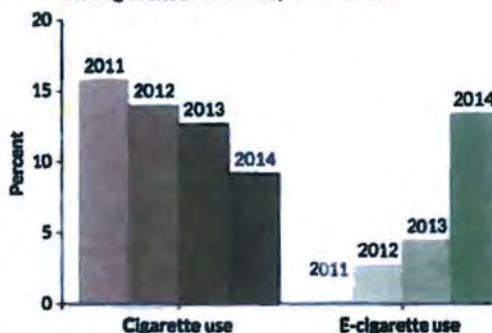
**For ADULT NONTOBACCO USERS:**

- E-cigarette aerosol is not harmless water vapor. In addition to nicotine, e-cigarette aerosol can contain heavy metals, ultrafine particulates that can be inhaled deep into the lungs, and cancer-causing agents like acrolein.
- E-cigarette aerosols also contain propylene glycol or glycerin and flavorings. Some e-cigarette manufacturers claim that the use of these ingredients is safe because they meet the FDA definition of "generally recognized as safe" (GRAS). However, GRAS status applies to ingestion of these ingredients (i.e., in food), *not* inhalation. The health effects of inhaling these substances, including from an e-cigarette, are unknown.
- Inhaling e-cigarette aerosol directly from the device or from secondhand aerosol that is exhaled by users is potentially harmful to health. Therefore, adult nontobacco users should not use e-cigarettes or be exposed to secondhand aerosol from these products.

# The Dangers of Vaping



Cigarette and e-cigarette use among U.S. high school students, 2011-2014



Teens are falling for flavored e-cigs, but the vapors they inhale may be toxic **By Janet Raloff**

**T**hey've appeared on television and in magazines — Katy Perry, Johnny Depp and other celebrities vaping electronic cigarettes. The high-tech gadgets, marketed as a healthier alternative to traditional cigarettes, seem to be available everywhere, from Internet suppliers and specialty vaping shops to 24-hour convenience marts.

E-cigarettes have become the fashionable new electronic toy. With vape flavorings like bubble gum, Dr Pepper and cotton candy, teens have been taking the bait. In 2014, e-cigarettes surpassed cigarettes as the most commonly used tobacco product by middle school and high school students, according to an annual U.S. survey.

Teens' fascination with this nicotine-dispensing smoking alternative worries physicians and toxicologists. Data from a growing number of studies indicate that electronic cigarettes are far from harmless. They also pose their own addiction risk.

Chemicals in e-cigarettes can damage lung tissue and reduce the lungs' ability to keep germs and other harmful substances from entering the body, studies have found (*SN*: 12/27/14, p. 20). The flavored e-cig liquids can do their own damage. And the lungs — not to mention the young brain (see "Nico-teen brain," Page 20) — may be particularly vulnerable to nicotine's effects.

"What I can say definitively is that nicotine is harmful to the

developing teenage brain," says Mitch Zeller, director of the Center for Tobacco Products at the U.S. Food and Drug Administration in Silver Spring, Md. "No teenager, no young person, should be using any tobacco or nicotine-containing products." E-cigarettes, he says, are among the products that should be kept firmly out of the hands — and mouths — of adolescents.

## Soaring popularity

In the last year, e-cigarette use by U.S. teenagers tripled — from 4.5 to 13.4 percent among high school students and from 1.1 to 3.9 percent among middle schoolers, according to data from the annual National Youth Tobacco Surveys (sponsored by the FDA and the Centers for Disease Control and Prevention). Other surveys, some national, some state-level, offer even more troubling figures.

A 2014 survey of U.S. teens, for example, found that almost 9 percent of eighth-graders had vaped in the 30 days before they were questioned. Among 10th-graders, 16.2 percent had vaped in the previous 30 days versus 7.2 percent who had smoked. Teens don't see e-cigs as dangerous, suggest the data from a University of Michigan study, released last December. Only 14.2 percent of 12th-graders surveyed viewed vaping as harmful.

In some parts of the country, e-cigarette use by young people is especially high. In Hawaii, 29 percent of more than 1,900 ninth- and 10th-grade students in five schools had at some time

In 2014, e-cigarettes became the most commonly used tobacco product among teens. The devices surpassed cigarettes, which have been on the decline, according to a national survey by the CDC and FDA. SOURCE: 2011-2014 NYTS

JOHN VAN HASSELT/CORBIS

used e-cigarettes, according to a survey published in *Pediatrics* in January.

And teen vaping is hardly restricted to Americans. A new survey of nearly 2,700 German seventh-graders finds that almost 5 percent have vaped. A May report in the *Journal of Adolescent Health* describes a near tripling in vaping among teens in New Zealand between 2012 and 2014. By 2014, one in five 14- to 15-year-olds there had given it a try. Reported use by high school teens in Poland is even higher: 23.5 percent.

Such trends, Zeller says, "should raise alarm bells for parents and educators."

### Smokeless nicotine

Unlike true cigarettes, electronic cigarettes don't burn tobacco. They don't burn anything. Instead, the battery-operated devices turn a flavored liquid into a vapor. Users inhale, or vape, the mist. The liquid usually contains nicotine, a natural stimulant in tobacco that is highly addictive. Also in the liquid are solvents, flavorings and who knows what else.

E-cigarettes first appeared in the U.S. market in 2007, designed to help tobacco addicts wean themselves from smoking. Recent research, however, indicates that vaping does not boost quit rates (*SN Online*: 3/24/14).

Irina Petrache of the Indiana University School of Medicine in Indianapolis studies the impact of nicotine in e-cigs. She and her colleagues recently exposed lung tissue in the lab to nicotine alone, to cigarette smoke or to e-cigarette vapors. Compared with tissues treated with a nicotine-free soluble extract, all three types of exposures caused lung cells to become more permeable. The cells were no longer an effective barrier to outside substances.

In follow-up tests, the researchers exposed lab animals to nicotine and e-cig liquids. These exposures caused increased oxidative stress and resulted in a buildup of inflammatory cells in the lungs of the mice. "We were surprised at how quickly we saw this inflammation," she says. In fact, the affected lung surface cells "became activated" by the exposures. Petrache explains, "which means they became an active participant in the inflammation."

Her team's findings show that nicotine alone — independent of anything else in cigarette smoke or e-cig vapors — can harm lung tissue. While neither nicotine nor the vapors were quite as potent as the cigarette smoke, all three were triggers. "It took a somewhat larger amount of e-cigarette vapor or nicotine to cause the damage," she explains. Her group reported its

findings online May 15 in the *American Journal of Physiology—Lung Cellular and Molecular Physiology*.

In an "unexpected and disturbing" result, Petrache's team found that even an e-cigarette liquid with no nicotine can disrupt the barrier function of lung cells. Her group suspects this problem may have to do with soluble components, such as nicotine or the compound acrolein, in the flavored liquids that are inhaled through e-cigarettes. Despite a public perception to the contrary, vaping "does not seem to be harmless," Petrache concludes.

Irfan Rahman of the University of Rochester Medical Center in New York has a good idea of what was behind the inflammation witnessed by the Indiana team: free radicals spawned as the flavored e-cigarette liquids vaporized. Indeed, he was surprised to learn how potent a source of free radicals e-cigarettes can be. Free radicals, with one unpaired electron, can damage cells and derail the immune system (*SN*: 4/18/15, p. 9).

Rahman, a biochemist, and his team drew the vapors from e-cigarettes into sophisticated test equipment that his lab uses to measure free radicals. Some vaped puffs created from flavored e-liquids — with or without nicotine — produced high concentrations of free radicals. In fact, the nicotine-free vape liquid produced a substantially higher concentration of free radicals. Rahman's team reported in February in *PLOS ONE*.

In other experiments, Rahman's team quantified the free radicals from vaping and smoking. Puffs from both contained free radicals aplenty: the quantity in each vaped puff exceeded those in a puff of cigarette smoke.

To further explore e-cigarette use, Rahman and students from his lab began frequenting vape shops and talking to the teens and young adults who had come to buy supplies. The vapers bragged about being able to use e-cigarettes indoors where smoking was banned, that e-cigs could cost far less than cigarettes and that their colors, potency and flavors could be personalized to deliver a truly "individual" experience.

Some vapers described how they customize the vaping experience by eliminating the cartridge of e-liquid, also known as "e-juice," and using an eye dropper to drip a flavored solution directly onto the e-cigarette's heating element. Then they breathe in the vapors that rise off the coils. This technique, called "dripping," delivers a more potent hit of nicotine, users told Rahman. It also allows them to switch between flavors more easily

2014 was a banner year for e-cigs

2.4  
million

U.S. students reported using e-cigarettes

466

Brands of e-cigarettes for sale

10

States with no laws restricting minors from buying e-cigarettes

3,783

Calls to poison control involving exposures to e-cig devices and nicotine liquids (up from 271 in 2011)

SOURCES FROM TOP: 2011-2014 NYTS; SHU-HONG ZHU ET AL/TOBACCO CONTROL 2014; CDC; AM ASSOC POISON CONTROL CTBS



— an advantage at parties and in groups where people share an e-cigarette.

Rahman and colleagues investigated how dripping (see image, left) might affect the vapor profile. They found that it upped production of free radicals dramatically.

Many teens and young adults told Rahman and colleagues that their throats became dry and

scratchy with vaping. Some said that vaping made them cough or choke and that their mouths bled. Rahman says he decided, "We've got to start looking into these things and see what's going on."

So his team exposed human lung cells and mice to e-cigarette vapors. The vapors triggered intense inflammation in both. Preliminary data from Rahman's team indicate that vaping can cause DNA damage in test tube-grown cells. More worrisome: In one of his team's lung cancer cell lines, e-cigarette vapors triggered precancerous cells to act more like malignant cells. "They go from bad to worse," Rahman says. Surprisingly, he says, cigarette smoke did not show this effect.

Studies by his group and others, Rahman says, suggest that vaping is not safer than smoking: "It's equally bad."

### Weakened defenses

Last year in San Diego at a meeting of the American Thoracic Society, Laura Crotty Alexander reported that vaping can make it harder for the body to kill germs (*SN: 6/28/14, p. 9*). Crotty Alexander, a pulmonologist, works at the Veterans Affairs San Diego Healthcare System.

In the lab, she exposed *Staphylococcus aureus* bacteria to e-cigarette vapors, hoping to create conditions that would somewhat mimic what the germs might encounter in the lungs of an e-cig user. The bacteria exposed to high levels of nicotine covered themselves with a thicker biofilm coating than normal, which bolstered their protection.

Crotty Alexander then allowed mice to breathe in air containing these vaping-exposed bacteria. By the next day, the mice had three times as many bacteria in their lungs as did mice exposed to normal Staph bacteria. Fighting off the germs exposed to e-cigarette vapors proved hard for the mice.

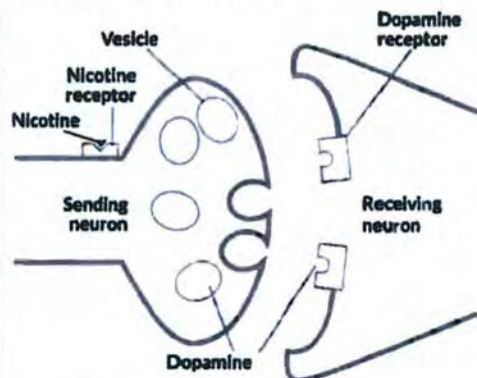
Inflamed lungs with an impaired barrier might help explain why more germs made it into the mice's lungs. Thomas Sussan of the Johns Hopkins University Bloomberg School of Public Health and colleagues found similar connections between vaping and immune dysfunction.

Sussan's team tallied the free radicals from vaping, measuring 700 billion or so free radicals per puff (*SN Online: 2/4/15*). Then, as Rahman's group had done, Sussan and collaborators pumped e-cig vapors into a shoebox-sized chamber. They placed mice in the box for 90 minutes, twice daily, over a two-week period to inhale those vapors.

## Nico-teen brain

The teenage brain is no place for nicotine. The prefrontal cortex, the area of the brain responsible for emotions and impulse control, doesn't finish developing until age 25 or so. It's an area especially vulnerable to nicotine addiction.

Exposing the developing adolescent brain to nicotine "could lead to a high risk of lifelong addiction," says Garry Sigman, who heads adolescent medicine at the Loyola University Chicago Stritch School of Medicine in Maywood, Ill.



**Brain interrupted** Nicotine (black triangle) tricks the nerve cell sending a message into releasing more dopamine (yellow dots) into the synapse than it would normally, giving users a feel-good high, but potentially creating addiction and other problems down the road

Nicotine can reach the brain within seven seconds of inhaling. The drug then acts like a key, unlocking special receptor molecules that cause nerve cells in the prefrontal cortex and other parts of the brain to release neurotransmitters, such as dopamine and serotonin, into the synapse, where nerve cells communicate. Users get a feel-good high. After repeated exposure to nicotine, however, fundamental changes in the brain can interfere with the body's ability to release natural pleasure-giving chemicals on its own. Teen brains will also create more receptors to handle the flood of nicotine. As the number of receptors increases, teens need more nicotine to get the same high. That makes nicotine users seek hit after hit. In teens, behavioral consequences, including impaired attention and bouts of depression and anxiety, can emerge, research suggests.

While some of the negative effects of nicotine on the young brain can fade with time if exposure ends, others may persist. Neuroscientists at VU University Amsterdam found that nicotine treatment in adolescent rats increased impulsive behavior and impaired attention during adulthood. — Teresa Shipley Feldhausen

FROM TOP: CINDY YAMAMAKA/CORBIS; NATIONAL INSTITUTE ON DRUG ABUSE; ADAPTED BY T. HIRSHFIELD

Afterward, the animals' lungs showed substantial signs of oxidative stress and inflammation. Compared with unexposed mice, the vaping mice had "a nearly 60 percent increase in inflammatory cells," Sussan says. The influx of immune system macrophages in the airways was similar to what his group had seen in mice exposed to cigarette smoke.

To test whether this lung damage affected immunity, Sussan's team exposed some of the "vaped" animals to either flu virus or *Streptococcus pneumoniae* bacteria. Normally, macrophages would gobble up and kill the pathogens. The vaped animals produced plenty of macrophages, but the scavenger cells didn't do their job. The result: "defective bacterial clearance," the researchers reported in February in *PLOS ONE*.

Similarly, mice that had breathed in e-cig vapors proved less able than nonvaping mice to fight off the flu virus. Some of the mice exposed to the e-cigarette vapors died. All nonvaping mice survived.

The emerging animal data show that "clearly, these e-cigarettes aren't safe," concludes Sussan, a toxicologist. In fact, he says, any vapers "who think they are not doing any harm are fooling themselves."

### The Wild West

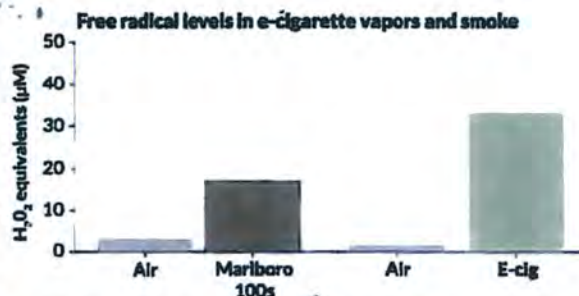
A challenge to probing any risks associated with e-cigs is the lightning pace with which the vaping environment has been evolving. In January 2014, at least 466 brands of e-cigarettes were for sale, according to a recent Internet survey by researchers at the University of California, San Diego. Each brand had its own website. That same survey turned up 7,764 uniquely named flavored e-liquids, with hundreds of new flavors appearing each month.

Sussan calls the e-cig market "the Wild West." Tests on one device or flavored liquid may not extrapolate to others being sold. Makers of e-liquids don't have to list their ingredients and nicotine amounts. And when listed, they aren't reliable, several studies have found. Few flavorings in the e-juices have been evaluated for risks to the lungs.

A few research teams are trying to get a handle on what's out there. Researchers at Portland State University in Oregon recently purchased and analyzed 30 e-juices. "The levels of flavorings that we found in some of the fluids were high — sometimes as much as 4 percent of the material," says chemist James Pankow. That was unexpected, he says. His team published its findings online April 15 in *Tobacco Control*.

Industrial safety guidelines recommend workplace inhalation limits for some of the chemicals his team found in vaping liquids. Examples include the aldehydes vanillin and benzaldehyde. Based on the quantities of some of these chemicals found in the e-juices, people who chronically vape could inhale amounts greater than those recommended for employees, Pankow notes.

In addition, he says, breathing something is very different from eating it. The gastrointestinal tract is better able than the lungs to tolerate incoming materials. Even the Flavor Extracts



**Oxidative stress** Tobacco-flavored e-cig vapor (10-minute exposure) contained more free radicals than smoke from conventional cigarettes (five-minute exposure) or air. SOURCE: CHAD LEHNER ET AL./ENV. POLL. 2015

Manufacturers Association, he says, argues that it would be "false and misleading" to claim that food-grade flavorings are inherently safe to vape.

Certain other chemicals added to cigarettes to make them easier to smoke are found in e-cigs as well, a team at the Harvard School of Public Health reports. The researchers sifted through a mountain of tobacco company documents released to the public in the 1990s as part of a legal settlement.

"What we found," says Hillel Alpert, "is that they added ingredients — particularly pyrazines — that appear to have contributed to the 'smooth' flavor, reducing the harshness of certain cigarettes." Pyrazines are also being added to e-cigarette fluids, his team wrote online June 10 in *Tobacco Control*. Such chemicals may mask the body's natural aversion to irritating aspects of vapors, making them easier to inhale. This might indirectly foster addiction, Alpert says. Simply put: Pyrazines can make it easier for teens to comfortably take in nicotine.

### Arguing for regulations

Vaping products remain largely unregulated in the United States and elsewhere. The FDA announced in April 2014 that it plans to extend its regulation of tobacco products to include e-cigarettes. The agency has not yet acted on that proposal.

As of December 2014, in 10 states and the District of Columbia, children can legally buy e-cigs. And to buy them on the Internet, minors just have to claim they are adults.

On April 28, a broad consortium of 31 organizations — from the American Lung Association and American Academy of Pediatrics to the United Methodist Church — sent an open letter to President Obama asking him to light a fire under the FDA about regulation of e-cigarettes and other unregulated tobacco products. Without action, the groups charged, "there are no restrictions in place to protect public health against the risks these products pose, particularly to the health of our children."

### Explore more

- Shu-Hong Zhu et al. "Four hundred and sixty brands of e-cigarettes and counting: Implications for product regulation." *Tobacco Control*. July 2014.

# LEGAL SERVICES

DIVISION OF LEGAL AND RESEARCH SERVICES  
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## MEMORANDUM

April 2, 2014

**SUBJECT:** CSSB 209( ): Constitutional problems with local option addition  
(Work Order No. 28-LS1539\C)

**TO:** Senator Peter Micciche  
Attn: Mindy Rowland

**FROM:**  Kathleen Strasbaugh  
Legislative Counsel

This memo addresses an issue with the local option provisions added to the newest draft of CSSB 209( ): whether permitting a municipality to negate a law of statewide application is constitutional.

The Alaska statutes provide communities with the ability to adopt a local option with respect to alcoholic beverages and to certain gaming activity.<sup>1</sup> State law also authorizes municipal governments to adopt certain measures within parameters set by state law.<sup>2</sup> The Alaska Court of Appeals upheld a conviction under the alcohol local option law challenged on the grounds that it was unconstitutional because it unlawfully delegated the legislature's authority:

The fact that the local community is not itself enacting a state law when it holds a local option election disposes of Shettlers' other arguments that local options are unconstitutionally enacted. It does not violate due process for local voters to elect to adopt a state law regulating alcoholic beverages without the opportunity to specifically vote on all the provisions of the state law. Nor does the possibility that a community might frequently change its local option establish an unlimited delegation of legislative power. Finally, because the community voters were not empowered to and in fact did not enact a state law, the elections were not subject to the constitutional provisions on initiative measures.

*Shettlers v. State*, 832 P. 2d 181, 185 (Alaska Ct. App. 1992). In contrast, the local option requested for this bill would allow a community to opt to nullify the application of a state law. There is no precedent for this that I am aware of. Further it is not clear from the

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<sup>1</sup> AS 04.11.490 - 04.11.509; AS 05.15.620 - 05.15.625.

<sup>2</sup> See generally, state law restrictions identified in AS 29.10.200.

Senator Peter Micciche

April 2, 2014

Page 2

legislation that the exercise of the local option serves a beneficial public purpose, unlike the public health purpose that is served by permitting a community to limit access to alcohol. And unlike the alcohol local option law, this bill's local option is essentially just an up or down vote on whether state law should apply. Given these factors, a challenge based on improper delegation of legislative authority may be more likely to be successful than it was in *Shetters*. See *State v. Fairbanks North Star Borough*, 736 P.2d 1140 (Alaska 1987).

Time does not permit an extended exploration or discussion of this issue, but I did want to alert you that the local option provision may be fatally flawed.

If I may be of further assistance, please advise.

KJS:lem

14-169.lem

Enclosure

## LEGAL SERVICES

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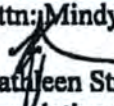
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### MEMORANDUM

April 7, 2014

**SUBJECT:** CSSB 209( ): Smoking in Public Places  
(Work Order No. 28-LS1539\P)

**TO:** Senator Peter Micciche  
Attn: Mindy Rowland

**FROM:**   
Kathleen Strasbaugh  
Legislative Counsel

Please find enclosed a new version of SB 209 that adds e-cigarettes stores to the exemptions and delays the effective date of the local option provisions of the bill for two years. I have also made some adjustments to AS 18.35.201 to acknowledge the local option exception, and eliminated "airport fuel facility" from the list of prohibited places because such facilities are covered by other safety laws -- and this bill is designed to deal with the health, not safety, aspects of smoking.

This memo addresses further the potential legal problem with the local option provisions of the law discussed in a previous memo.<sup>1</sup> As previously noted, there are other local option election provisions in the Alaska Statutes.<sup>2</sup> There are also circumstances under which by ordinance a local government can elect to participate in a state program.<sup>3</sup> There is some precedent for the exercise of an option that permits a municipal government to opt out of a state law program, an example I had not recalled when I wrote to you last. *See, e.g.*, the local option provisions of the Public Employment Relations Act (PERA):

This Act is applicable to organized boroughs and political subdivisions of the state, home rule or otherwise, unless the legislative body of the political subdivision, by ordinance or resolution, rejects having its provisions apply.

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<sup>1</sup> The earlier memo was sent to you with version "C" on April 2, 2014.

<sup>2</sup> AS 04.11.490 - 04.11.509; AS 05.15.620 - 05.15.625.

<sup>3</sup> *See* AS 28.10.431, which allows a municipality to elect to assess a vehicle registration tax and have the state collect it.

Ch. 113, § 4, SLA 1972.<sup>4</sup>

Here, however, the municipality would be opting out of a statute of otherwise statewide application that is enacted to benefit the public health, the violation of which can result in the imposition of a penalty that is enforced through the criminal justice system. In other circumstances, Alaska's appellate courts have struck down municipal enactments that conflict with, or are significantly inconsistent with laws of statewide application. For example, an ordinance that provided for a maximum penalty that was higher than that in state law for the same offense was struck down as unlawful in *Anderson v. Municipality of Anchorage*, 645 P.2d 205, 213 (Alaska Ct. App. 1982). In overruling a municipal drunk driving ordinance that differed from state law, the Alaska Court of Appeals held that despite the liberal powers of self government granted to Alaska municipalities, the Municipality of Anchorage could not enforce an ordinance that was inconsistent with state law. *Simpson v. Municipality of Anchorage*, 635 P.2d 1197, 1200 (Alaska Ct. App. 1981).<sup>5</sup> In *Adkins v. Lester*, 530 P.2d 11, 14 (Alaska 1974), the Alaska Supreme Court struck down a Fairbanks ordinance that required that emergency vehicles use audible signals at all times where state law permitted such vehicles to be driven without audible signals under some circumstances, on the grounds that the commissioner of public safety was authorized to adopt a statewide scheme of traffic safety regulations, and the local ordinance interfered with the regulation in question.<sup>6</sup>

There are significant distinctions between the PERA exemptions and the gaming and alcoholic beverage local option laws. The improper delegation of legislative authority issue as explained in the previous memorandum issued to you on this subject remains significant.

In addition, if the law were challenged, it might be on the grounds that a person's right to equal protection would be violated because of the different treatment a person might receive if the person lived in a community that did not opt out (and was subject to a penalty for violation of the law), or the public health benefits a person might lose if the person lived in a community that opted out. Alcoholic beverage local option law has been upheld against equal protection challenges because of the great harm caused by

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<sup>4</sup> However, a municipality was not permitted to opt out of the law where the purpose of doing so was to thwart organizing activities by employees seeking to avail themselves of the rights conferred by PERA. *Kodiak Island Borough v. State, Department of Labor*, 853 P.2d 1111, 1114 (Alaska 1993).

<sup>5</sup> *But see Cremer v. Anchorage*, 575 P.2d 306, 307 - 08 (Alaska 1978) (local "driving while suspended or revoked" ordinance upheld that applied on private property held not inconsistent with state law, which was limited to public property).

<sup>6</sup> Additionally, state motor vehicle statutes have specific provisions concerning consistency between state and local law.

Senator Peter Micciche  
April 7, 2014  
Page 3

alcohol abuse warrants criminalizing alcohol offenses in communities where the option has been exercised:

[T]he state has a "compelling interest in curbing the problem of alcohol abuse." *Harrison v. State*, 687 P.2d 332, 340 (Alaska App. 1984).

In *Harrison*, we discussed the numerous problems facing this state as a result of alcohol abuse. We pointed out that "in response to the growing evidence of a strong relationship between alcohol abuse and crime, Alaska's local option law was enacted in 1980." *Id.* at 335. The statutes that Burnor questions in this case are part of the fabric of the local option law. See *Tuckfield v. State*, 805 P.2d 982, 983-84 (Alaska App. 1991). In discussing *Harrison's* contention that the local option law violated equal protection because it permitted one community to ban the importation of alcoholic beverages and simultaneously permitted other communities to allow importation of alcoholic beverages, we stated:

The question is whether differences in treatment are reasonable in light of the balance between the importance of the legislative intent, on the one hand, and the interest of the individual on the other.... We see no basis for concluding that differences in the treatment of citizens from different communities under the local option law should be considered constitutionally significant when those differences result only from the extent to which individual communities elect to implement that law. When the state attacks a complex problem it need not choose between attacking every aspect of that problem and doing nothing at all.

*Harrison*, 687 P.2d at 341 (citation omitted).

*Burnor v. State*, 829 P.2d 837, 840 (Alaska Ct. App. 1992). Here, the local option is to allow smoking in public places to continue, an objective that does not appear to be in keeping with the overall purpose of the legislation, making it more vulnerable than it might otherwise be to challenge.

If I may be of further assistance, please advise.

KJS:ray  
14-162.ray

Enclosure

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## **Fraternal Order of Eagles v. City & Juneau-Douglas Aerie 4200**

Supreme Court of Alaska  
July 1, 2011, Decided  
Supreme Court No. S-13748, No. 6574

### **Reporter**

254 P.3d 348; 2011 Alas. LEXIS 57

FRATERNAL ORDER OF EAGLES, JUNEAU-DOUGLAS AERIE 4200, MARK PAGE, BRIAN TURNER, R.D. TRUAX, and LARRY PAUL, Appellants, v. CITY AND BOROUGH OF JUNEAU, Appellee.

**Prior History:** [\*\*1] Appeal from the Superior Court of the State of Alaska, First Judicial District, Juneau, Phillip M. Pallenberg, Judge. Superior Court No. 1JU-08-00730 CI.

## **Core Terms**

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smoking, private club, ban, ordinance, right to privacy, tobacco, regulation, intimate association, privacy, superior court, fundamental rights, intimate, smokers, rights, ingestion, interfere, freedom of association, restaurants, second-hand, personal autonomy, summary judgment, smoking ban, membership, infringed, alcoholic beverage, associational, implicate, alcohol, Cancer, places

## **Case Summary**

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### **Procedural Posture**

Appellants, a private club and its members, sued respondent, the City and Borough of Juneau, Alaska, claiming a smoking ban infringed upon their freedom of association under the First Amendment and their privacy rights under *Alaska Const. art. I, § 22*. The Superior Court of the State of Alaska, First Judicial District, Juneau, denied appellants' motion for summary judgment and granted summary judgment to the City. Appellants filed an appeal.

### **Overview**

Appellants, a private club and its members, challenged an ordinance banning smoking in private clubs, City and Borough of Juneau, Alaska, Code § 36.60. The Supreme Court of Alaska upheld the ordinance. Because the smoking ban regulated only conduct, it did not implicate the freedom of association protected by *U.S. Const. amend. I*. The smoking ban did not violate appellants' right to privacy under *Alaska Const. art. I, § 22*, because private clubs did not enjoy privacy protections afforded in the home. As smoking tobacco was not a fundamental right of personal autonomy, strict scrutiny did not apply. The ban on smoking in private clubs bore a close and substantial relationship to the legitimate state purpose of protecting the public health.

### **Outcome**

The judgment was affirmed.

## **LexisNexis® Headnotes**

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Business & Corporate Compliance > ... > Governments > Agriculture & Food > Smoking Bans  
Governments > Local Governments > Ordinances & Regulations

Micciche Peter

**HN1** The City and Borough of Juneau, Alaska, has adopted a "Smoking in Public Places Code," City and Borough of Juneau, Alaska, Code § 36.60.

Business & Corporate Compliance > ... > Governments > Agriculture & Food > Smoking Bans  
 Governments > Legislation > Effect & Operation > Amendments  
 Governments > Local Governments > Ordinances & Regulations

**HN2** City and Borough of Juneau, Alaska, Code § 36.60, the anti-smoking ordinance, has been amended several times. Originally it exempted enclosed areas used for conferences or meetings in restaurants, service clubs, hotels, or motels while the spaces are in use for private functions as well as bars and bar restaurants. In 2004 it was amended to ban smoking in "bar restaurants" effective January 2, 2005, and to ban smoking in "bars" effective January 2, 2008. In 2007 it was amended to prohibit smoking and the use of smokeless tobacco products at several public and private medical facilities, including the public streets and sidewalks adjacent to those facilities. It has also been amended to prohibit smoking in bus passenger shelters.

Business & Corporate Compliance > ... > Governments > Agriculture & Food > Smoking Bans  
 Governments > Legislation > Effect & Operation > Amendments  
 Governments > Local Governments > Ordinances & Regulations

**HN3** In 2008, an amendment to City and Borough of Juneau, Alaska, Code § 36.60 changed the name from the "Smoking in Public Places Code" to the "Second-Hand Smoke Control Code" and eliminated the exception for smoking in retail tobacco stores. The amended ordinance broadened the definition of a "bar;" eliminated the exception to the smoking ban for "private functions;" and specifically prohibited smoking in private clubs that offer food or alcoholic beverages for sale, regardless of the number of employees.

Civil Procedure > Appeals > Summary Judgment Review > Standards of Review  
 Civil Procedure > Appeals > Standards of Review > De Novo Review

**HN4** The Supreme Court of Alaska reviews a grant of summary judgment de novo while drawing all factual inferences in favor of, and viewing the facts in the light most favorable to the non-prevailing party. A grant of summary judgment will be affirmed when there are no genuine issues of material fact, and the prevailing party was entitled to judgment as a matter of law.

Civil Procedure > Appeals > Standards of Review > De Novo Review  
 Civil Procedure > Appeals > Standards of Review > Questions of Fact & Law

**HN5** The Supreme Court of Alaska applies its independent judgment to questions of constitutional law and will adopt the rule of law that is most persuasive in light of precedent, reason, and policy.

Governments > Local Governments > Duties & Powers

**HN6** *Alaska Const. art. X, § 11* provides home rule municipalities with broad powers: A home rule borough or city may exercise all legislative powers not prohibited by law or by charter. The Alaska Constitution also requires that a liberal construction shall be given to the powers of local government units. *Alaska Const. art. X, § 1*.

Constitutional Law > ... > Case or Controversy > Constitutionality of Legislation > Inferences & Presumptions  
 Governments > Local Governments > Ordinances & Regulations

**HN7** A duly enacted law or rule, including a municipal ordinance, is presumed to be constitutional. Courts should construe enactments to avoid a finding of unconstitutionality to the extent possible.

254 P.3d 348, \*348; 2011 Alas. LEXIS 57, \*\*1

Constitutional Law > Bill of Rights > Fundamental Freedoms > Freedom of Association

Constitutional Law > ... > Fundamental Rights > Procedural Due Process > General Overview

**HN8** The right to associate is a fundamental right protected by the First Amendment and the Due Process Clause of the Fourteenth Amendment. The United States Supreme Court has recognized that individuals have a First Amendment right to associate in two situations: (1) intimate association, when individuals enter into and maintain certain intimate human relationships; and (2) expressive association, when individuals associate for the purpose of engaging in those activities protected by the First Amendment — speech, assembly, petition for the redress of grievances, and the exercise of religion.

Constitutional Law > Bill of Rights > Fundamental Freedoms > Freedom of Association

Business & Corporate Compliance > ... > Governments > Agriculture & Food > Smoking Bans

**HN9** While smoking bans restrict where a person may smoke, it is a far cry to allege that such restrictions unduly interfere with smokers' right to associate freely with whomever they choose. Nothing in the Constitution engrafts upon First Amendment protections any other collateral social interaction, whether eating, drinking, dancing, gambling, fighting, or smoking.

Constitutional Law > Bill of Rights > Fundamental Freedoms > Freedom of Association

Business & Corporate Compliance > ... > Governments > Agriculture & Food > Smoking Bans

**HN10** An ordinance prohibiting smoking in bars and restaurants, no matter how applied, cannot infringe on the right of expressive association.

Constitutional Law > Bill of Rights > Fundamental Freedoms > Freedom of Association

Business & Corporate Compliance > ... > Governments > Agriculture & Food > Smoking Bans

Governments > Local Governments > Ordinances & Regulations

**HN11** An ordinance banning smoking in private clubs does not implicate the right to intimate association under the First Amendment.

Constitutional Law > Bill of Rights > Fundamental Freedoms > Freedom of Association

**HN12** The First Amendment protects the ability to choose one's intimate associates freely, not the ability to engage in any conduct in any place so long as one is interacting with his or her intimate associates.

Constitutional Law > Substantive Due Process > Privacy > General Overview

**HN13** See *Alaska Const. art. I, § 22*.

Constitutional Law > Substantive Due Process > Privacy > General Overview

**HN14** The explicit guarantee of privacy under *Alaska Const. art. I, § 22* provides Alaskan citizens with greater protection than the federal constitution. Although the Supreme Court of Alaska has recognized a strong right to personal autonomy and privacy under the Alaska Constitution, it has also clearly stated that the rights to privacy and liberty are neither absolute nor comprehensive; their limits depend on a balance of interests that will vary depending on the importance of the rights infringed. When the state interferes with a fundamental aspect of the right to privacy, the government must demonstrate a compelling governmental interest and the absence of a less restrictive means to advance that interest. For interference with a non-fundamental aspect of privacy, the state must show a legitimate interest and a close and substantial relationship between its interest and its chosen means of advancing that interest.

Constitutional Law > Substantive Due Process > Privacy > General Overview

**HN15** The Supreme Court of Alaska has held two categories of privacy rights are fundamental: those concerning personal autonomy and those protecting a distinctive situs — the home. There is some overlap between these two areas because the right to privacy in the home is directly linked to a notion of individual autonomy.

Constitutional Law > Substantive Due Process > Privacy > General Overview

Business & Corporate Compliance > ... > Governments > Agriculture & Food > Smoking Bans

**HN16** Smoking tobacco is not a fundamental right of personal autonomy.

Constitutional Law > Bill of Rights > Fundamental Rights > General Overview

Criminal Law & Procedure > ... > Controlled Substances > Possession > General Overview

**HN17** There is no fundamental right, either under the Alaska or federal constitutions, either to possess or ingest marijuana.

Constitutional Law > Bill of Rights > Fundamental Rights > General Overview

**HN18** There is no fundamental right to possess or consume alcohol.

Constitutional Law > Bill of Rights > Fundamental Rights > General Overview

Business & Corporate Compliance > ... > Governments > Agriculture & Food > Smoking Bans

**HN19** There is not a fundamental right of personal autonomy under the Alaska Constitution to ingest tobacco.

Constitutional Law > Substantive Due Process > Privacy > General Overview

Criminal Law & Procedure > ... > Controlled Substances > Possession > General Overview

**HN20** Because of the distinctive nature and importance of the home, Alaskans have a fundamental right to privacy in their homes. This fundamental right to privacy in the home encompasses the possession and ingestion of substances such as marijuana, subject to two important limitations: First, the use or possession must be limited to a purely personal, non-commercial context in the home; and second, the right must yield when it interferes in a serious manner with the health, safety, rights and privileges of others or with the public welfare.

Constitutional Law > Substantive Due Process > Privacy > General Overview

Criminal Law & Procedure > ... > Controlled Substances > Possession > General Overview

**HN21** The right to possess and ingest certain substances encompassed by the right to privacy is strictly limited to a purely personal, non-commercial context in the home. It is the distinctive nature of an individual's home that is recognized as deserving of special protection.

Constitutional Law > Substantive Due Process > Privacy > General Overview

Governments > Police Powers

**HN22** Alaska cases do not support the argument that the government may not abridge any aspect of personal privacy unless it involves conduct posing a threat of harm to another. The Supreme Court of Alaska has rejected the argument that the state cannot regulate conduct that poses a threat of harm to others if the potential victims consent to the harm.

Constitutional Law > Substantive Due Process > Privacy > General Overview

**HN23** No one has an absolute right to do things in the privacy of his own home which will affect himself or others adversely.

Healthcare Law > Medical Treatment > End-of-Life Decisions > Assisted Suicide

**HN24** A physician who assists in a suicide undeniably causes harm to others even with the patient's consent.

**Counsel:** Paul H. Grant, Law Office of Paul H. Grant, Juneau, for Appellants.

John W. Hartie, City Attorney, Juneau, for Appellee.

Peter J. Maassen, Ingaldson, Maassen & Fitzgerald, P.C., Anchorage, for Amicus Curiae American Cancer Society Cancer Action Network.

**Judges:** Before: Carpeneti, Chief Justice, Fabe, Winfree, Christen, and Stowers, Justices.

**Opinion by:** FABE

## Opinion

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[\*350] FABE, Justice.

### I. INTRODUCTION

The City and Borough of Juneau has an ordinance that prohibits smoking in certain places. In March 2008 the City Assembly amended that ordinance to prohibit smoking in "private clubs" that offer food or alcoholic beverages for sale. The Fraternal Order of Eagles, Juneau-Douglas Aerie 4200 and three of its members challenged the ban on smoking in private clubs both on its face and as applied to their Aerie facility. The Eagles argued that the prohibition on smoking in private clubs violates both their First Amendment rights under the United States Constitution and their privacy rights under the Alaska Constitution. We conclude that the ban on smoking in private clubs is a regulation [\*2] of conduct that does not implicate the freedom of association under the First Amendment to the United States Constitution and that the ban on smoking in private clubs does not violate the Eagles' right to privacy under article I, section 22 of the Alaska Constitution. We therefore affirm the superior court's order granting the City and Borough of Juneau's motion for summary judgment.

### II. FACTS AND PROCEEDINGS

In October 2001 **HN1** the City and Borough of Juneau (the City) adopted the first version of its "Smoking in Public Places Code," City and Borough of Juneau Code (CBJ) 36.60. The City Assembly found that "in order to protect the public health it is necessary to control the amount of tobacco smoke in public places." The City Assembly also included in its findings the conclusions of a 1992 report published by the United States Environmental Protection Agency, titled *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*, that outlined the dangers of second-hand smoke, including increased risks for lung cancer and coronary heart disease among nonsmokers, increased risk of death from lung cancer and coronary heart disease, respiratory problems in children, and lower [\*3] respiratory tract infections.

Since 2001 **HN2** the City's anti-smoking ordinance has been amended several times. Originally it exempted "enclosed areas used for conferences or meetings in restaurants, service clubs, hotels, or motels while the spaces are in use for private functions" as well as "bars and bar restaurants." In 2004 it was amended to ban smoking in "bar restaurants" effective January 2, 2005, and to ban smoking in "bars" effective January 2, 2008. In 2007 it was amended to prohibit smoking and the use of smokeless tobacco products at several public and private medical facilities, including the public streets and sidewalks adjacent to those facilities.<sup>1</sup> Later that year it was also amended to prohibit smoking in bus passenger shelters.

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<sup>1</sup> The prohibitions on smokeless tobacco appear only in the provisions regulating medical facilities and are not at issue in this appeal. CBJ 36.60.010(b) (2008).

But the ban on smoking in "bars" and "bar restaurants" did not include private clubs until 2008, when a concern was raised that private clubs selling food or alcohol had an unfair business advantage. In response the City Assembly directed the City Attorney to prepare a new amendment to the [\*4] ordinance that would "clearly prohibit smoking in all places where either alcoholic beverages or food are offered for sale." *HN3* In March 2008 the City Assembly adopted the amendment to the ordinance now at issue in this appeal. This amendment made several changes to the ordinance, including changing the name from the "Smoking in Public Places Code" to the "Second-Hand Smoke Control Code" and eliminating the exception for smoking in retail tobacco stores. The amended ordinance [\*351] broadened the definition of a "bar"; eliminated the exception to the smoking ban for "private functions"; and specifically prohibited smoking in private clubs that offer food or alcoholic beverages for sale, regardless of the number of employees.<sup>2</sup>

The Fraternal Order of Eagles, Juneau-Douglas Aerie 4200 is a private nonprofit charitable corporation organized under the laws of the State of Alaska. Aerie 4200 is a local chapter of the international organization known as the Fraternal [\*5] Order of Eagles. Aerie 4200 has 262 full members, including both men and women, and 134 ladies auxiliary members. Members pay a \$15 initiation fee and \$35 in annual dues. New members must be approved by a unanimous vote of the existing members. All members must subscribe to the club rules. The club rules contain an expectation that members will treat the Aerie facility as "an extension of the members' homes" and that the members will have an expectation of privacy while in the facility.

Aerie 4200 holds a license to sell alcoholic beverages in the Aerie facility and is thus subject to Title 4 of the Alaska Statutes, titled "Alcoholic Beverages." *Alaska Statute 04.16.010* requires that establishments licensed to sell alcohol, such as the Aerie facility, be closed between 5:00 a.m. and 8:00 a.m. every day. Aerie 4200 employs four part-time bartenders, in addition to a business manager who also serves as a bartender. All five of these employees are members of Aerie 4200 and all five are smokers.<sup>3</sup>

Aerie 4200's activities are "intended to produce a financial base" [\*6] from which contributions to worthy causes are made. In 2007 Aerie 4200 contributed almost \$25,000 to various charities. Aerie 4200 has observed a decline in applications for new membership and estimate that revenues from their Aerie facility have declined 25% since the extension of the smoking ban to private clubs.

The Aerie facility is available only to members, auxiliary members, and their guests. Guests must be signed into the guestbook and sponsored by a member who is present. Each guest is permitted to visit three times before being expected to apply for membership. These requirements are occasionally relaxed in situations such as "providing assistance to people in distress or allowing prospective members to evaluate the club." The Aerie facility is also opened up to the general public four times each year for fundraising events, but no smoking is allowed in the facility during these events. Except on these public occasions, smoking is allowed by a "House Rule" adopted unanimously by Aerie 4200's membership in April 2008.

In July 2008 Aerie 4200 and three of its members (collectively, the Eagles) filed suit against the City, alleging that the portion of the Second-Hand Smoke Control [\*7] Code that bans smoking in private clubs is unconstitutional both on its face and as applied to Aerie 4200. Specifically, the Eagles claimed that the smoking ban infringed upon their freedom of association under the *First Amendment to the United States Constitution* and their privacy rights under *article I, section 22 of the Alaska Constitution*.

Both the Eagles and the City agreed that the case could be resolved as a matter of law on summary judgment. The superior court considered memoranda from both parties as well as an amicus memorandum from the American

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<sup>2</sup> For places of employment other than private clubs, the ordinance currently contains an exception to the smoking ban if there are four or fewer employees, unless the place of employment is an "enclosed public place." CBJ 36.60.030(a)(2) (2008).

<sup>3</sup> According to an affidavit from the Grand Worthy President of Aerie 4200, approximately 85% of Aerie 4200's members are smokers.

Cancer Society.<sup>4</sup> The amicus memorandum addressed the legal issues presented but also provided more recent factual information about the dangers of second-hand smoke, including various studies detailing the positive public health effects of anti-smoking ordinances. On October 14, 2009, [\*352] the superior court denied the Eagles' motion for summary judgment and granted summary judgment to the City on both the federal association claim and the state privacy claim.<sup>5</sup> The superior court entered final judgment on December 11, 2009. The Eagles appeal.

### III. STANDARD OF REVIEW

**HN4** We review a grant of summary judgment de novo while drawing "all factual inferences in favor of, and viewing the facts in the light most favorable to the non-prevailing party."<sup>6</sup> A grant of summary judgment will be affirmed "when there are no genuine issues of material fact, and the prevailing party . . . was entitled to judgment as a matter of law."<sup>7</sup> Here, the parties [\*\*9] agreed that the case could be decided on summary judgment and do not contend that there are material facts in dispute. **HN5** We apply our independent judgment to questions of constitutional law<sup>8</sup> and will "adopt the rule of law that is most persuasive in light of precedent, reason, and policy."<sup>9</sup>

**HN6** Article X, section 11 of the Alaska Constitution provides home rule municipalities with broad powers: "A home rule borough or city may exercise all legislative powers not prohibited by law or by charter." The Alaska Constitution also requires that "[a] liberal construction shall be given to the powers of local government units."<sup>10</sup> We have made clear that **HN7** "[a] duly enacted law or rule, including a municipal ordinance, is presumed to be constitutional"<sup>11</sup> and that "[c]ourts should construe enactments to avoid a finding of unconstitutionality to the extent possible."<sup>12</sup>

### IV. [\*\*10] DISCUSSION

#### A. The Ban On Smoking In Private Clubs Is A Regulation Of Conduct That Does Not Implicate The Eagles' Freedom Of Association Under The First Amendment To The United States Constitution.

**HN8** "The right to associate is a fundamental right protected by the First Amendment and the due process clause of the Fourteenth Amendment."<sup>13</sup> The United States Supreme Court has recognized that individuals have a First Amendment right to associate in two situations: (1) "intimate association," when individuals "enter into and maintain certain intimate human relationships," and (2) "expressive association," when individuals "associate for

<sup>4</sup> The superior court granted the American Cancer Society's motion for leave to participate as amicus [\*\*8] curiae on December 22, 2008. The American Cancer Society also submitted an amicus brief to this court.

<sup>5</sup> The Eagles also raised several other claims in their complaint, including that their right to association under the Alaska Constitution was violated, that the anti-smoking ordinance was preempted by a comprehensive state scheme for regulating alcohol and tobacco, and that the Juneau police have unlawfully intruded into the Aerie facility when seeking to enforce the ban on smoking. In its decision on summary judgment, the superior court requested that the Eagles file a status report indicating whether they were choosing to proceed with these remaining claims. The Eagles filed a Notice Regarding Additional Claims on November 20, 2009, advising the court that they did not intend to pursue these claims.

<sup>6</sup> Rockstad v. Erikson, 113 P.3d 1215, 1219 (Alaska 2005).

<sup>7</sup> *Id.*

<sup>8</sup> State, Dep't of Health & Soc. Servs. v. Planned Parenthood of Alaska, Inc., 28 P.3d 904, 908 (Alaska 2001).

<sup>9</sup> Alaskans for Efficient Gov't, Inc. v. State, 153 P.3d 296, 298 (Alaska 2007) (quoting Sonneman v. State, 969 P.2d 632, 636 (Alaska 1998)).

<sup>10</sup> Alaska Const. art. X, § 1.

<sup>11</sup> Treacy v. Municipality of Anchorage, 91 P.3d 252, 260 (Alaska 2004).

<sup>12</sup> *Id.*

<sup>13</sup> In re Mendel, 897 P.2d 68, 76 (Alaska 1995) (citing NAACP v. Alabama ex rel. Patterson, 357 U.S. 449, 460, 78 S. Ct. 1163, 2 L. Ed. 2d 1488 (1958)).

the purpose of engaging in those activities protected by the *First Amendment* — speech, assembly, petition for the redress of grievances, and the exercise of religion.”<sup>14</sup>

For the Eagles to prevail on their challenge to the City's ban on smoking in private clubs they "must demonstrate that the ordinance infringes on one of these two protected [\*353] areas of association."<sup>15</sup> The Eagles focus their arguments [\*11] on the "intimate association" prong.<sup>16</sup> The Eagles argue that (1) the "specific and unique characteristics" of their group and the Aerie facility, such as its small membership and restrictive policies for admitting guests and new members, make the relationships among their members the type of intimate association protected under the *First Amendment*; and (2) because approximately 85% of their members are smokers, prohibiting smoking in the Aerie facility unduly interferes with those relationships by essentially "telling members to 'go elsewhere.'"

To support this argument the Eagles point to the United States Supreme Court decision in *Roberts v. United States Jaycees*, which [\*12] held that state human rights legislation requiring the Jaycees to admit women did not abridge the male members' freedom of association.<sup>17</sup> In *Roberts*, the Court noted that "choices to enter into and maintain certain intimate human relationships must be secured against undue intrusion by the State" because such relationships are "a fundamental element of personal liberty."<sup>18</sup> In order to enjoy this protection, however, a relationship must be "highly personal."<sup>19</sup> Noting that family bonds are the clearest example of such highly personal relationships, the Court explained that relationships "distinguished by such attributes as relative smallness, a high degree of selectivity in decisions to begin and maintain the affiliation, and seclusion from others in critical aspects of the relationship" will trigger the protections of the *First Amendment*.<sup>20</sup> Therefore, "[d]etermining the limits of state authority over an individual's freedom to enter into a particular association . . . unavoidably entails a careful assessment of where that relationship's objective characteristics locate it on a spectrum from the most intimate to the most attenuated of personal attachments."<sup>21</sup> The Eagles argue that [\*13] this language requires us to first determine whether Aerie 4200 consists of the type of intimate relationships protected under the freedom to associate.

The City counters that the ordinance does not implicate the freedom of association because it "does not regulate who may associate with whom" but instead only "regulates certain *conduct* in certain places." (Emphasis in original.) The superior court also emphasized the distinction between the cases cited by the Eagles, including *Roberts*, which involve "the regulation of the *membership* of private clubs," and regulations that only pertain to "the *conduct* of members." (Emphasis in original.) As the superior court explained, cases involving the regulation of membership have a direct impact on individuals' choice of whom to associate with, while this case concerns "what people can choose to do while associating." Because of this conclusion, the superior court did not reach the question whether Aerie 4200 consists of intimate relationships possessing the "distinctive characteristics"<sup>22</sup> that would afford heightened constitutional protection.

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<sup>14</sup> *Roberts v. U.S. Jaycees*, 468 U.S. 609, 617-18, 104 S. Ct. 3244, 82 L. Ed. 2d 462 (1984).

<sup>15</sup> *Taverns For Tots, Inc. v. City of Toledo*, 341 F. Supp. 2d 844, 849 (N.D. Ohio 2004).

<sup>16</sup> While the Eagles maintain that their exercise of expressive (as opposed to intimate) association rights has been "hampered by the ordinance because members have been made to feel unwelcome and have been discouraged from attendance," they admit that "all evidence on this point is anecdotal" and that "any attempt to conclusively link the ordinance with a chilling of [the Eagles'] expressive associational rights is difficult at best."

<sup>17</sup> 468 U.S. 609, 104 S. Ct. 3244, 82 L. Ed. 2d 462 (1984).

<sup>18</sup> *Id.* at 617-18.

<sup>19</sup> *Id.* at 618.

<sup>20</sup> *Id.* at 619-20.

<sup>21</sup> *Id.* at 620.

<sup>22</sup> See *id.* at 621.

Numerous [\*\*14] state and federal courts have reached similar conclusions when considering *First Amendment* challenges to ordinances that restrict smoking. As the Washington Supreme Court noted: "Other courts have universally rejected challenges to smoking bans on the grounds they interfere with freedom of association."<sup>23</sup>

[\*354] The first group of these cases considered ordinances banning smoking in places of public accommodation such as restaurants or bars. In *NYC C.L.A.S.H., Inc. v. City of New York*, the federal district court rejected the "expressive association" argument that state and city laws prohibiting smoking in bars and restaurants interfered with the rights of smokers to associate while exercising their First Amendment rights.<sup>24</sup> In *C.L.A.S.H.*, a smokers'-rights organization [\*\*15] argued that "to bar the act of smoking in all privately owned places that are open to the public deprives smokers of a necessary venue for conducting their private social lives."<sup>25</sup> The federal district court concluded that *HN9* "[w]hile the Smoking Bans restrict where a person may smoke, it is a far cry to allege that such restrictions unduly interfere with smokers' right to associate freely with whomever they choose" and that "[n]othing in the Constitution engrafts upon First Amendment protections any other collateral social interaction, whether eating, drinking, dancing, gambling, fighting, or smoking."<sup>26</sup> As the *C.L.A.S.H.* court noted, the effect of this "association PLUS" theory would be to embellish the *First Amendment* with extra-constitutional protection for any ancillary practice adherents may seek to entwine around fundamental freedoms, as a consequence of which the government's power to regulate socially or physically harmful activities may be unduly curtailed."<sup>27</sup>

In *Taverns for Tots v. City of Toledo*, a federal district court in Ohio similarly found that *HN10* an ordinance prohibiting [\*\*16] smoking in bars and restaurants, "no matter how applied, cannot infringe on the right of expressive association."<sup>28</sup> That court quoted the opinion in *NYC C.L.A.S.H.* and further explained that the ordinance "do[es] not interfere with the ability of members [of Taverns for Tots] to get together for any lawful purpose, including the exercise of expressive activity . . . . The ordinance only prevents smoking in public places."<sup>29</sup>

Several other decisions, both at the federal and state level, have addressed the direct question whether an ordinance prohibiting smoking in private clubs unconstitutionally interferes with intimate associational rights. In *Players, Inc. v. City of New York*, the federal district court for the Southern District of New York again ruled that New York City's smoking ban was [\*\*17] constitutional, even when it banned smoking in a private club "with a long and storied past."<sup>30</sup> The court rejected the club's argument under the intimate association prong, writing:

[E]ven if Players had not waived the opportunity to present facts in support of its claim to the right of intimate association . . . the Court finds that the Club could not demonstrate that any such right was infringed by the Smoking Bans. Players does not cite to, and the Court cannot locate, any provision of the Smoking Bans or their regulatory schemes that purports to regulate members, or interaction among

<sup>23</sup> *Am. Legion Post #149 v. Washington State Dep't of Health*, 192 P.3d 306, 323 (Wash. 2008); see, e.g., *Players, Inc. v. City of New York*, 371 F. Supp. 2d 522, 544-45 (S.D.N.Y. 2005); *Taverns for Tots, Inc. v. City of Toledo*, 341 F. Supp. 2d 844, 849-53 (N.D. Ohio 2004); *City of Tucson v. Grezaffi*, 200 Ariz. 130, 23 P.3d 675, 681 (Ariz. App. 2001); *Am. Lithuanian Naturalization Club v. Board of Health of Athol*, 446 Mass. 310, 844 N.E.2d 231, 242 (Mass. 2006).

<sup>24</sup> 315 F. Supp. 2d 461, 472-76 (S.D.N.Y. 2004).

<sup>25</sup> *Id.* at 473 (citation omitted).

<sup>26</sup> *Id.* at 473-74.

<sup>27</sup> *Id.* at 474.

<sup>28</sup> 341 F. Supp. 2d at 852.

<sup>29</sup> *Id.* at 851. The federal district court in *Taverns for Tots* also rejected the plaintiff's intimate association claim, but on the basis that the purpose of Taverns for Tots was to evade the anti-smoking ordinance and that such an organization "is not the kind of intimate associational activity that either enjoys or deserves protection under the *First Amendment*." *Id.* at 850.

<sup>30</sup> 371 F. Supp. 2d 522, 525 (S.D.N.Y. 2005).

members, in any clubs covered by the statutes. Smokers' ability to join Players is completely unaffected by the Smoking Bans. At worst, interaction among members could be affected by the laws only incidentally.<sup>31</sup>

With regard to Players' expressive associational rights, the court cited *NYC C.L.A.S.H.* to again reject the club's First Amendment [\*355] argument.<sup>32</sup>

State courts have also upheld anti-smoking ordinances, even when applied to private clubs. In *American Lithuanian Naturalization Club v. Board of Health of Athol*, the Supreme Judicial [\*\*18] Court of Massachusetts upheld a challenge to a smoking ban that prohibited smoking in all enclosed areas of local private clubs.<sup>33</sup> The court rejected the intimate association argument advanced by three private clubs that their members would no longer socialize at their facilities if smoking was banned, holding that there was "no showing that enforcement of the town regulation will infringe the members' right to maintain relationships with each other."<sup>34</sup>

In the closest factual analogy to this case, *American Legion Post #149 v. Washington State Department of Health*, the Washington Supreme Court considered a challenge to a statute and ordinance prohibiting smoking in any place of employment.<sup>35</sup> Although the Washington Supreme Court considered the relevant factors and determined that American Legion Post #149 was not an intimate association because of its large membership, the court indicated that there would be no violation of the group's rights even if it had been deemed an intimate association: "Even if the Post were deemed to facilitate intimate human relationships, the ban does not directly interfere with such relationships or a person's [\*\*19] ability to join the Post. Instead, it merely prohibits smoking in the Post's building when employees are present."<sup>36</sup>

We agree with these other courts that *HN11* an ordinance banning smoking in private clubs does not implicate the right to intimate association under the *First Amendment*. Even assuming the Eagles' relationships are of the highly personal type that receive heightened constitutional protection, the ordinance does not regulate or interfere with the members' "choices to enter into and maintain"<sup>37</sup> those relationships. The ordinance does not regulate the membership of Aerie 4200 or who may associate with whom; it only regulates the conduct of members in certain places.

The Eagles argue that the ordinance unduly interferes with "how, when, and where club members choose to partake of their intimate associations." The Eagles essentially urge us (1) to adopt the "association plus" theory in spite of the uniform decisions of other courts and (2) to hold that "the right of intimate association includes a right to engage in any lawful activities the participants may choose." But *HN12* the *First Amendment* [\*\*20] protects the ability to choose one's intimate associates freely, not the ability to engage in any conduct in any place so long as one is interacting with his or her intimate associates. As Judge Pallenberg persuasively explained:

One could not seriously argue that application of other penal laws, such as the laws against drug possession, theft, sexual contact with minors, or prostitution, to the conduct of members within the confines of a private club infringes upon the members' freedom of association. All such laws regulate the actions of the members, not their choice of the people with whom they associate. In terms of its impact on freedom of association, regulation of smoking as an activity is not different in kind from regulation of these

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<sup>31</sup> *Id.* at 545.

<sup>32</sup> *Id.* at 545-46.

<sup>33</sup> 446 Mass. 310, 844 N.E.2d 231 (Mass. 2006).

<sup>34</sup> *Id.* at 242.

<sup>35</sup> 164 Wn.2d 570, 192 P.3d 306 (Wash. 2008).

<sup>36</sup> *Id.* at 323.

<sup>37</sup> *Roberts v. U.S. Jaycees*, 468 U.S. 609, 617, 104 S. Ct. 3244, 82 L. Ed. 2d 462 (1984).

other activities. . . . People are free to join the Eagles or not; they are just prohibited from smoking inside the club.

Because the smoking ban regulates only conduct, we hold that it does not implicate the freedom of association protected by the *First Amendment to the United States Constitution*. We do not reach the question whether Aerie 4200 consists of the highly personal relationships that receive heightened protection under the right to intimate [\*\*21] association.

[\*356] **B. The Ban On Smoking In Private Clubs Does Not Violate The Eagles' Right To Privacy Under *Article I, Section 22 Of The Alaska Constitution*.**

*HN13 Article I, section 22 of the Alaska Constitution* states that "the right of the people to privacy is recognized and shall not be infringed." We have held that *HN14* this explicit guarantee of privacy provides Alaskan citizens with greater protection than the federal constitution.<sup>38</sup> But although we have recognized a strong right to personal autonomy and privacy under the Alaska Constitution, we have also clearly stated that "the rights to privacy and liberty are neither absolute nor comprehensive . . . their limits depend on a balance of interests" that will vary depending on the importance of the rights infringed.<sup>39</sup> When the state interferes with a fundamental aspect of the right to privacy, the government must demonstrate a "compelling governmental interest and the absence of a less restrictive means to advance that interest."<sup>40</sup> For interference with a non-fundamental aspect of privacy, "the state must show a legitimate interest and a close and substantial relationship between its interest and its chosen means of advancing that interest." [\*\*22]<sup>41</sup> Thus, to determine whether the Eagles' right to privacy has been violated, we must first evaluate the nature of the Eagles' rights, if any, that are abridged by the ban on smoking in private clubs, and then consider whether that abridgement is justified.<sup>42</sup>

*HN15* We have held that two categories of privacy rights are fundamental: those concerning personal autonomy and those protecting a distinctive situs — the home.<sup>43</sup> We have recognized that there is some overlap between these two areas because "the right to privacy in the home is directly linked to a notion of individual autonomy."<sup>44</sup> In this case, the Eagles ask us to hold that there is a fundamental privacy right "to ingest a legal substance — tobacco — in a private club facility." The Eagles argue that the Aerie facility serves as an extension of the members' homes and that the ingestion of tobacco within the [\*\*23] Aerie facility should be protected under our decision in *Ravin v. State*, which held that the right to privacy protects the possession by adults of small quantities of marijuana in the home for personal use.<sup>45</sup> The City counters that smoking is not a fundamental right of personal autonomy and that the Aerie facility should not receive the same special protection as the home. The superior court found that the regulation of smoking does not "implicate the fundamental right of personal autonomy" and that the Aerie facility is not the equivalent of a home.

**1. Smoking tobacco is not a fundamental right of personal autonomy.**

We agree with the superior court that, standing alone, *HN16* smoking tobacco is not a fundamental right of personal autonomy. This conclusion flows directly from our previous cases. Our decision in *Ravin* was firmly rooted in the constitutional protection for privacy in the home, and specifically held that *HN17* "there is no fundamental

<sup>38</sup> *Woods & Rohde, Inc. v. State, Dep't of Labor*, 565 P.2d 138, 150 (Alaska 1977).

<sup>39</sup> *Sampson v. State*, 31 P.3d 88, 91 (Alaska 2001).

<sup>40</sup> *Id.*; see *State v. Erickson*, 574 P.2d 1, 11-12 (Alaska 1978); *Ravin v. State*, 537 P.2d 494, 497-98 (Alaska 1975).

<sup>41</sup> *Sampson*, 31 P.3d at 91.

<sup>42</sup> See *Harrison v. State*, 687 P.2d 332, 337 (Alaska App. 1984).

<sup>43</sup> See *Sampson*, 31 P.3d at 93-94 (describing the holdings in several personal autonomy cases and in *Ravin*).

<sup>44</sup> *Id.* at 94 (citing *Ravin*, 537 P.2d at 503-04).

<sup>45</sup> 537 P.2d at 504.

right, either under the Alaska or federal constitutions, either to possess or ingest [\*\*24] marijuana." <sup>46</sup> Similarly, in *State v. Erickson*, we rejected the argument that the right to privacy protected the use of cocaine within the home and held that "the defendants' particular rights to privacy and autonomy involved cannot be read so as to make the ingestion, sale or [\*\*357] possession of cocaine a fundamental right." <sup>47</sup>

Aerie 4200 argues that these holdings in *Ravin* and *Erickson* are distinguishable because tobacco, unlike marijuana or cocaine, is a legal substance. The court of appeals addressed a similar argument in *Harrison v. State*, which upheld the constitutionality of Alaska's local option law, and concluded that **HN18** "there is no fundamental right to possess or consume alcohol." <sup>48</sup> We agree with this conclusion of the court of appeals in *Harrison* and conclude that it applies here as well. **HN19** There is not a fundamental right of personal autonomy under the Alaska Constitution to ingest tobacco.

## 2. The ban on smoking in private clubs does not violate the fundamental right to privacy in the home.

In *Ravin*, however, we recognized that we could not dispose of *Ravin*'s privacy claims simply by holding that there [\*\*25] was no constitutional right to possess or smoke marijuana. <sup>49</sup> We thus conducted "a more detailed examination of the right to privacy and the relevancy of where the right is exercised." <sup>50</sup> This examination led us to conclude that **HN20** because of the distinctive nature and importance of the home, Alaskans have a fundamental "right to privacy in their homes." <sup>51</sup> We concluded that this fundamental right to privacy in the home encompassed "the possession and ingestion of substances such as marijuana," subject to two important limitations: First, the use or possession must be limited to "a purely personal, non-commercial context in the home"; and second, the right "must yield when it interferes in a serious manner with the health, safety, rights and privileges of others or with the public welfare." <sup>52</sup>

The Eagles urge us to extend this reasoning to the ingestion of tobacco within their Aerie facility. We decline to do so because the Aerie facility is not a home and because smoking tobacco within the Aerie facility does not occur in "a purely personal, non-commercial context."

Our decision in *Ravin* does not invalidate the ordinance at issue here because [\*\*26] a private club is not a home. The Eagles argue that "*Ravin* does not set up a dichotomy between 'homes' and 'everywhere else' " but instead recognizes a spectrum of location-based privacy rights, with possession or ingestion within a private home at one end. <sup>53</sup> Our conclusion in *Ravin*, however, made clear that **HN21** the right to possess and ingest certain substances encompassed by the right to privacy was strictly limited to a "purely personal, non-commercial context *in the home*." <sup>54</sup> It is the "distinctive nature" of an individual's home that we have recognized as deserving of special protection. <sup>55</sup>

For this reason, the Eagles' arguments that the Aerie facility is "an extension" of the members' homes and "has many attributes of a home" are not persuasive. A home is a private residence. Private clubs, including the Aerie

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<sup>46</sup> *Id.* at 502.

<sup>47</sup> 574 P.2d 1, 12 (Alaska 1978).

<sup>48</sup> 687 P.2d 332, 338 (Alaska App. 1984).

<sup>49</sup> *Ravin*, 537 P.2d at 502.

<sup>50</sup> *Id.*

<sup>51</sup> *Id.* at 504.

<sup>52</sup> *Id.*

<sup>53</sup> See *Ravin*, 537 P.2d at 502-03.

<sup>54</sup> *Id.* at 504 (emphasis added).

<sup>55</sup> *Id.* at 503.

facility, are not homes. The Aerie facility is owned by a non-profit corporation organized under the laws of Alaska; it sells liquor and holds a liquor license that subjects it to the State of Alaska's comprehensive regulations for the sale of alcohol; and it employs five people, including a designated [\*\*27] business manager.

Furthermore, when members of Aerie 4200 smoke tobacco in the Aerie facility, they are not ingesting that substance in a "purely personal, non-commercial context."<sup>56</sup> Aerie 4200 could choose not to sell alcohol in the Aerie facility. But Aerie 4200 functions as both a social club and a commercial enterprise that conducts activities "intended to produce a financial base." The fact that Aerie 4200 uses its revenue to support charitable [\*\*358] causes does not change the commercial nature of its Aerie facility. Because the Aerie facility is not a home and operates in a commercial context, it does not fall under the privacy protections established in *Ravin*.

**3. The ban on smoking in private clubs bears a close and substantial relationship to the legitimate state purpose of protecting the public health.**

Because the ban on smoking in private clubs does not implicate a fundamental aspect of the right to privacy, we do not evaluate the ban under strict scrutiny. Instead, we apply the less stringent test of whether the City has demonstrated a legitimate interest in protecting the public health and welfare and a close and substantial relationship between that interest and the [\*\*28] ban on smoking in private clubs.<sup>57</sup>

The superior court found that "[t]he toll of death and injury caused by consumption of tobacco is not subject to serious dispute," and the amicus brief filed by the American Cancer Society discusses in detail the "harmful effects of exposure to second-hand smoke and the beneficial impact of smoke-free legislation." The Eagles do not dispute these health claims and concede that there is a legitimate state interest in enacting "a broad smoking ban in places where the public may be found, such as bars and restaurants."

The Eagles argue, however, that there is not a close and substantial relationship between protecting the public from the harmful effects of tobacco smoke and banning smoking in their private club. The Eagles emphasize that their club rule allowing smoking was adopted by a unanimous vote; that 85% of Aerie 4200's members, including all five of its employees, are smokers; and that the Aerie facility does not allow smoking when it opens to the general public a few times each year. From the perspective of the Eagles, this demonstrates that the ban on smoking in private clubs has no relationship [\*\*29] to the welfare of the "general public," let alone a close and substantial one, but instead applies only to "private and consenting adults." The Eagles essentially claim that they have the right to engage in conduct which harms only themselves.

We rejected a similar argument in *Sampson v. State*, which held that the right to privacy does not include a right to physician-assisted suicide.<sup>58</sup> In *Sampson*, we explained that *HN22* our cases do not support the argument "that the government may not abridge any aspect of personal privacy unless it involves conduct posing a threat of harm to another."<sup>59</sup> Our decision in *Sampson* also rejected the argument that the state cannot regulate conduct that poses a threat of harm to others if the potential victims consent to the harm.<sup>60</sup> The Supreme Judicial Court of Massachusetts rejected a similar argument in *American Lithuanian Naturalization Club v. Board of Health of Athol*,

<sup>56</sup> *Id.* at 504.

<sup>57</sup> See *Sampson v. State*, 31 P.3d 88, 91 (Alaska 2001).

<sup>58</sup> 31 P.3d 88.

<sup>59</sup> *Id.* at 95; see also *State v. Erickson*, 574 P.2d 1, 21 (1978) [\*\*30] ("*HN23* No one has an absolute right to do things in the privacy of his own home which will affect *himself* or others adversely.") (emphasis added).

<sup>60</sup> *Sampson*, 31 P.3d at 95 (finding that *HN24* "a physician who assists in a suicide undeniably causes harm to others" even with the patient's consent).

holding that there was a rational connection between the state's interest in public health and the ban on smoking in private clubs, particularly given the exposure of non-smoking club members to second-hand smoke.<sup>61</sup>

All of Aerie 4200's members, including the smokers and the non-smokers, are harmed by exposure to second-hand smoke in the enclosed space of the Aerie facility. Their consent does not change the analysis of the City's interest in protecting their health. As the superior court observed:

It is not enough to say that the persons exposed to second-hand smoke have chosen to be in the Eagles Aerie Home. If it were, then no anti-smoking ordinance could be upheld as long as other persons present were there voluntarily. If a workplace, or a bar, or a restaurant is posted as [\*359] a smoking zone, then everyone present has chosen to be there knowing there is smoke.

The City has a legitimate interest in protecting the public, non-smokers and smokers alike, from the well-established dangers of second-hand tobacco smoke. Aerie 4200 has elected to obtain a state-regulated liquor license [\*\*31] and sell alcoholic beverages in its Aerie facility. Establishments that offer alcoholic beverages for sale are likely to be places where members of the public frequently gather. Therefore, the City's decision to ban smoking in any enclosed place that offers food or alcohol for sale, including private clubs, bears a close and substantial relationship to the public health.

#### **V. CONCLUSION**

For the foregoing reasons, we AFFIRM the superior court's order granting summary judgment to the City and Borough of Juneau.

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<sup>61</sup> See 446 Mass. 310, 844 N.E.2d 231, 238-39 (Mass. 2006).



# The Health and Economic Benefits of Making Alaska Smoke-Free

**Making all Alaska workplaces, restaurants, and bars 100% smoke-free would prevent about 1,900 youth from becoming smokers, and within five years, save an estimated \$5.04 million in lung cancer, heart attack, and stroke costs.**

**According to the Surgeon General, the science is clear: There is no safe level of exposure to second-hand smoke.** Just as tobacco smoke causes lung cancer, heart attacks, strokes, and other preventable diseases in smokers, secondhand smoke causes disease and death in non-smokers, as well. Smoke-free laws not only decrease exposure to tobacco smoke and the resulting disease and death, they also decrease the number of youth who start smoking, increase the number of smokers who quit, and cut health care costs for smokers and non-smokers alike.

Alaska is one of only 15 states that currently has no law prohibiting smoking in all workplaces or restaurants or bars. Making all workplaces, restaurants, and bars in the state 100% smoke-free is the **only** way to protect all Alaska residents from the dangers of secondhand smoke.

## SAVING LIVES

Making all Alaska workplaces, restaurants, and bars 100% smoke-free would be expected to provide the following reductions in the number of smokers and the number of deaths caused by smoking or exposure to tobacco smoke:\*

Adults Who Would Quit Smoking	Youth Who Would Never Start Smoking	Reduction in Smoking-Related Deaths	Reduction in Deaths of Non-Smokers
4,500	1,900	2,800	300

## SAVING MONEY

In addition to saving lives, making Alaska smoke-free would cut health care costs for both smokers and non-smokers. Over five years, a comprehensive smoke-free law covering all Alaska workplaces, restaurants, and bars would be expected to produce the following economic benefits:\*

Lung Cancer Treatment Savings	Heart Attack and Stroke Treatment Savings	State's Medicaid Program Savings	Smoking-Related Pregnancy Treatment Savings
\$1.35M	\$3.69M	\$520,000	\$980,000

\*Estimates are based on analysis performed on behalf of the American Cancer Society Cancer Action Network. Totals in charts have been rounded



## Alaska Smoke-Free Indoor Workplaces

**Only half of Alaska's population is covered by a current smoke-free workplace law. A statewide smoke-free indoor workplaces law would update existing Alaska state law to provide comprehensive protection from secondhand smoke for employees and customers in all enclosed workplaces and places of public accommodation.**

**This law would prohibit smoking in all indoor workplaces, businesses and public spaces. It would require that those who choose to smoke "take it outside" in order to better protect the health and safety of all workers, patrons and visitors from the disease and premature death caused by secondhand smoke. No one should have to choose between their health and a good job. Due to limitations in local authority, it is time for a statewide law.**

**A statewide law would create a standard with regard to secondhand smoke that puts all businesses and workplaces across Alaska on a level playing field.**

**Everyone has the right to breathe smoke-free air.**

### Smoke-Free Laws Save Lives

There is conclusive scientific evidence that secondhand smoke causes heart disease.

- Studies of at least 10 communities published in peer-reviewed journals have proven a decrease in heart attack incidence after the implementation of smoke-free laws.<sup>2</sup>
- Helena, MT enjoyed a 40% decrease in heart attacks among Helena residents while smoke-free laws were in place.<sup>2</sup>
- Heart attack hospitalizations fell by 41% in Pueblo, CO after a comprehensive smoke-free law was enacted. This decrease was sustained over a three-year-period.<sup>2</sup>

### Anchorage Experiences

#### Smoke-Free Laws Benefit Businesses

Using employment data on Anchorage bars from 2001 to 2010, a report commissioned by the Alaska Department of Health and Social Services Tobacco Prevention and Control Program (2011) found:

Bar employment within the Municipality was 10% higher than it would have been if the smoke-free law had not been implemented.

The Institute of Social and Economic Research interviewed representatives of 50 full-service restaurants and bars in Anchorage on their perceptions of the impact of the smoke free indoor ordinance.

- 76% of restaurant and bars reported very positive or somewhat positive feedback from customers and employees.
- A total of 96% (48/50) of surveyed full-service restaurant and bar representatives identified at least one benefit from the passage of the smoke-free ordinances in Anchorage.
- Most respondents identified a cleaner environment, increased customer and employee satisfaction, improved employee health, more new customers, and lower maintenance costs as benefits of a smoke-free Anchorage.



## Alaskans strongly support smoke-free indoor workplaces.

- 4 in 5 Alaska adults support smoke-free workplaces.<sup>4</sup>
- Support for smoke-free indoor workplaces includes a strong majority of current smokers (59%) as well as former smokers (80%).<sup>4</sup>
- Alaskan support for smoke-free indoor workplaces is high throughout all regions of the state, ranging from 75% to 84%.<sup>4</sup>



### The Need for Legislation

- Secondhand smoke is a major cause of needless, preventable death, causing or worsening a wide range of adverse health effects, including lung cancer, heart disease, respiratory infections, and asthma. Most significantly, it has been shown that even brief exposure can be dangerous.
- Non-smokers exposed to secondhand smoke increase their risk of heart disease and lung cancer by up to 30 percent.
- The U.S. Surgeon General's Report, "The Health Consequences of Involuntary Exposure to Tobacco Smoke," (2006) concluded that there is no risk free level of exposure to secondhand smoke; ventilation and other air cleaning technologies cannot eliminate exposure of nonsmokers to secondhand smoke; and that comprehensive smoke-free workplace policies are the only effective way to eliminate secondhand smoke exposure in the workplace<sup>1</sup>
- Published research in communities before and after adoption of comprehensive smoke-free workplace laws has documented a significant decline in heart disease-related hospital admissions.

### Sources:

1. U.S. Department of Health and Human Services, *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*, HHS, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.
2. Institute of Medicine (IOM), *Secondhand Smoke Exposure and Cardiovascular Effects: Making Sense of the Evidence*, Washington, DC: The National Academies Press, 2009
3. Institute of Social and Economic Research, University of Alaska Anchorage, *The Impact of Anchorage's 2000 and 2007 Smoke-free Policies on Select Restaurants and Bars*, 2014.
4. Alaska Tobacco Facts, Update 2013 [http://dhss.alaska.gov/dph/Chronic/Documents/Tobacco/PDF/2013\\_alaska\\_tobacco\\_facts.pdf](http://dhss.alaska.gov/dph/Chronic/Documents/Tobacco/PDF/2013_alaska_tobacco_facts.pdf)

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Green = Comprehensive smoke-free workplaces ordinances in place




Yellow = Sitka has an exemption for bars in stand-alone buildings, but all other workplaces are covered

Orange = Boroughs without the authority to pass smoke-free workplace ordinances on the local level due to lack of health powers

Gray = Legal analysis not conducted, but likely in the same category as the orange-shaded boroughs with inadequate health powers to enact smoke-free

<u>Borough</u>	<u>Borough seat</u>	<u>Class</u>	<u>Population</u>	<u>Area</u>	<u>Map</u>
<u>Aleutians East Borough</u>	<u>Sand Point</u>	Second	3,141	6,988 sq mi (18,099 km <sup>2</sup> )	
<u>Anchorage</u>	<i>(Consolidated city-borough)</i>	Unified Home Rule	291,826	1,697 sq mi (4,395 km <sup>2</sup> )	
<u>Bristol Bay Borough</u>	<u>Naknek</u>	Second	997	505 sq mi (1,308 km <sup>2</sup> )	
<u>Denali Borough</u>	<u>Healy</u>	Home Rule	1,826	12,750 sq mi (33,022 km <sup>2</sup> )	
<u>Fairbanks North Star Borough</u>	<u>Fairbanks</u>	Second	97,581	7,366 sq mi (19,078 km <sup>2</sup> )	
<u>Haines Borough</u>	<i>(Consolidated city-borough)</i>	Home Rule	2,508	2,344 sq mi (6,071 km <sup>2</sup> )	
<u>Juneau</u>	<i>(Consolidated city-borough)</i>	Unified Home Rule	31,275	2,716 sq mi (7,034 km <sup>2</sup> )	

<u>Borough</u>	<u>Borough seat</u>	<u>Class</u>	<u>Population</u>	<u>Area</u>	<u>Map</u>
<u>Kenai Peninsula Borough</u>	<u>Soldotna</u>	Second	55,400	16,013 sq mi (41,473 km <sup>2</sup> )	
<u>Ketchikan Gateway Borough</u>	<u>Ketchikan</u>	Second	13,477	4,840 sq mi (12,536 km <sup>2</sup> )	
<u>Kodiak Island Borough</u>	<u>Kodiak</u>	Second	13,592	6,560 sq mi (16,990 km <sup>2</sup> )	
<u>Lake and Peninsula Borough</u>	<u>King Salmon</u>	Home Rule	1,631	23,782 sq mi (61,595 km <sup>2</sup> )	
<u>Matanuska-Susitna Borough</u>	<u>Palmer</u>	Second	88,995	24,682 sq mi (63,926 km <sup>2</sup> )	
<u>North Slope Borough</u>	<u>Barrow</u>	Home Rule	9,430	88,817 sq mi (230,035 km <sup>2</sup> )	
<u>Northwest Arctic Borough</u>	<u>Kotzebue</u>	Home Rule	7,523	35,898 sq mi (92,975 km <sup>2</sup> )	
<u>Sitka</u>	<i>(Consolidated city-borough)</i>	Unified Home Rule	8,881	2,874 sq mi (7,444 km <sup>2</sup> )	
<u>Skagway</u>	-	First	968	452 sq mi (1,171 km <sup>2</sup> )	

<u>Borough</u>	<u>Borough seat</u>	<u>Class</u>	<u>Population</u>	<u>Area</u>	<u>Map</u>
<u>Unorganized Borough</u>	-	-	78,149	323,440 sq mi (837,706 km <sup>2</sup> )	
<u>Wrangell</u>	<i>(Consolidated city-borough)</i>	Unified Home Rule	2,369	2,570 sq mi (6,656 km <sup>2</sup> )	
<u>Yakutat</u>	<i>(Consolidated city-borough)</i>	Home Rule	662	7,650 sq mi (19,813 km <sup>2</sup> )	

# ALASKA SMOKE-FREE WORKPLACES

EVERYONE HAS THE RIGHT TO BREATHE SMOKE-FREE AIR.



## Resolutions of Support for a Statewide Smoke-Free Workplace Law

This is a list of well over 800 Alaska businesses and organizations who have signed a resolution in support of a statewide smoke-free indoor workplace law.

They come from businesses and organizations large and small, representing nearly every industry in Alaska. They cross all community and cultural lines. Broken out regionally, you will find they are also representative of every corner of The Great Land. From north to south, east to west, it's time for Alaska to have smoke-free workplaces!

### Statewide Supporters

- AARP
- Agnew::Beck
- Akeela
- Alaska Academy of Family Physicians
- Alaska AFL-CIO
- Alaska Association of Naturopathic Physicians
- Alaska Asthma Coalition
- Alaska Commercial Company
- Alaska Community Foundation
- Alaska Dental Association
- Alaska Dental Society
- Alaska Federation of Natives
- Alaska Native Health Board
- Alaska Native Tribal Health Consortium
- Alaska Native Veterans Association
- Alaska Nurse Practitioner Association
- Alaska Nurses Association
- Alaska Primary Care Association
- Alaska Public Health Association
- Alaska Sports Hall of Fame
- Alaska State Dental Hygienists Association
- Alaska State Hospital and Nursing Home Association (ASHNHA)
- Alaska State Medical Association
- Alaska Teen Media Institute
- Alaska Tobacco Control Alliance
- Alaska's Center for Resource Families
- American Academy of Pediatrics - Alaska Chapter
- American Cancer Society
- American Diabetes Association Alaska
- American Heart Association
- American Lung Association
- Arctic Office Products
- Asthma and Allergy Foundation of America - Alaska Chapter
- BDO USA, LLP
- Big Brothers Big Sisters of Alaska
- CIRI Alaska Tourism Corporation
- Doyon Limited
- Evangelical Lutheran Church of America - Alaska Synod
- Grant Aviation, Inc.
- Hilcorp Alaska
- March of Dimes
- Mountain Pacific Quality Health - Alaska
- Premera Blue Cross Blue Shield of Alaska
- Ravn Alaska
- RurAL CAP
- RurAL CAP Head Start Child Development & Policy Council
- The Alaska Club
- Tobacco Free Rainbow Alliance
- Volunteers of America - Alaska Chapter
- YWCA Alaska

## Anchorage Supporters

- 8 Star Alaska Adventures
- Advanced Physical Therapy of Alaska
- Alaska Advanced Dentistry
- Alaska Bagel Restaurant
- Alaska Enterprise Solutions, Inc.
- Alaska Fresh Seafood & The Bubbly Mermaid
- Alaska Lens Rental
- Alex Hotel & Suites
- Allergy, Asthma, and Immunology Center of Alaska
- Anchor Inn - Whittier
- Anchorage Medical Society
- Anchorage Neighborhood Health Center
- Anchorage Pediatric Group
- Anchorage School District
- Anchorage Senior Activity Center
- Anchorage Youth Court
- Anchorage Youth Development Coalition
- Arctic Management, LLC
- Arctic Roadrunner
- Batteries Plus Bulbs - Anchorage
- Bear Paw Bar & Grill
- Bernie's Pharmacy, Inc.
- Catfish Haven Restaurant
- Chilkoot Charlie's
- Club Paris
- Diagnostic Health Anchorage
- Downtown Grill
- Fell, William P., DDS
- Flattop Pizza & Pool
- Fromagio's Artisan Cheese
- Gallo's Mexican Restaurant
- Generous Health
- George, Rev. Carol
- Graceworks Alaska
- Grandview Baptist Church
- Helander, Ken
- Heritage Birth Center
- Hotel Captain Cook
- Humpy's Great Alaskan Alehouse
- Identity Inc.
- JC Rentals
- KACN TV
- Kanady Chiropractic Center
- Kay's Family Restaurant
- Lawn Wizard Lawn Care
- Living Water Baptist Church
- Lone Star Steak House
- Medical Park Family Care
- Michelsohn & Daughter Construction, Inc.
- Middle Way Cafe
- Midnight Sun Brewing Company
- Mike's Maniacs Slow Pitch Softball
- Mitchell Chiropractic
- Moose's Tooth Pub & Pizzeria
- Mountain View Family Dentistry
- Natural Pantry
- Northwest Strategies
- Obeidi Limited
- Peanut Farm Bar and Grill
- Pediatric OT Services, LLC
- Pil's Deli
- Porcaro Communications
- Pro-Care Home Medical
- Providence Pulmonary Rehab
- Puffin Inn
- Pulmonary Associates
- Repairs Unlimited, LLC
- Sacks Cafe
- Safe & Sound Inc.
- Seagalley Restaurant
- Seward's Folly Bar & Grill
- Side Street Espresso
- Smoke-Free Anchorage Coalition
- Snow City Cafe
- Snow Wizard Snow Plowing
- Sonia's Magic Hairstyles
- Spenard Roadhouse
- Starting Point, Inc.
- Sub Zero Bistro & Microlounge
- Terra Bella, Inc.
- The Builders Collaborative
- The Flying Dutchman Pastry
- Tobacco Free Rainbow Alliance
- UAA Department of Health Sciences
- UAA Physical Education Department
- UAA School of Social Work
- Uncle Joe's Pizzeria
- Walsh Sheppard
- Weaver Brothers
- Yak & Yeti Himalayan Restaurant

## **Gulf Coast Supporters**

- A Balanced Approach - Kodiak
- A Smiling Bear Bed & Breakfast - Kodiak
- Alaska One Realty LLC - Kodiak
- Alaskan Real Estate
- Arc N Spark Welding - Kodiak
- AT&T - Kodiak
- Bases Loaded
- Beachside Rental House - Kodiak
- Brother Francis Shelter - Kodiak
- Center Star Training, LLC - Kodiak
- Coastal Creation - Kodiak
- Connecting Ties, Inc. - Kodiak
- Daniels Jewelry - Kodiak
- E-Clips Haircare Studio - Cordova
- Emily's Alterations & Design - Kodiak
- Family Chiropractic - Kodiak
- Galley Gourmet - Kodiak
- Henry's Great Alaskan Restaurant, Inc. - Kodiak
- Humane Society of Kodiak
- Images Hair and Tanning
- Island Air Service- Kodiak
- Kendra's Kreations - Kodiak
- Kings Diner Inc.
- KMK Rentals - Cordova
- Kodiak Area Native Association
- Kodiak Bed & Breakfast
- Kodiak Island Ambulatory Care Clinic, Inc. (KIACC Inc.)
- Kodiak Island Borough School District
- Kodiak Lawn Care
- Kodiak Motors, Inc.
- Kodiak Printmasters
- Kodiak Teen Court
- Kodiak Women's Resource & Crisis Center
- M & S Enterprises
- Mill Bay Coffee & Pastries - Kodiak
- Nordic Dancer Bed & Breakfast - Kodiak
- Norman's Fine Gifts & Jewelry - Kodiak
- Northwoods Massage - Kodiak
- Old Harbor Native Corporation - Kodiak
- Orca Book and Sound
- Orion's Mountain Sports - Kodiak
- Ouzinkie Native Corporation
- Pearson Cove Bed & Breakfast - Kodiak
- Providence Kodiak Island Counseling Center
- Re/Max of Kodiak
- Sparrows - Kodiak
- St Denny Surveying - Kodiak
- St. James the Fisherman Episcopal Church - Kodiak
- St. Mary's Catholic Parish - Kodiak
- Stringbeadz by Susan - Kodiak
- Sutliff's Hardware - Kodiak
- Sweeney Insurance - Kodiak
- TC Enterprises, LLC - Kodiak
- Threshold Services, Inc. - Kodiak
- Ton of Fun - Kodiak
- Total Interior Furnishings - Kodiak
- Wells Fargo Bank - Kodiak
- Wild Iris Salon

## Interior Supporters

- A&K Electric, LLC - Fairbanks
- Access Alaska
- Aframe Gas Station
- Airport Equipment Rentals
- Alaska Acupuncture and Herb
- Alaska Fur Gallery
- Alaska Homegrown - Russell Bickness
- Alaska Universal Productions, Inc
- Alpine Chiropractic and Massage
- American Village of Alaska Inc. / Caribou Hotel - Glennallen
- Arctic Burner Service - Fairbanks
- Arctic Chiropractic
- Arctic Fire Hot Sauce-Fairbanks
- Arctic Lights Candle Company-Fairbanks
- Arts Venture - Fairbanks
- Baan O Yeel Kon Corporation - Rampart
- Bergeron, Daniel M., DDS
- Bettisworth North Architects
- Black Diamond Resort Company
- Bonnie's Baskets & Things-Fairbanks
- Brewster's
- Canyon Gift Company
- Castlerock Self Storage
- Cheesh'na Tribal Council
- Co-Op Diner
- Coghill's Store - Nenana
- Concierge Medicine of Alaska - Fairbanks
- Copper River Native Association
- Copper Valley Historical Society
- Cross Road Medical Center - Glennallen
- Denali Adventure Tours
- Denali ATV Adventures
- Denali Borough
- Denali Chamber of Commerce
- Denali Dome Home B&B
- Denali Gift Company
- Denali Glacier Scoops & Gifts
- Denali Jeep Excursions
- Denali Lakeview Inn
- Denali Mountain Works
- Denali Outdoor Center
- Denali Princess Wilderness Lodge
- Denali Raft Adventure
- Denali Taxi Shuttle - Healy
- do TERRA Essential Oils
- Grassroots Guitar Co.
- Greater Fairbanks Board of Realtors
- Hair Salon - Glennallen
- Hatcher Photography - Fairbanks
- Healy Heights Family Cabins
- Heartstream Yoga
- Hub of Alaska - Glennallen
- I ACT FREE Coalition
- If Only... a fine store
- Information Insight
- Interior Alaska Center for Non-Violent Living - Fairbanks
- Interior Community Health Center
- Interior Excavation & Trucking - Fairbanks
- Jazzercise Fairbanks
- Jeff King Inc. / Husky Homestead
- Jolly Roger, Inc.
- Karibu Gallery & Gifts
- Kristi's Quisine
- Lake Louis Lodge
- Last Frontier Denali Photography
- Lavelle's Bistro
- Lemongrass Thai Cuisine - Fairbanks
- McAfee Chiropractic-Fairbanks
- McCarthy Ventures LLC
- McKinley Gifts
- Miles of Alaska - Nenana
- Minto Development Corporation
- Monderosa Bar & Grill
- Motel Nord Haven - Healy
- Mount Pleasant Baptist Church - Fairbanks
- Nenana A Frame
- Nenana City Public Schools
- Nenana Native Village
- Nenana Taekwondo
- Nenana Tortella Council on Aging, Inc.
- Nenana Urban Farm
- Northern Alaska Environmental Center - Fairbanks
- Northern Alaska Tour Company - Fairbanks
- Northern Business Systems
- Northstar Youth Court - Fairbanks
- Perspicacity Contract Services
- Pichette Counseling Services - Fairbanks
- Positive Changes Coaching and Training - Fairbanks

- Donna's House of Petals & Gifts
- Duncan Designs - Fairbanks
- Eagle Tribal Buildings
- Elegant Memories
- Elem Robotics
- Enchanted Forest - Fairbanks
- Evans Industries
- Fairbanks Choral Society
- Fairbanks Clinic Insurance
- Fairbanks Daily News-Miner, Inc.
- Fairbanks Economic Development Corporation
- Fairbanks Family Dental Care
- Fairbanks Forrest and Farm
- Fairbanks Memorial Hospital
- Fairbanks Native Association
- Fairbanks Potters Guild
- Fairbanks Youth Soccer Association
- Finish Line - Fairbanks
- First Fruits Consulting -Fairbanks
- Fisher's Fuel Inc
- Food Factory-Fairbanks
- Frontier Farms
- Furred and Feathered Friends 4-H Club - Nenana
- GCI Fairbanks
- Geraldo's - Fairbanks
- Glenallen Chiropractic Clinic
- Glenn Transport LLC - Glennallen
- Granma's Quilt Shop
- Railbelt Mental Health and Addictions
- Raven Retirement Community of Fairbanks
- Resource Center for Parents and Children - Fairbanks
- Robotics Think Bots
- Ronn Murray Photography
- Rose's Cafe
- Santa's Senior Center
- Shear Heaven Salon
- Sipping Streams Tea Company- Fairbanks
- Stanley Nissan
- Sue Cole Creations-Fairbanks
- Tanana Chiefs Conference
- Tartan Tundra Music
- The Himalayan
- Tosina Lodge
- Trax Outdoor Center - Fairbanks
- Tri-Valley Fire Department
- Turning Point Counseling Services - Fairbanks
- Valley Chapel
- Walsh, Kelliher & Sharp, CPAs, APC
- Warbelow's Air Ventures
- West Valley Vision Center, Inc. - Fairbanks
- White Palms Art Gallery
- Wolfrun Restaurant-Fairbanks
- Workshop Acres - Nenana
- World Eskimo Olympics
- Wright Air Service

## **Kenai Peninsula Supporters**

- 811 Auk Apartments 6 Plex
- A Flyin Skein LLC - Seward
- A Home Away From Home - Homer
- ABC Pregnancy Care Center
- AK Exports, LLC
- Alaska Advanced Care Chiropractic
- Alaska Christian College
- Alaska Fjord Charters - Seward
- Alaska Lanes
- Alaska Maxi Storage
- Alaska West Air - Nikiski
- Alaskan Cottages - Homer
- Alex Russell Pediatrics
- Aloha Bed & Breakfast - Homer
- Anderson Tug & Barge - Seward
- Angels Rest on Resurrection Bay LLC - Seward
- Aurora Health & Nutrition
- Aurora Taxes & Accounting - Anchor Point
- Bayan Asian Market
- Beach House Rentals - Seward
- Bear Creek Winery & Lodging - Homer
- Beemun's Variety
- Behrens, Dr. Bobbie J.
- Big 'G' Electric & Engineering Inc
- Blazy Construction Inc.
- Box Canyon Cabins - Seward
- Boys and Girls Club of the Kenai Peninsula
- Bridges Community Resource Network
- Brown and Hawkins / Sweet Darlings
- Bunnell Street Arts Center - Homer
- Captain Coffee Roasting Company - Homer
- Central Peninsula Health Foundation
- Central Peninsula Hospital
- Chez Moi Boutique
- Chilson Computer Services
- Chugachmuit
- Clinic of Chiropractic Health - Homer
- Community Action Coalition
- Cook Inlet Council on Alcohol & Drug Addiction (CICADA)
- Cooper Landing Chamber of Commerce
- Cosmic Kitchen - Homer
- Linda Loris B&B Seward
- Lisa Turner, MS
- Love, Inc of the Kenai Peninsula
- Lucky 13 Fashions
- McDonald's Restaurants of the Kenai Peninsula
- Michael P Moriarty, PC Seward
- Moose Pass Chamber of Commerce & Visitors Bureau
- Mykel's Restaurant & Soldotna Inn
- Nancy Field Insurance
- Nature's Way Rehab Services, LLC
- Neal, Gwen M., Attorney at Law - Homer
- Ninilchik Family Dentistry
- Odie's Bead-It
- Oral Surgery Associates Inc.
- Orange Poppy
- Parker and Associates
- Paul Turner, PhD
- Peninsula Accounting Services
- Peninsula Allergy & Asthma Center
- Peninsula Community Health Services
- Peninsula Dental Center
- Peninsula Health Center Inc
- Peninsula Internal Medicine, P.C.
- Peninsula Medical Center
- Peninsula Pediatric Dentistry
- Peninsula Power Sports
- Peninsula Radiation Oncology Center
- Peninsula Radio Group
- Phormation Chiropractic Inc
- Pioneers of Alaska Igloos #9 - Seward
- Pizza Boys Inc
- Preventative Dental Services PC - Homer
- Professional Escrow Services., Inc
- Qutekcak Native Tribe
- Rangeview Bed & Breakfast - Homer
- Renewal Skincare Studio
- Resurrection Bay Lions Club - Seward
- Rez Fitness
- Schiff RV & Boats
- Sea Otter Community Center - Seldovia
- Seaview Cafe & Bar

- Cottler, Dr. Harry - Soldotna
- Delta Leasing LLC
- Diamond M Ranch Resort, LLC
- Donna's Country & Victorian Gifts
- Family Medical Clinic
- Fine Thyme Cafe
- First American Title - Seward
- Foster Construction
- Frontier Community Services
- Good Karma Inn - Homer
- Havenwood Guest House - Seward
- Health North Family Medicine
- Homer Bookstore
- Homer Head Start
- Horace Mann Insurance Co. - Brenda Johnson
- Hospice of the Central Peninsula
- Hutchings Auto Group
- Integrated Robotics Imaging Systems
- Jammin Java
- Jeannie Annette Enterprises
- Jo Doug Inn - Seward
- Kaladi Brothers Coffee
- Kenai Civil Air Patrol
- Kenai Peninsula School District
- Kenai Peninsula United Way
- Kenai Peninsula Urology LLC
- Kenai Peninsula Youth Facility
- Kenai Public Health Center
- Kenai River Drifters Lodge
- Kenai Spine
- Kenai Sports & Family Chiropractic
- Kenai Watershed Forum
- Kenda's Studio
- King's Treasures Christian Bookstore
- KPO Rehabilitation and Sports Medicine
- Kruzof Fisheries LLC - Seward
- Kuskokwim Wilderness Adventures
- Le Barn Appetit Inn & Creperie - Seward
- Legends Dental
- Seaview Community Services
- Semaka Charters - Seward
- Seward Chamber of Commerce, CVB
- Seward Rotary Club
- Seward Vacation Properties
- Seward Wellness for All Coalition
- Silhouette Shingles, LLC - Seward
- Snack Shack
- Snowder Chiropractic
- Soldotna Chiropractic & Therapeutic Massage
- Soldotna Dental Arts
- Soldotna Dental Clinic
- Soldotna Mini Storage
- Soldotna Y Chevron
- Spenard Builders Supply - Kenai
- Stan's Barber Shop
- Starbird Studios - Seward
- Sunny Cove Sea Kayaking - Seward
- SVT Health and Wellness
- Sweeny's Clothing
- Tammy's Flowers and Gifts
- The Daily Buzz
- The Duck Inn
- The Fitness Place
- The Medicenter - Kenai
- The UPS Store # 2752
- Thorn's Showcase Lounge - Seward
- Tina's Hair Pros
- Trustees Services of Alaska Inc
- Turnagain Heights., LLC
- Ulmer's Drug & Hardware
- Upstream Family Medicine
- Veronica's
- VIDA!
- Weaver Brothers
- West Chiropractic Clinic
- White Crane Academy
- Wilderness Way
- Winter's Grace Guidance Center

## Mat-Su Valley Supporters

- Above Alaska Aviation, LLC - Talkeetna
- Alaska Center for Dentistry
- Alaska Center for Resource Families
- Alaska Family Services
- Alaska Midnite Scents - Wasilla
- Alaska Premier Real Estate LLC
- Alaska Sunset View Resort
- Alaska's Mat-Su Bed & Breakfast Association
- All I Saw Cookware - Wasilla
- Allison Little Steel Art
- Alpha Counseling and Education Services
- Animal Food Warehouse
- Architects Alaska
- Area 51 Hobby and Games, LLC - Wasilla
- Arkose Brewery - Palmer
- Aurora Dora - Talkeetna
- Beadberry Patch - Talkeetna
- Big Brothers and Sisters of Alaska - Mat-Su
- Board Media Group LLC
- C'est La Vie Affordable Fashions - Wasilla
- CAP Solutions
- Capstone Medical Group
- CCS Early Learning
- Chickaloon Village Traditional Council
- Choose Food Wisely LLC
- Christensen Chiropractic
- Church of the Covenant
- Classified Employees' Association of Matanuska-Susitna Borough School District
- Colony Inn
- Country Financial
- Country Legends 100.9 FM - Wasilla
- Crumb LLC
- Denali Images Art Gallery - Talkeetna
- DermaGlow Alaska - Wasilla
- Ehman Outdoors
- Envision Matsu
- Family Promise Mat-Su
- Fancy Lou Boutique - Wasilla
- Fence Emporium of Alaska Inc.
- Fireside Books
- First Presbyterian Church of Wasilla
- Flagship Properties LLC
- Flying Squirrel Bakery Cafe - Talkeetna
- Forget Me Knot Hair Salon - Wasilla
- Geneva Woods Pharmacy
- Mat-Su Education Association (MSEA)
- Mat-Su Health and Social Service Board
- Mat-Su Heath Foundation
- Mat-Su Integrative Medicine, LLC - Wasilla
- Mat-Su Midwifery and Family Health
- Mat-Su Regional Medical Center
- Mat-Su Regional Medical Center Cardiac Rehab
- Mat-Su Senior Services
- Mimi's Closet - Wasilla
- Mocha Me Crazy
- Moonstone Farm
- Murphy & Associates Engineering
- My House/The Gathering Place
- New Horizons Telecom LLC - Palmer
- Non Essentials LLC
- North Star Animal Hospital
- Northern Susitna Institute - Talkeetna
- Now Health, LLC - Palmer
- OnMission Church
- Palmer Pentecostal Church
- Percussion in the Valley - Palmer
- Pia's Custom Picture Framing - Wasilla
- Pioneer Peak Dental
- Pippel Insurance
- PJ's Crafty Corner - Wasilla
- RMG Real Estate
- Rock-On Climbing, LLC
- Rose Ridge Vacation Center
- Sea Star Strategies LLC
- Set-Free Alaska
- Sheep Mountain Lodge
- Spenard Builders Supply - Wasilla
- Stage 2 Studios, LLC
- Steve's Toyo Stove Repair
- Summit Worship Center - Wasilla
- Sunshine Community Health Center
- Susitna Mechanical
- Tailgaters Sports Bar & Grill LLC
- Take Shape for Life
- Talkeetna Roadhouse
- The Alaska Boathouse Restaurant
- The Alcove Salon - Wasilla
- The Algone Center
- The Baby Store Toys and More - Wasilla
- The Beader's Paradise - Wasilla
- The Dancing Leaf Gallery - Talkeetna

- Greater Palmer Chamber of Commerce
- Hatcher Pass Bed & Breakfast
- Hitchcock Piano Studio - Palmer
- Howdie Inc. - Wasilla
- JC Brandt Insurance & Financial Services, Inc. - Wasilla
- Jensi Automotive
- Just Imagine Toys
- Knik Tribal Council
- Latitude 62 Lodge - Talkeetna
- Learning Essentials
- Locals Pub & Pizzeria
- Lodestar Family Eye Care, PC - Palmer
- Lucas Chiropractic Clinic
- Mat-Su Borough School Board
- Mat-Su Coalition on Housing & Homelessness
- Mat-Su Conservation Services
- Mat-Su Convention & Visitor Bureau
- The Grand View Inn & Suites
- The Grill @ The Grand View
- The Metro Cafe - Wasilla
- Thrive Mat-Su
- Unaccompanied Youth Task Force
- United Way of Alaska
- Urban Roots Hair Studio
- Valley Christian Conference
- Valley Orthodontics
- Valley Rotaract
- Village Arts & Crafts Gift Shop - Talkeetna
- Wasilla Chiropractic Clinic
- Wasilla Chrysler Dodge Jeep Ram
- Wasilla Physical Therapy
- Wasilla Presbyterian Church
- Wild Iris Family Medicine & Maternity Care - Wasilla
- Windbreak Café/Trouthouse Lounge

## **Northern Alaska Supporters**

- AC Q-Stop - Barrow
- AC Value Center Barrow
- Airport Pizza
- Alaska Airlines - Barrow
- Alaska Technical Center - Kotzebue
- Alaska Technical Center-Kotzebue
- Arctic Cab - Barrow
- Arctic Chiropractic - Kotzebue
- Arctic Grocery Inc. - Barrow
- Arctic Kitchen and Apartments - Barrow
- Arctic Pizza - Barrow
- Barrow Kitchen
- Bearing Song & Gifts
- Bering Air-Kotzebue
- Bering Air, Inc. - Nome
- City of Kiana
- Era Alaska Kotzebue
- FBX Aviation Services - Kotzebue
- Illisagvik College - Barrow
- Inupiat Cleaners - Barrow
- Inupiat Cleaners - Barrow
- KBRW FM - Barrow
- KNOM Radio Mission, Inc.
- Leeza's Beauty Salon - Barrow
- Maruskiya's of Nome Alaska Native Art
- McIntyre Optometry Services, Inc. - Barrow
- Native Village of Brevig Mission
- Native Village of Kotzebue
- Native Village of Koyuk IRA Council
- Native Village of St Michael
- Noorvik Native Community
- Northwest Arctic Borough
- Northwest Inupiat Housing Authority
- Northwest Inupiat Housing Authority - Kotzebue
- Northwestern Aviation - Kotzebue
- Osaka Asian Cuisine - Barrow
- OTZ Telecommunications, Inc. - Kotzebue
- Ravn Alaska - Kotzebue
- Ravn Alaska / Hageland Aviation - Barrow
- Ryan Air
- Ryan Air - Kotzebue
- Sam & Lee's Restaurant - Barrow
- Samuel Simmonds Memorial Hospital - Barrow
- Savoonga Native Store
- Sitmasialk Native Corporation
- The Fur Shop - Barrow
- UAF Chukchi Campus - Kotzebue
- Village of Nome IRA Council
- Village of Solomon
- Water Service - Barrow
- Wells Fargo Bank - Barrow
- Wolf Creek Sales & Service - Kotzebue

## **Southeast Alaska Supporters**

- 1st City 1st Aid - Ketchikan
- Adventure Karts - Ketchikan
- Aimee Shull Photography
- Alaska Arts Southeast
- Alaska Electric Light & Power Company - Juneau
- Alaska Galore Tours - Juneau
- Alaska Grafix - Juneau
- Alaska Island Community Services
- Alaska Laundry and Cleaners - Juneau
- Alaska Native Brotherhood & Alaska Native Sisterhood Grand Camp - Ketchikan
- Alaska Native Girls - Metakatia
- Alaska Native Sisterhood Camp #16
- Alaska Rainforest Sanctuary
- Alaska Robotics
- Aquatic Alaska Adventures
- Armstrong - Keta, Inc. - Baranof Island
- At the White House B& B - Skagway
- Aurora Chiropractic Center
- AWARE Inc-Juneau
- BCD Construction, Inc. - Juneau
- Bev's Flowers and Gifts
- Braveheart Volunteers
- Breakaway Adventures - Wrangell
- Brenner's Fine Clothing and Gifts
- Catholic Charities
- Changing Tides LLC - Juneau
- Chilkoot Indian Association
- City Center Chiropractic - Juneau
- Creek Street Historic Properties
- Creekside Family Health Clinic - Ketchikan
- Diamond C Cafe - Wrangell
- Diversified Investments & Insurance - Ketchikan
- Easeful Being - Juneau
- Fairweather Gallery - Juneau
- Foggy Mountain Shop - Juneau
- Frontier Shipping & Copyworks - Ketchikan
- Garnet School
- Gateway Center for Human Services/Akeela
- Glacier Auto Parts
- McDonald's of Southeast Alaska
- National Council on Alcohol and Drug Dependence
- Native Craft Co-Op - Juneau
- Natural Healthcare - Juneau
- North Star Television Network
- North to Alaska
- Northern Light United Church - Juneau
- Northwind Architects - Juneau
- Organized Village of Kasaan
- Paper Pirates-Sanctuary
- Peace Health Ketchikan Medical Center
- Petersburg Indian Association
- Petersburg Mental Health
- Petersburg School District
- Radio Shack Ketchikan
- Rainbird Community Broadcast Corp. - Ketchikan
- Rainbow Foods - Juneau
- Rainforest Crafts - Ketchikan
- Rainforest Naturopathic Medicine
- Red Onion Saloon
- Rob Cohen Music - Juneau
- Robertson's Gallery & Custom Framing
- Rodfather's Broiler Restaurant
- Seaside Yarns, LLC - Juneau
- Shattuck & Grummett Insurance
- Sitka Dental Clinic
- Sitka Tribe of Alaska
- Sitkans Against Family Violence
- Skagway Brewing Company
- Southeast Alaska Guidance Association (SAGA)
- Southeast Alaska Regional Health Consortium (SEARHC)
- Southeast Furniture Warehouse
- Southeast Medical Clinic
- Starboard Frames and Gifts - Ketchikan
- State Farm Insurance - Ketchikan
- Stereo North Inc.
- Stikine Drug - Wrangell
- Studio Max - Ketchikan

- Goldbelt Inc - Juneau
- Haines Brewing Company, Inc.
- Healing Touch Alaska - Juneau
- Hearthside Books & Toys - Juneau
- Heritage Coffee
- Heritage Northwest Inc. - Juneau
- Hi-Tide Construction - Juneau
- Hoonah Indian Association
- Hoonah Liquor Store
- Icy Straits Lodge
- Ike's Fuel
- Inn at Creek Street - Ketchikan
- Inside Passage Midwifery & Natural Medicine
- Island Pharmacy - Ketchikan
- Jerry's Books and Games - Ketchikan
- Juneau Arts & Humanities Council
- Juneau Family Health and Birth Center
- Juneau's Imagination Station
- Ketchikan Public Health
- Ketchikan Ready Mix Inc.
- Ketchikan Wellness Coalition
- Ketchikan Youth Court
- Knockout Productions - Juneau
- Lifetime Eye Care
- Love in Action - Ketchikan
- Sylvan Enterprises
- Taku Lanes - Juneau
- Taquan Air - Ketchikan
- The Fox Hole - Ketchikan
- The Office Bar - Hoonah
- The Wild Oven Bakehouse - Juneau
- Tideland Tackle Marine - Hoonah
- Tongass Federal Credit Union - Ketchikan
- Tongass Mobile Estates - Hoonah
- Trickster Company - Juneau
- TSS, Inc. - Ketchikan
- University of Alaska - Southeast Campus
- Urban Eskimo - Juneau
- Videl Entertainment
- Wanzer, Terral - Ketchikan
- Weaver, Douglas, DDS - Juneau
- Wellspring Inc Integrative Medicine
- Wellwood Center Bed & Breakfast - Copper Center
- Willow Mountain Lodge
- Wostmann & Associates Inc
- Wrangell Early Childhood Education Coalition
- Wrangell Public Health Center
- Wrangell School District
- Yoga Union Inc.

## **Southwest Alaska Supporters**

- 4th and Broadway Boutique
- Alakanuk Tribal Council
- Aleut Community of St. Paul
- Aleutian Pribilof Island Association
- Arctic Belle Boutique - Bethel
- ArXotica Inc
- Association of Village Council Presidents (AVCP)
- Bethel Alaska PC
- Bethel Car Rental
- Bethel Chamber of Commerce
- Bethel Community Services Foundation
- Bethel Family Clinic
- Bethel Friends of Canines
- Bethel Native Corporation
- Bethel Public Health Center
- Bristol Alliance Fuels, LLC - Dillingham
- Bristol Bay Area Health Corporation
- Bristol Express - Dillingham
- Bristol Express Fuels, Inc. - Dillingham
- Bristol Express Gas Station & C-Store - Dillingham
- Brown Slough Bed & Breakfast - Bethel
- City of Dillingham Senior Center
- Donlin Gold
- Herron, Bob
- Iqurmiut Traditional Council - Russian Mission
- Kuskokwim Commercial Supply - Bethel
- Kuskokwim Wilderness Adventures - Bethel
- Let's Get Growing
- Lime Village Traditional Council - McGrath
- Lucy's Cache - Bethel
- Marilyn's Hair Salon
- Native Village of Bill Moore's Slough
- Native Village of Eek
- Native Village of Emmonak
- Native Village of Kwinhagak
- Native Village of Marshall
- Native Village of Nunam Iqua
- Native Village of Tununak
- Northern Lights Essential Oil Products
- Ohogamiut Traditional Council - Marshall
- Orutsaramiut Native Council - Bethel
- Portraits by Pipa
- Pribilof School District
- Sammy's Market - Bethel
- Sattler Strategies - Bethel
- Snack Shack - Bethel
- Stan's Barber Shop - Bethel
- The Delta Discovery, Inc. - Bethel
- Toksook Bay Head Start
- Unalaska City School Board
- Unalaskans Against Sexual Assault and Family Violence
- USA Pools - Bethel
- Volcarce Law Office - Bethel
- Yukon-Kuskokwim Health Corporation
- Yupiit of Andreafski Tribe - St. Marys
- Yupiit Piciryarait Cultural Center - Bethel
- Yupiit Piciryarait Museum - Bethel
- Yuut Elitnaurviat - The People's Learning Center, Inc. - Bethel

# Alaskan Opinions Regarding Statewide Smoke-Free Workplace Law

survey conducted for:



by:



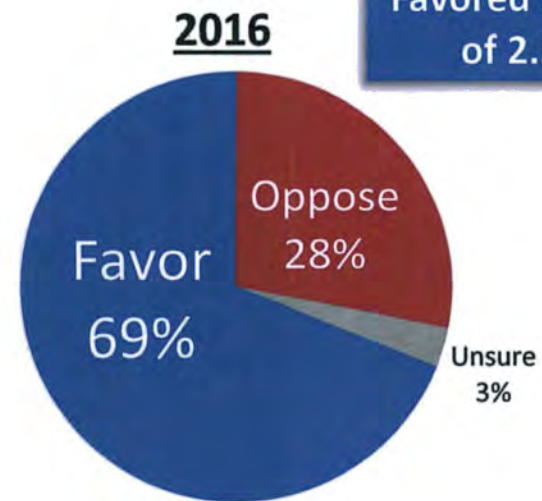
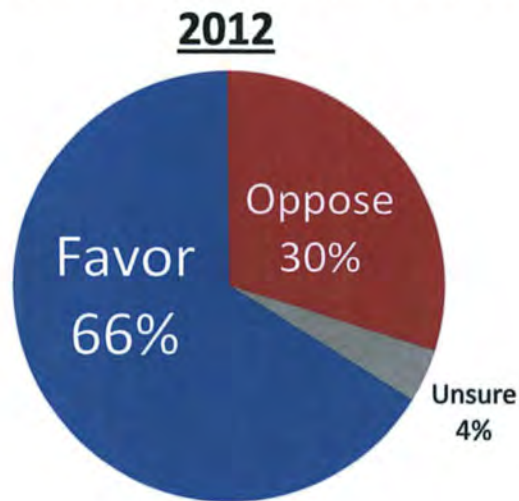
# Methodology

- Fielded: December 30, 2015 to January 7, 2016
- Sample:
  - Statewide
  - n=800 Registered Alaska Voters
  - Interview quotas by location, age and gender
- Interview Method:
  - 75% landline, 25% cell phone
  - Live interviewers
- Weighting:
  - Based on most recent Alaska voter statistics
  - Highly representative sample in terms of age, gender, education, income, political registration and geographic location
- Margin of Error:
  - $\pm 3.46\%$  at 95% confidence interval for total sample

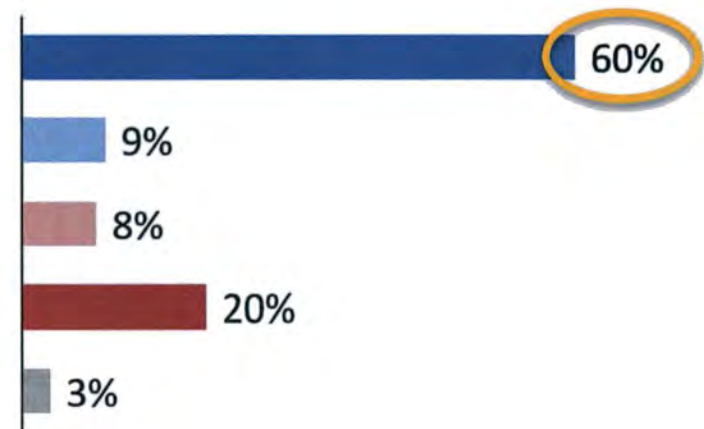
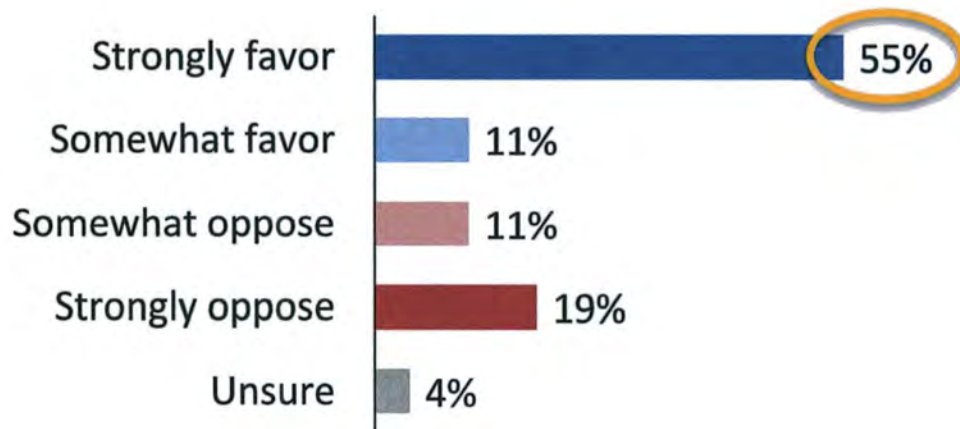
# Detailed Findings

# Statewide Smoke-Free Workplace Law

As you may know, there is currently no statewide law in Alaska that prohibits smoking indoors in public places, only local ordinances in some parts of the state. Would you favor or oppose a statewide law in Alaska that would prohibit smoking indoors in public places, including workplaces, public buildings, offices, restaurants and bars?

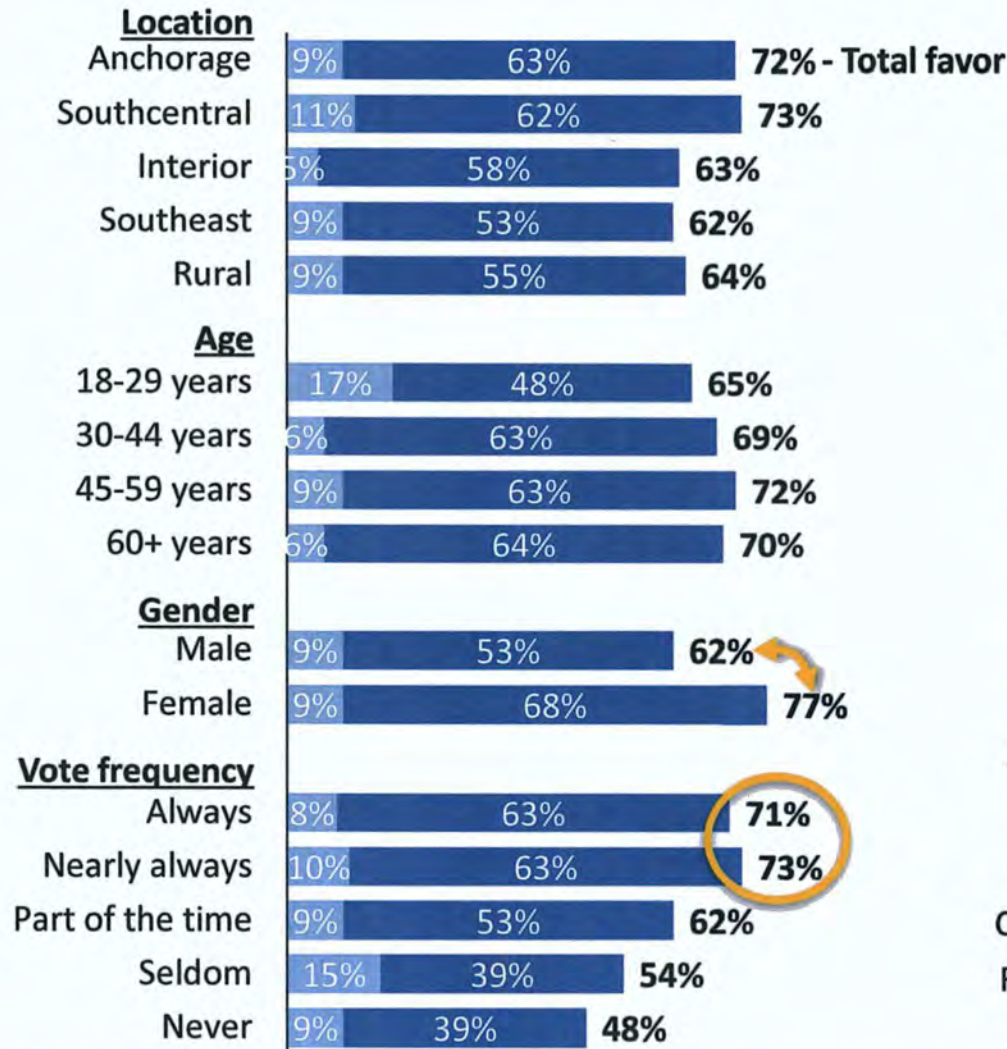


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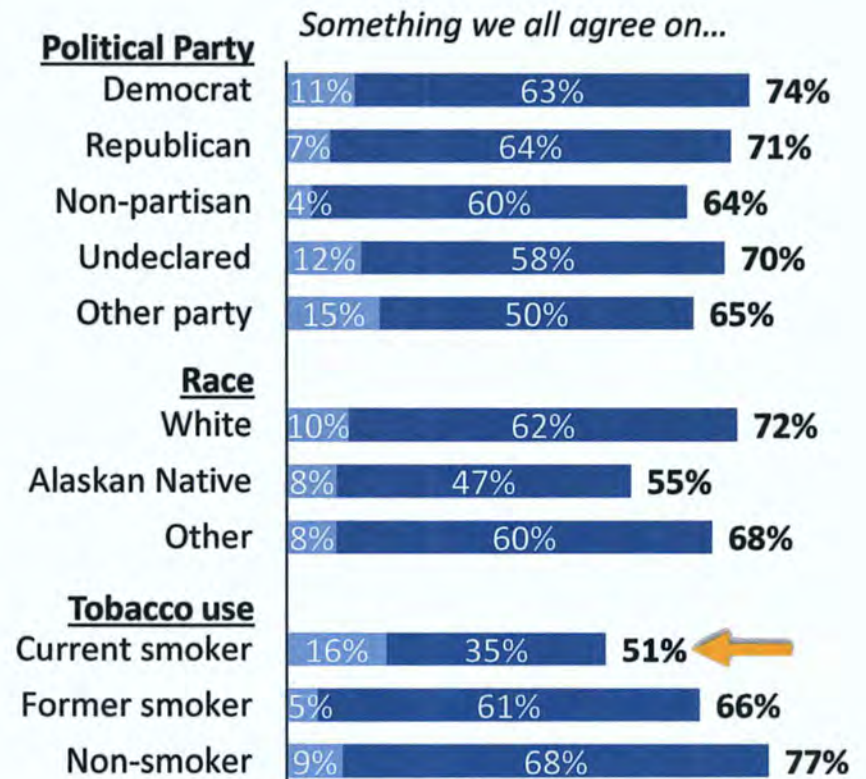


# Statewide Smoke-Free Law, cont'd

■ Somewhat favor ■ Strongly favor



There is broad support for a statewide smoke-free workplace law, and in most demographic subgroups the majority of Alaskans “strongly favor” it.

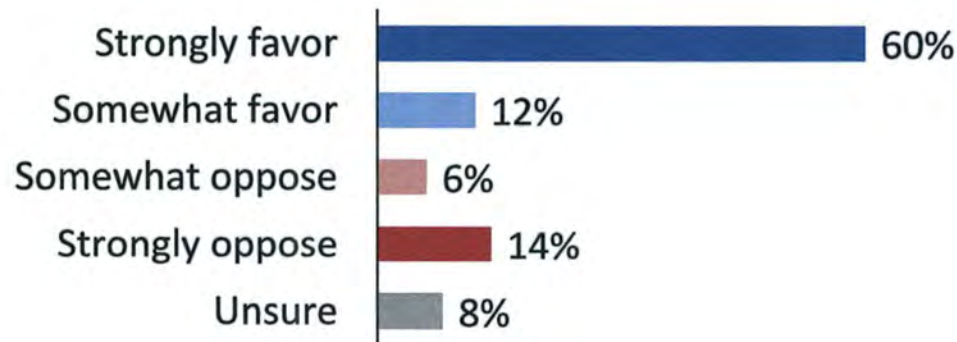
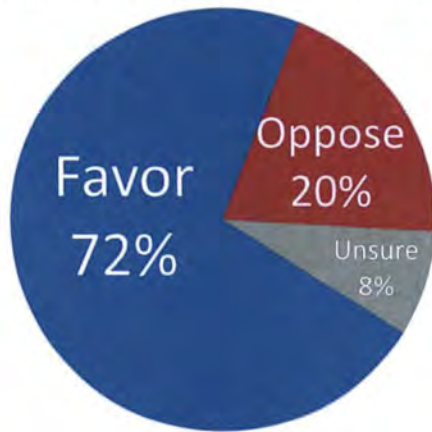


*Something we all agree on...*

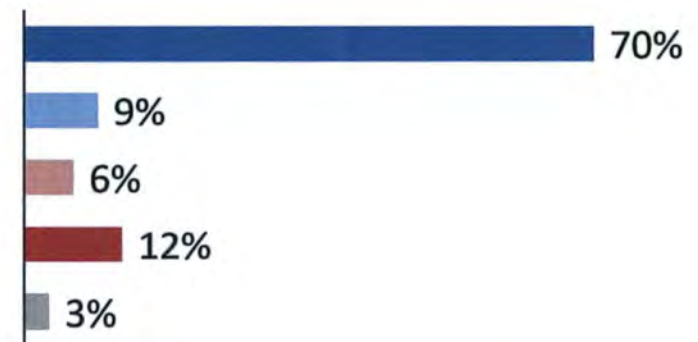
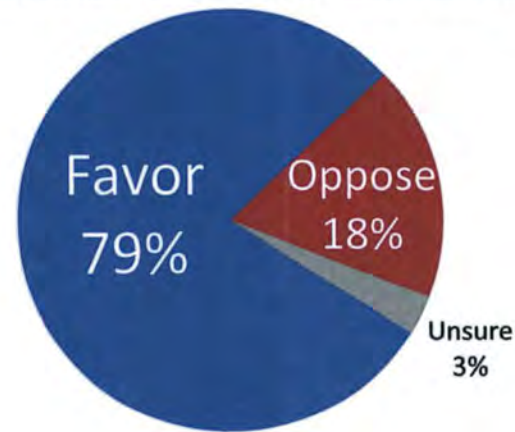
# E-Cigarettes and Marijuana in Smoke-Free Law?

*If Alaska passes a law prohibiting smoking indoors in public places, including workplaces, public buildings, offices, restaurants and bars, would you favor or oppose including electronic cigarettes, or e-cigarettes, in that law, so that the use of electronic cigarettes would not be allowed inside places that are smoke-free? ...What about the smoking of marijuana?*

## E-Cigarettes in Smoke-Free Law

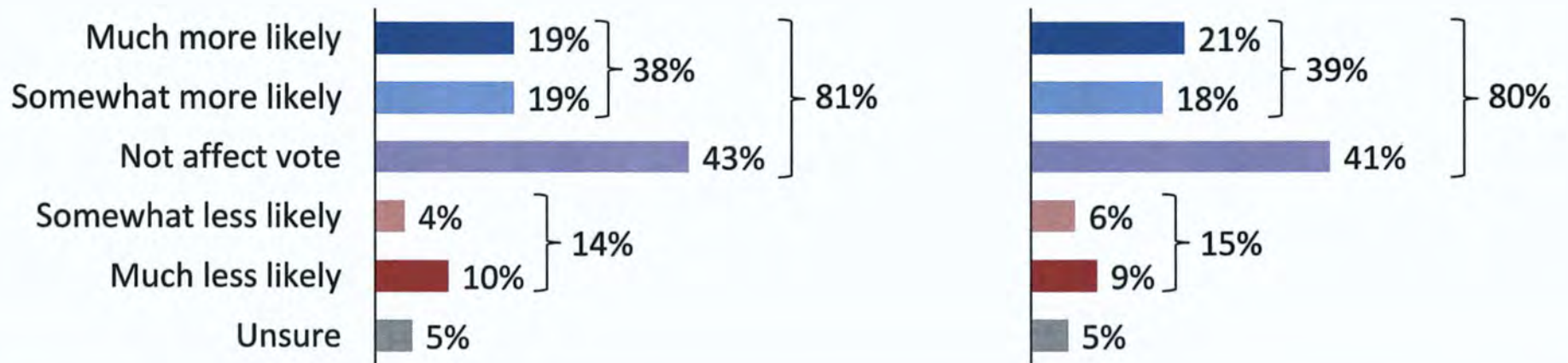
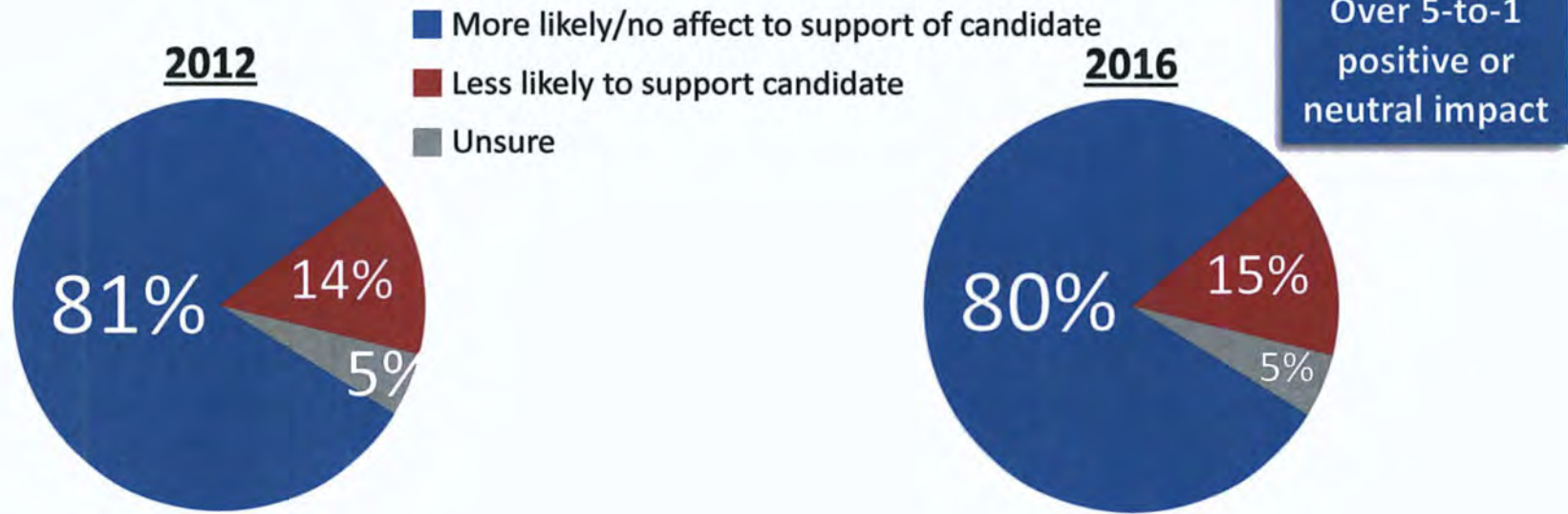


## Marijuana in Smoke-Free Law



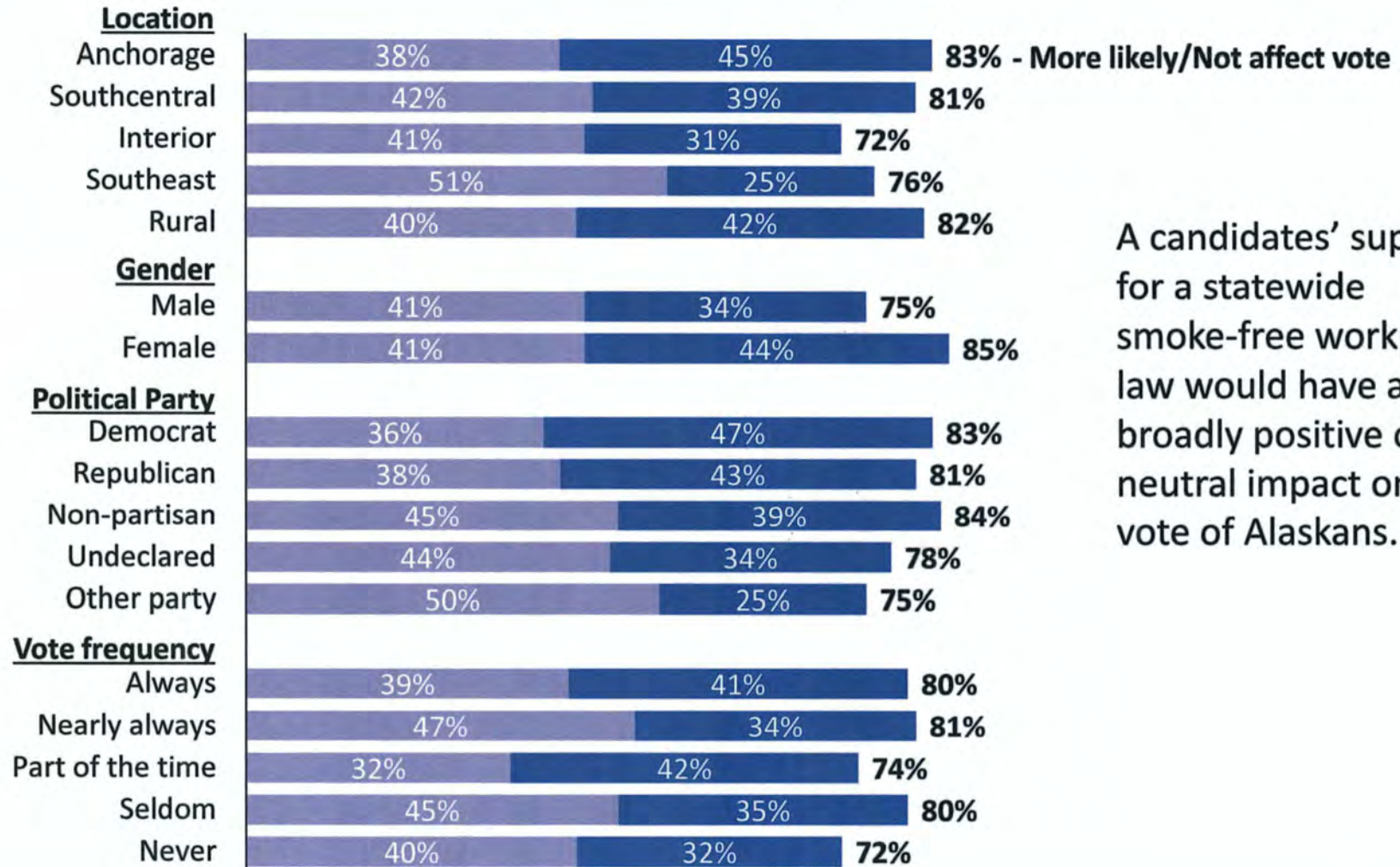
# Smoke-free issue affect your vote?

Would you be *more likely or less likely to vote for a candidate who supports a law that would prohibit smoking indoors in public places and workplaces in Alaska, or would their opinion on this issue not affect your vote?*



# Smoke-free issue affect your vote? cont'd

■ Would not affect vote ■ More likely to support

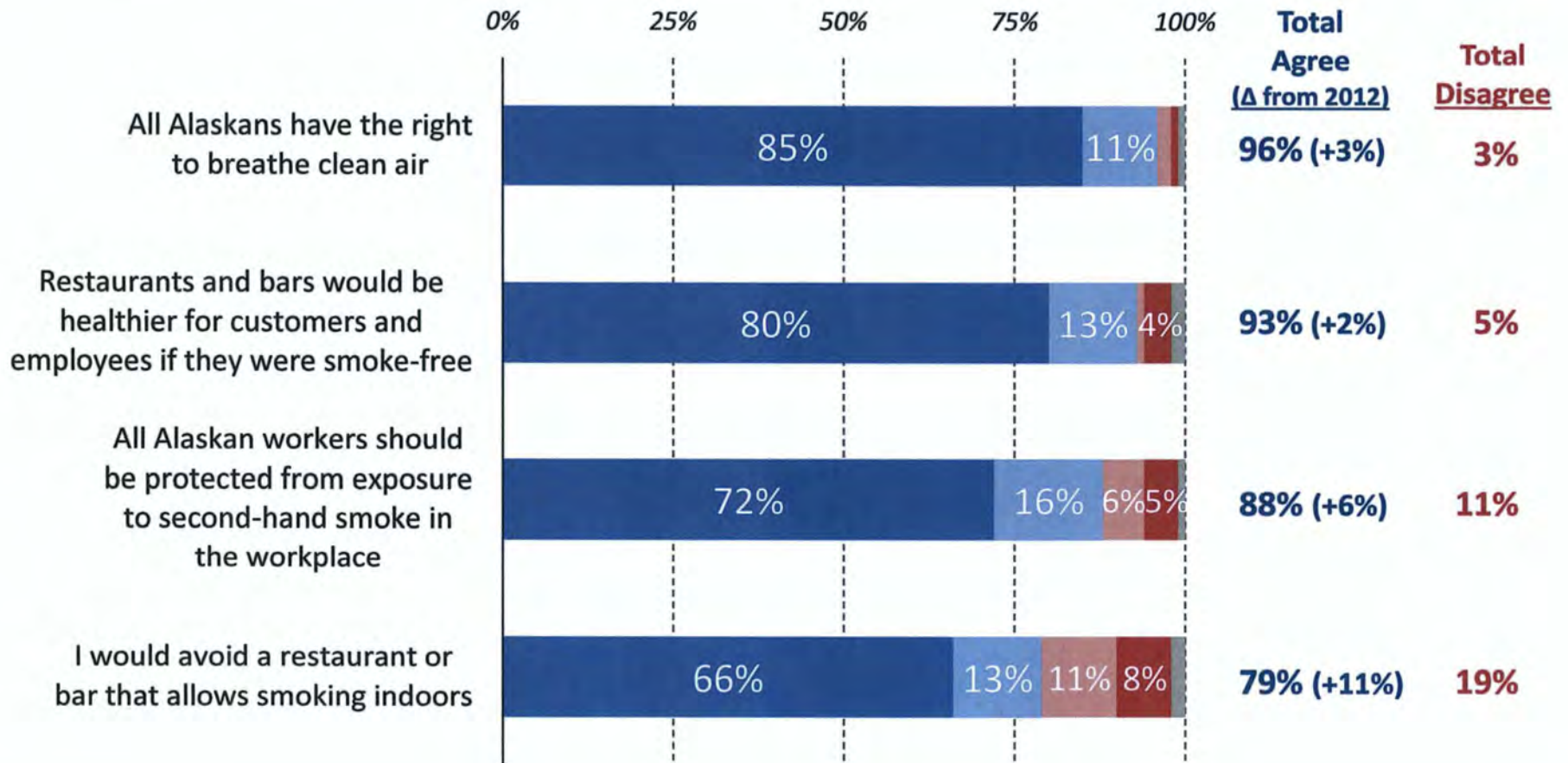


A candidates' support for a statewide smoke-free workplace law would have a broadly positive or neutral impact on the vote of Alaskans.

# Messaging

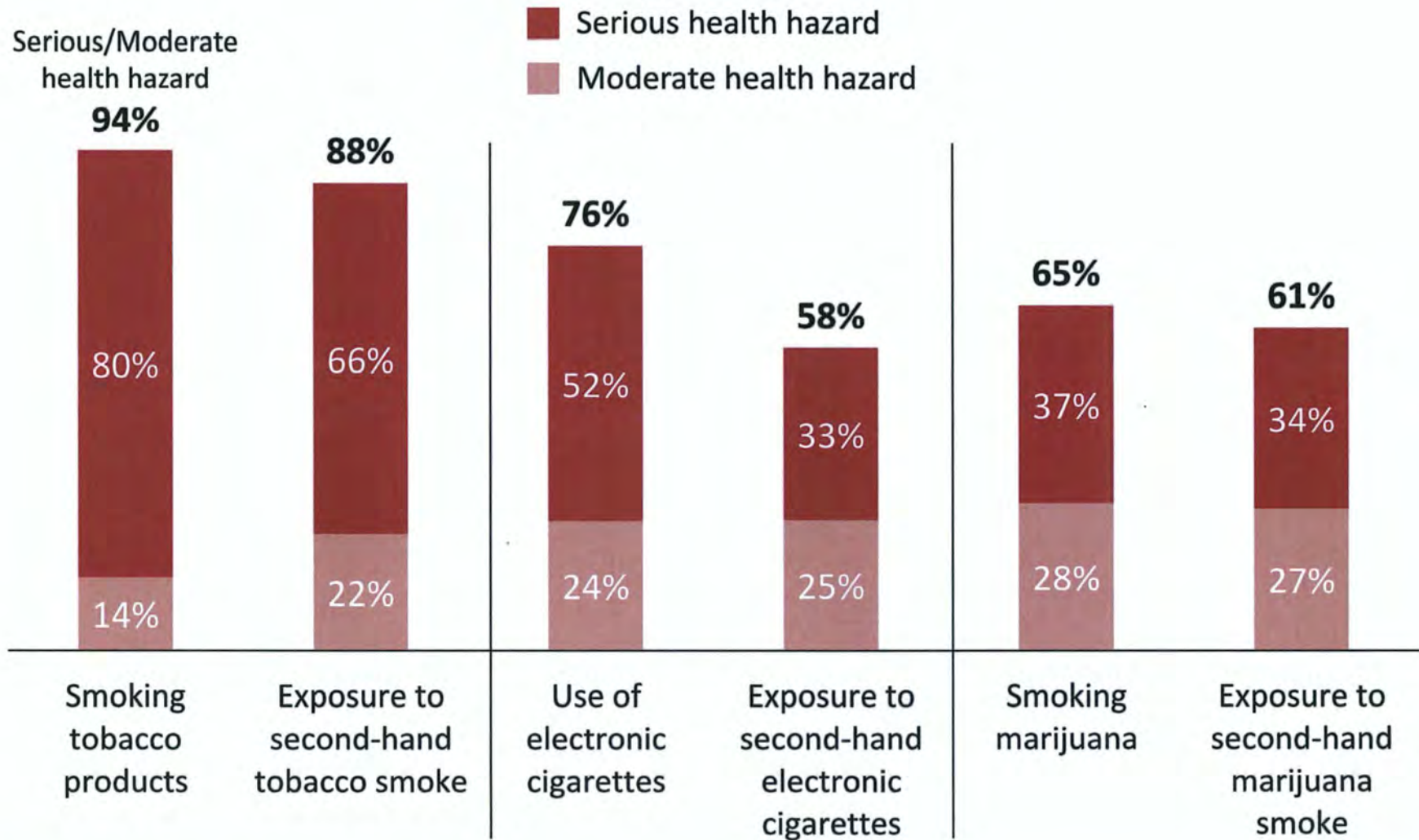
Please tell me whether you personally agree or disagree with each of the following statements...

■ Strongly agree   
 ■ Somewhat agree   
 ■ Somewhat disagree   
 ■ Strongly disagree   
 ■ Unsure



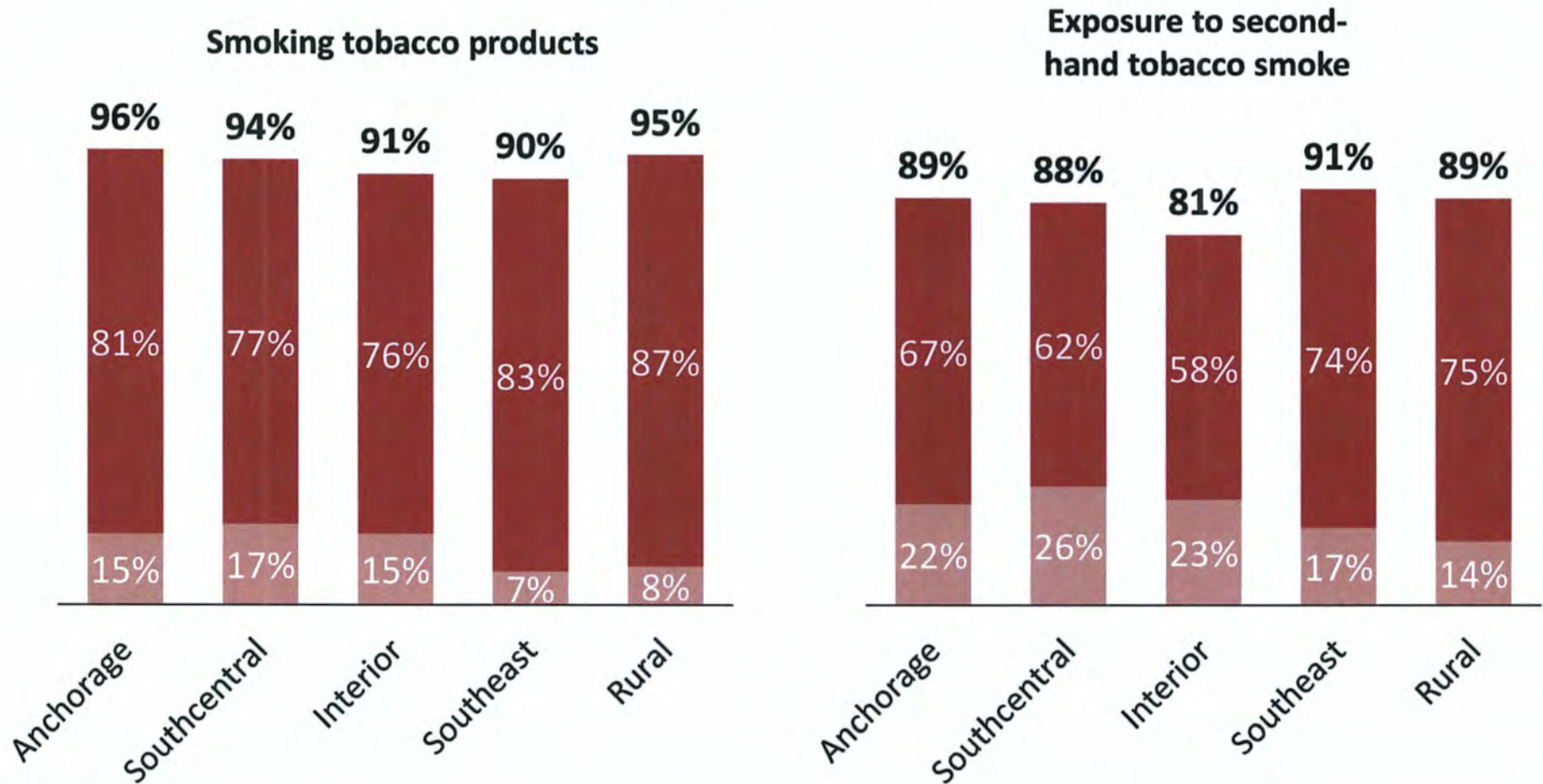
# Perceived Risk

Please tell me whether you feel each of the following is a serious, moderate, or minor health hazard, or no health hazard at all.



# Perceived Risk by Location

- Serious health hazard
- Moderate health hazard

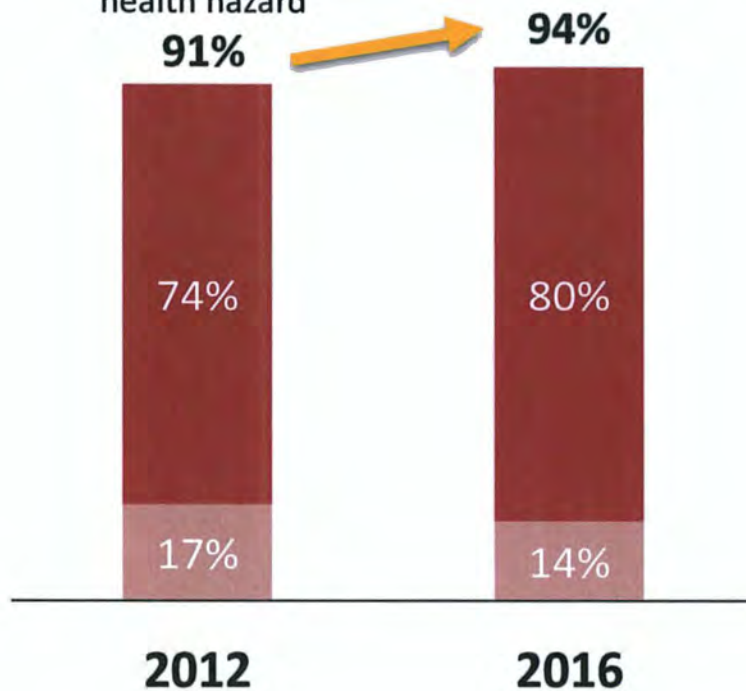


# Tracking Perceived Risk

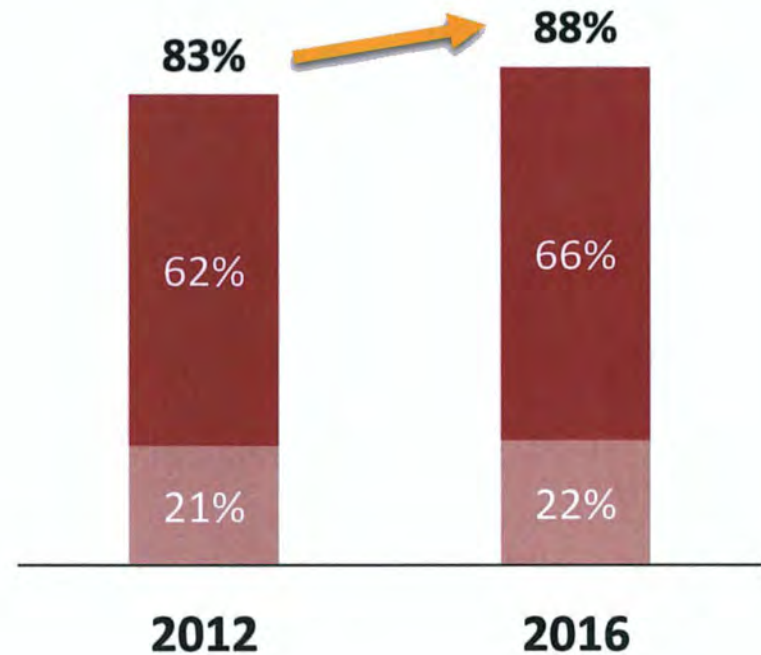
- Serious health hazard
- Moderate health hazard

## Smoking tobacco products

Serious/Moderate health hazard



## Exposure to second-hand tobacco smoke



# Takeaway

- Alaskan views are in strong alignment with the priorities of the American Cancer Society Cancer Action Network.
  - Across all measures that can be tracked, opinions have become even more favorable.
- A large majority of Alaskans (69%) support a statewide smoke-free workplace law.
  - Support is strong and consistent across all demographic subgroups, including location, age and political party. Even a slight majority of smokers (51%) support the law.
  - Similarly large percentages support including e-cigarettes (72%) and marijuana (79%) in a smoke-free workplace law.
- Thirty-nine percent (39%) of Alaskans say they would be more likely to vote for a candidate who supports a smoke-free workplace law. Fully four-out-of-five Alaskans (80%) say a candidates' support for the law would have a positive or neutral impact on their vote.
- The percentage of Alaskans who report smoking and exposure to second-hand smoke as a serious or moderate health hazard is near absolute (94% and 88%, respectively), and perceived risk has increased slightly since the last measurement.
  - A large majority also view the smoking and second-hand exposure of e-cigarettes and marijuana as a serious or moderate health hazard.

# American Cancer Society Cancer Action Network

Alaska Smoke-Free Workplace Opinion Survey  
 Live Interviewer Telephone Survey  
 25% Cell, 75% Landline

# Topline Results & Tracking

n=800 Registered Voters  
 Fielded: Dec. 30, 2015 – Jan. 7, 2016  
 Margin of error= ±3.46% at 95% confidence interval

Tracking results provided from 2012 survey where available. Results from 2015 unless noted otherwise.  
 2012 survey: June 13-17, n=1,345 registered voters, 20% cell, MOE ±2.7%

1) Just to make sure we have a representative sample, could you please tell me in what year you were born?

	<u>2015</u>	<u>2012</u>
18-29 years.....	17%.....	16%
30-44 years.....	28%.....	30%
45-59 years.....	27%.....	29%
60 years or older.....	24%.....	20%
Not provided.....	4%.....	5%

2) Gender (by observation)

	<u>2015</u>	<u>2012</u>
Male.....	51%.....	49%
Female.....	49%.....	51%

Now I'd like to ask some questions regarding smoking...

3) Please tell me whether you feel each of the following is a serious, moderate, or minor health hazard, or no health hazard at all. First...

	Serious/ Moderate hazard	Serious health hazard	Moderate health hazard	Minor health hazard	No health hazard at all	Unsure
Smoking tobacco products	<b>2015:</b> 94% .....	...80%.....	14%.....	2%.....	1% .....	3%
	<b>2012:</b> 91% .....	...74%.....	17%.....	7%.....	1% .....	1%
Exposure to second-hand tobacco smoke	<b>2015:</b> 88% .....	...66%.....	22%.....	9%.....	2% .....	1%
	<b>2012:</b> 83% .....	...62%.....	21%.....	11%.....	4% .....	2%
Use of electronic cigarettes, or e-cigarettes.....	76% .....	...52%.....	24%.....	8%.....	3% .....	13%
Exposure to second-hand electronic cigarettes .....	58% .....	...33%.....	25%.....	16%.....	8% .....	18%
Smoking marijuana .....	65% .....	...37%.....	28%.....	19%.....	11% .....	5%
Exposure to second-hand marijuana smoke.....	61% .....	...34%.....	27%.....	18%.....	13% .....	8%

4) As you may know, there is currently no statewide law in Alaska that prohibits smoking indoors in public places, only local ordinances in some parts of the state. Would you favor or oppose a statewide law in Alaska that would prohibit smoking indoors in public places, including workplaces, public buildings, offices, restaurants and bars? ...is that strongly (favor/oppose) or somewhat (favor/oppose)?

	<u>2015</u>	<u>2012</u>
Strongly favor.....	60%.....	55%.....
Somewhat favor.....	9%.....	11%.....
Somewhat oppose .....	8%.....	11%.....
Strongly oppose .....	20%.....	19%.....
Unsure.....	3%.....	4%.....
	} 69%	} 66%
	} 28%	} 30%

5) Would you be more likely or less likely to vote for a candidate who supports a law that would prohibit smoking indoors in public places and workplaces in Alaska, or would their opinion on this issue not affect your vote? ...and would you be much (more/less) likely or somewhat (more/less) likely to vote for that candidate?

	<u>2015</u>		<u>2012</u>
Much more likely .....	21%	}	19%
Somewhat more likely .....	18%		19%
Not affect vote .....	41%		43%
Somewhat less likely .....	6%	}	4%
Much less likely .....	9%		10%
Unsure .....	5%		5%

6) Please indicate which one of the following you think is more important [Randomized statements]: The rights of customers and employees to breathe clean air in restaurants and bars, or the right of the business owner to choose what is best for his or her establishment? ...and do you feel very, somewhat, or not very strongly about that?

	<u>2015</u>	<u>2012</u>
Rights of the customers and employees .....	61%	57%
Very strongly .....	48%	
Somewhat strongly .....	12%	
Not very strongly .....	1%	
Right of the business owner .....	37%	39%
Very strongly .....	22%	
Somewhat strongly .....	13%	
Not very strongly .....	2%	
Unsure .....	2%	4%

Now I'm going to read a series of statements. After I read each one, please tell me whether you personally agree or disagree with that statement. First... ..and is that strongly (agree/disagree) or somewhat (agree/disagree)?

[Randomized 7-10]		Total agree	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Unsure
7) All Alaskan workers should be protected from exposure to secondhand smoke in the workplace	2015:	88%	72%	16%	6%	5%	1%
	2012:	82%	65%	17%	7%	8%	3%
8) Restaurants and bars would be healthier for customers and employees if they were smoke-free	2015:	93%	80%	13%	1%	4%	2%
	2012:	91%	73%	18%	3%	4%	2%
9) All Alaskans have the right to breathe clean air	2015:	96%	85%	11%	2%	1%	1%
	2012:	93%	80%	13%	2%	3%	2%
10) I would avoid a restaurant or bar that allows smoking indoors	2015:	79%	66%	13%	11%	8%	2%
	2012:	68%	58%	10%	12%	17%	3%

11) If Alaska passes a law prohibiting smoking indoors in public places, including workplaces, public buildings, offices, restaurants and bars, would you favor or oppose including electronic cigarettes, or e-cigarettes, in that law, so that the use of electronic cigarettes would not be allowed inside places that are smoke-free? ...and would you say you strongly (favor/oppose) or somewhat (favor/oppose) that?

Strongly favor.....	60%	} 72%
Somewhat favor.....	12%	
Somewhat oppose .....	6%	} 20%
Strongly oppose .....	14%	
Unsure.....	8%	

12) And again, if Alaska passes a law prohibiting smoking indoors in public places, would you favor or oppose including the smoking of marijuana in that law, so that smoking marijuana would not be allowed inside places where cigarette smoking is prohibited? ...and would you say you strongly (favor/oppose) or somewhat (favor/oppose) that?

Strongly favor.....	70%	} 79%
Somewhat favor.....	9%	
Somewhat oppose .....	6%	} 18%
Strongly oppose .....	12%	
Unsure.....	3%	

Moving on to a slightly different topic...

Split A  
50% of  
Sample

13a) As you may know, the State of Alaska is facing a large budget deficit this year. A proposal has been put forward to cover the deficit by raising new revenue through various sources and taxes. Included in the proposal is an increase in the state tax on tobacco. Do you favor or oppose an increase in the state tobacco tax as part of the overall proposal to cover the state's budget deficit? ...and do you strongly (favor/oppose) or somewhat (favor/oppose) that?

Strongly favor.....	51%	} 72%
Somewhat favor.....	21%	
Somewhat oppose .....	6%	} 25%
Strongly oppose .....	19%	
Unsure.....	3%	

Split B  
Remaining  
50% of  
Sample

13b) The State of Alaska is considering whether or not to increase the state tobacco tax this year. Tobacco use costs Alaskans and the state approximately \$600 million per year in direct medical costs and lost productivity due to premature death. An increase in the tobacco tax would help offset the costs incurred to the state from the use of tobacco. Do you favor or oppose an increase in the state tobacco tax? ...and do you strongly (favor/oppose) or somewhat (favor/oppose) that?

Strongly favor.....	55%	} 70%
Somewhat favor.....	15%	
Somewhat oppose .....	7%	} 27%
Strongly oppose .....	20%	
Unsure.....	3%	

14) Would you favor or oppose an increase in the state tobacco tax if some of the additional revenue that is generated is used to help fund tobacco prevention and cessation programs? ...and would you say you strongly (favor/oppose) or somewhat (favor/oppose) that?

Strongly favor .....	54%	} 75%
Somewhat favor .....	21%	
Somewhat oppose .....	7%	} 24%
Strongly oppose .....	17%	
Unsure .....	1%	

15) The state is considering an increase of \$1 to the state tobacco tax. Do you favor or oppose an increase of that amount? ...and would you say you strongly (favor/oppose) or somewhat (favor/oppose) that?

Strongly favor .....	52%	} 73%
Somewhat favor .....	21%	
Somewhat oppose .....	5%	} 24%
Strongly oppose .....	19%	
Unsure .....	3%	

15a) And would you favor or oppose an increase in the state tobacco tax of \$1.50?

[Asked of those who favor a \$1 increase, shown as % of total]

Favor \$1.50 increase .....	56%
Oppose \$1.50 increase, favor \$1.00 increase .....	14%
Unsure on \$1.50 increase .....	3%
Oppose or Unsure on \$1.00 increase .....	27%

16) Do you favor or oppose increasing the tax on non-cigarette tobacco products, including cigars, e-cigarettes, and smokeless tobacco, at the same rate as the increase to the cigarette tax? ...and do you strongly (favor/oppose) or somewhat (favor/oppose) that?

Strongly favor .....	55%	} 72%
Somewhat favor .....	17%	
Somewhat oppose .....	7%	} 26%
Strongly oppose .....	19%	
Unsure .....	2%	

Now I have a few more questions for demographic purposes only...

17) How often would you say you vote in statewide elections -- always, nearly always, part of the time or seldom?

Always .....	59%
Nearly always .....	25%
Part of the time .....	8%
Seldom .....	6%
Never (vol.) .....	2%

18) When you registered to vote, did you register as a Democrat, Republican, Non-Partisan, Undeclared, or something else?

	<u>2015</u>	<u>2012</u>
Democrat .....	15%	14%
Republican.....	24%	25%
Non-partisan .....	15%	15%
Undeclared.....	39%	33%
Other .....	3%	6%
Not provided .....	4%	7%

19) Do you consider yourself very conservative, somewhat conservative, moderate, somewhat liberal or very liberal? [randomized order – read top to bottom, bottom to top]

	<u>2015</u>	<u>2012</u>
Very conservative.....	17%	18%
Somewhat conservative.....	26%	23%
Moderate .....	28%	31%
Somewhat liberal .....	14%	11%
Very liberal.....	9%	7%
Not provided .....	6%	10%

20) What was the last level of schooling you completed?

	<u>2015</u>	<u>2012</u>
Less than high school graduate.....	3%	3%
High school graduate/GED.....	23%	24%
Some college/technical school .....	31%	27%
College graduate .....	29%	31%
Post-graduate.....	14%	15%

21) What is your race or ethnic background?

	<u>2015</u>	<u>2012</u>
White.....	72%	71%
Alaskan Native.....	10%	10%
Other .....	14%	13%
Not provided .....	4%	6%

22) Which of the following describes your use of tobacco products: do you currently smoke, are you a former smoker, do you smoke occasionally, or do you never smoke?

	<u>2015</u>	<u>2012</u>
Current smoker .....	10%	10%
Occasional smoker .....	7%	10%
Former smoker.....	25%	27%
Never smoke .....	58%	53%

23) Do you currently or have you ever used electronic cigarettes, also known as e-cigarettes? (If yes): And are you a current or former user of e-cigarettes?

Current user .....	3%
Former user.....	8%
No.....	88%
Not provided .....	1%

24) In which of the following ranges does your total household income fall?

	<u>2015</u>	<u>2012</u>
Less than \$10,000 .....	4%	3%
\$10,000 - \$24,999 .....	8%	9%
\$25,000 - \$34,999 .....	6%	6%
\$35,000 - \$49,999 .....	11%	10%
\$50,000 - \$74,999 .....	15%	13%
\$75,000 - \$99,999 .....	14%	16%
More than \$100,000 .....	30%	28%
Not provided .....	12%	15%

---

25) Location

	<u>2015</u>	<u>2012</u>
Anchorage .....	42%	41%
Southcentral.....	23%	22%
Interior .....	14%	15%
Southeast .....	11%	12%
Rural.....	10%	10%

The AlaskaPoll



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*Information for Solutions*

- ❖ Market Research
- ❖ Public Opinion Analysis
- ❖ Political and Government Research
- ❖ Focus Groups

# Opinions and Attitudes Regarding a Statewide Smoke-Free Workplace Law in Alaska

June 2012

Prepared for:

American Cancer Society  
Cancer Action Network, Inc.





**Methodology ..... 3**

**Summary ..... 5**

**Findings ..... 7**

**Crosstabulations ..... 19**

**Survey Instrument..... 36**





# Methodology



### **Overview**

During the period June 13-17, 2012, one thousand three hundred forty-five (n=1,345) Alaskan registered voters were personally contacted via telephone concerning their awareness, attitudes and opinions of smoking and smoke-free workplace laws in Alaska. Dittman Research and Communications (DRC) worked with the American Cancer Society Cancer Action Network (ACS CAN) to develop a survey instrument that addresses these topics. All views and data were obtained on a strictly confidential basis.

### **Sample Design**

To meet the needs of ACS CAN, a sample design was featured which allows for valid and independent research and analysis of both statewide and regional opinions. An oversample of respondents was conducted in certain areas to achieve this.

Overall results were weighted to bring the sample into correct geographic distribution. Further weighting ensures an accurate representation of Alaskan registered voters in terms of age and political registration.

Respondents were contacted over both landline phones and cell phones – phone numbers were generated randomly, ensuring representation of both listed and unlisted numbers. Approximately 20% of the respondents in each region were contacted via cell phone, with the remaining 80% contacted via household landlines.

<u>Region</u>	<u>Margin of error</u>
Anchorage	±6.9%
Fairbanks	±5.7%
Mat-Su	±5.7%
Kenai Peninsula	±5.8%
Southeast Alaska	±8.5%
<u>Rural Alaska</u>	<u>±9.4%</u>
Statewide	±2.7%

### **Processing the Data**

DRC employees completed coding, editing, data entry and verification, while data processing was completed through the Statistical Package for the Social Sciences (SPSS) program. The SPSS program is one of the most sophisticated research-oriented data processing and analytical systems available, and is designed specifically for the processing and analysis of survey research data.

# Summary





### Key Findings

- **There is little disagreement among Alaskans that cigarettes are hazardous...**
  - **91% Believe smoking is a "serious" or "moderate health hazard"**
  - **83% Believe secondhand smoke is a "serious" or "moderate health hazard"**
  - **91% "Strongly" or "somewhat agree" that *"Restaurants and bars would be healthier for customers and employees if they were smoke-free"***
  - **93% "Strongly" or "somewhat agree" that *"All Alaskans have the right to breathe clean air"***
  - **82% "Strongly" or "somewhat agree" that *"All Alaskan workers should be protected from secondhand smoke in the workplace"***
  
- **Overall, a considerable percentage of Alaskans (54%) already think a statewide smoke-free law exists. This is not too surprising considering the majority of residents live in areas with strong smoke-free ordinances. However this holds true, to a large extent, even in areas without smoke-free ordinances: Mat-Su (51%), Kenai Peninsula (45%) and Fairbanks (43%).**
  
- **In total, two-out-of-three Alaskan voters (66%) favor a statewide smoke-free workplace law – 55% "strongly favor". A majority of residents in all regions of the state favor the law.**
  
- **Approximately two-out-of-five Alaskan voters (38%) indicate they would be more likely to vote for a candidate who supports a smoke-free workplace law. A similarly high percentage (43%) say that a candidate's position on this issue would not affect their vote either way. Only 14% would be less likely to vote for a candidate who supports the law.**
  
- **Nearly three-out-of-four Alaskans (73%) think a statewide smoke-free law would have a positive or neutral effect on Alaska's bar and restaurant industry.**
  - **Only 7% of Alaskans say they would go out less often because of the law – the remaining 92% would go out more often or about the same as they do now.**
  - **Over two-out-of-three Alaskans (68%) indicate they *"would avoid a restaurant or bar that allows smoking indoors"*.**





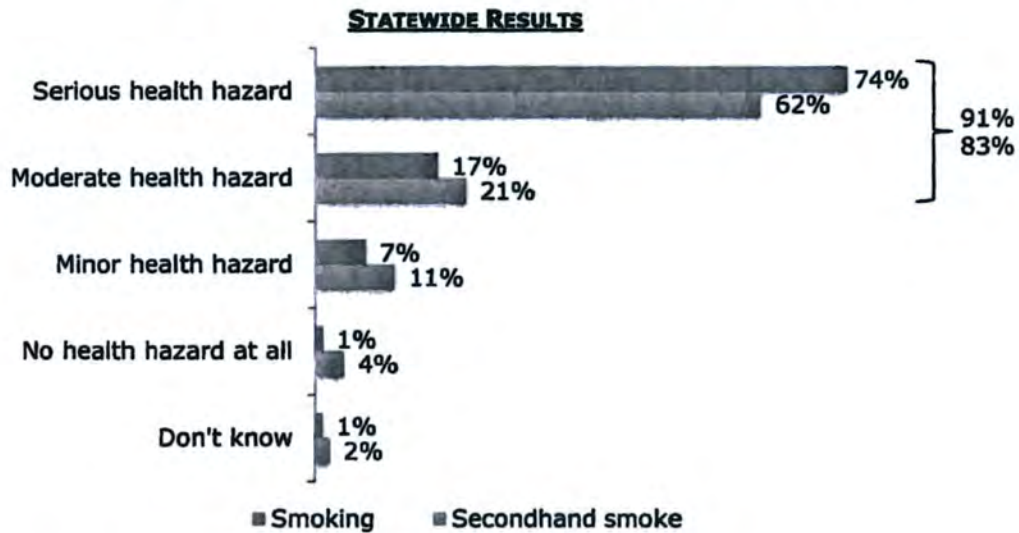
# Findings



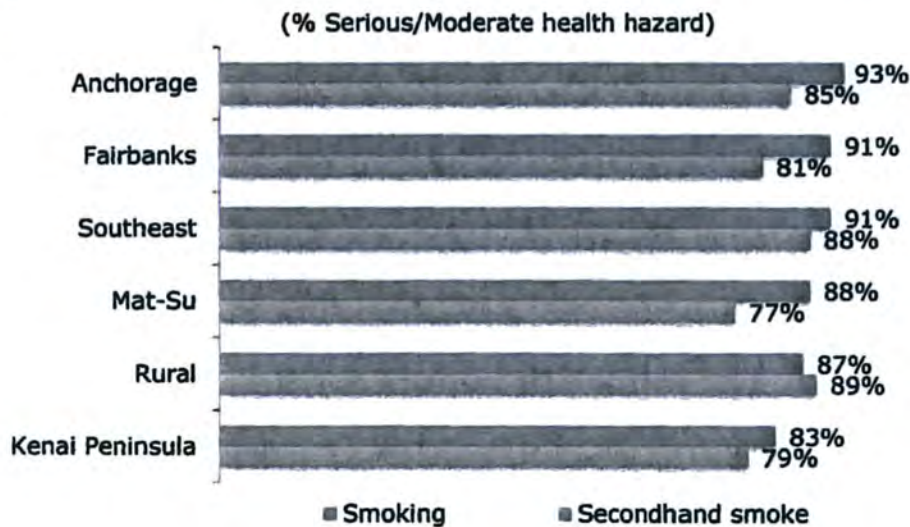
Approximately three-out-of-four Alaskans (74%) believe smoking is a serious health hazard, and nine-out-of-ten (91%) report it is at least a moderate health hazard. Similar percentages report exposure to secondhand smoke as hazardous. Interestingly, the belief that smoking is a "serious health hazard" increases with age, education level and household income.

**Question:** *In general, do you feel that smoking is a serious, moderate, or minor health hazard, or no health hazard at all?*

*And do you feel that exposure to secondhand smoke is a serious, moderate, or minor health hazard, or no health hazard at all?*



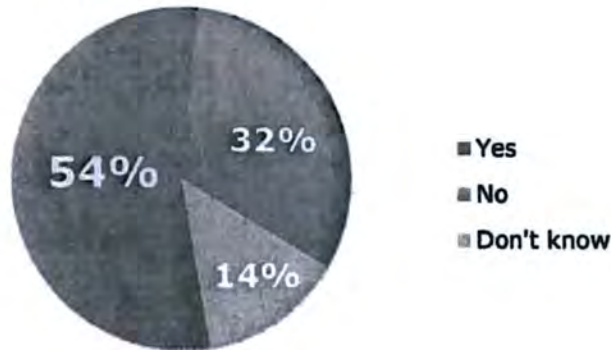
Opinions on the effects of smoking and secondhand smoke are fairly consistent across the state...



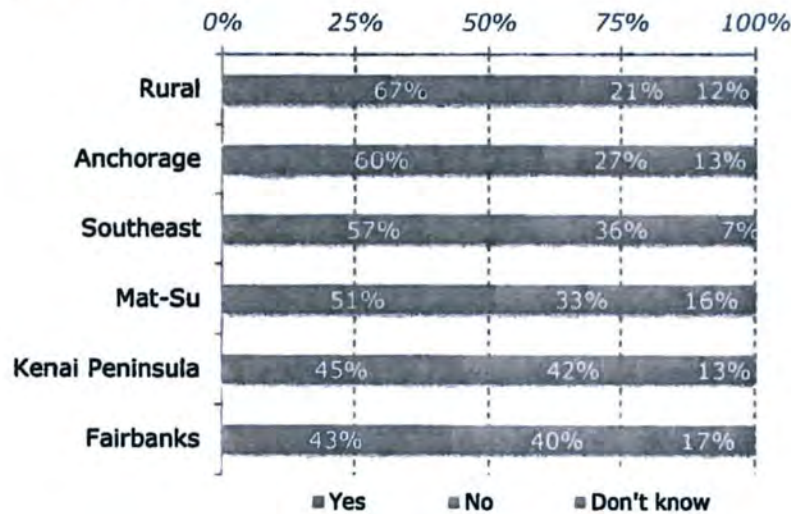
Overall, the majority of Alaskans (54%) already think a statewide smoke-free law exists. This is consistent across all demographic subgroups.

**Question:** *As far as you know, is there a statewide law in Alaska that prohibits smoking indoors in public places?*

**STATEWIDE RESULTS**

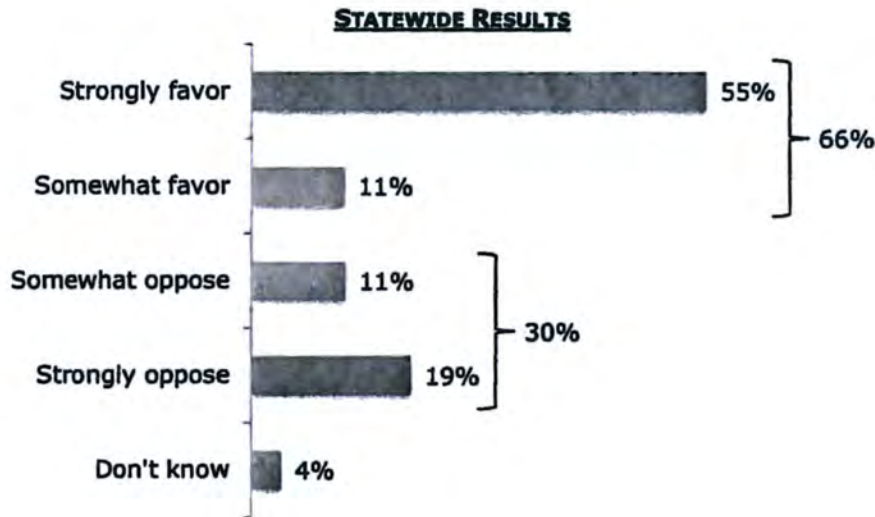


A significant number of Alaskans in all regions report they believe a statewide smoke-free law is already in effect.

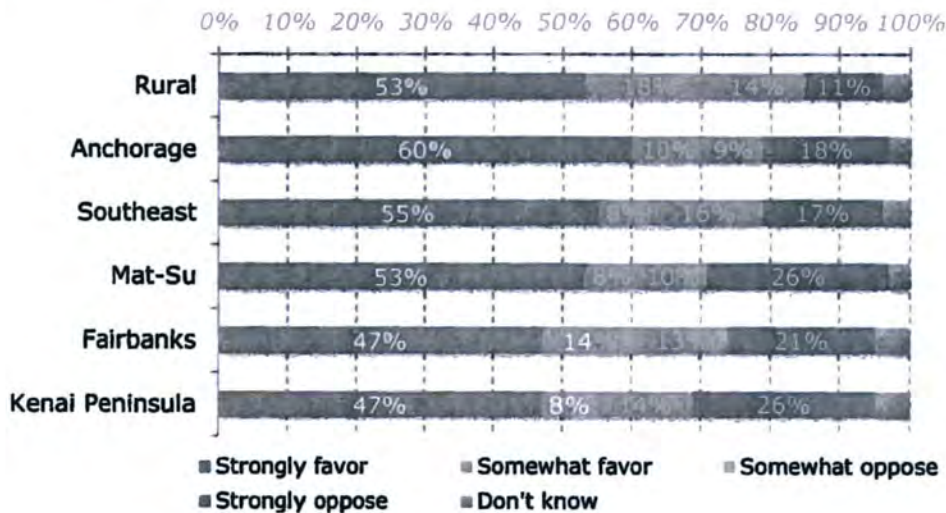


By a margin of over 2-to-1, Alaskan voters report they would favor a statewide smoke-free workplace law – the majority indicating they “strongly favor” (55%).

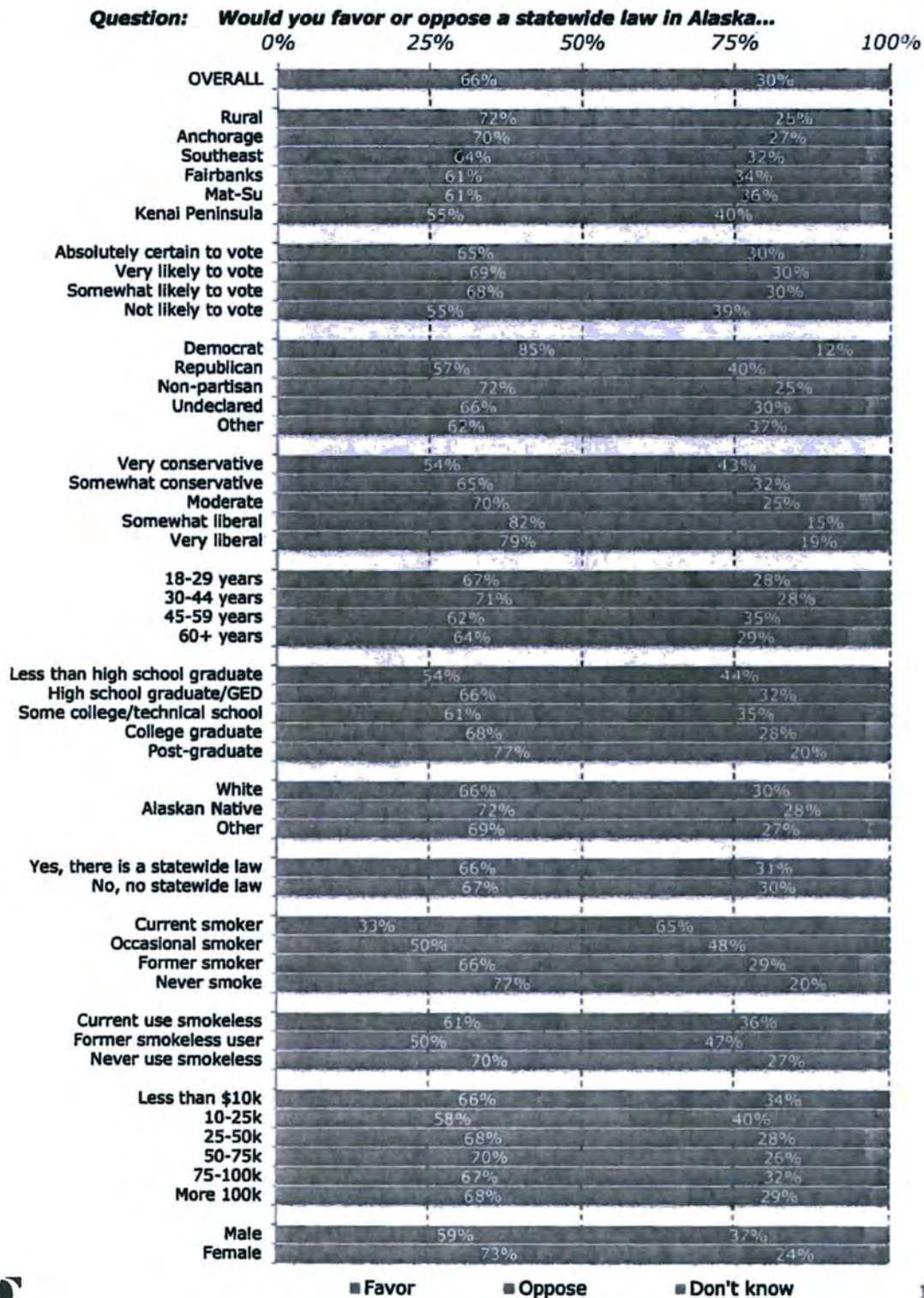
**Question:** *Would you favor or oppose a statewide law in Alaska that would prohibit smoking indoors in public places, including workplaces, public buildings, offices, restaurants and bars?*



A sizable majority in all regions report they would favor a statewide smoke-free law. In fact, aside from Fairbanks and the Kenai Peninsula, the majority of residents in all regions “strongly favor” the law.



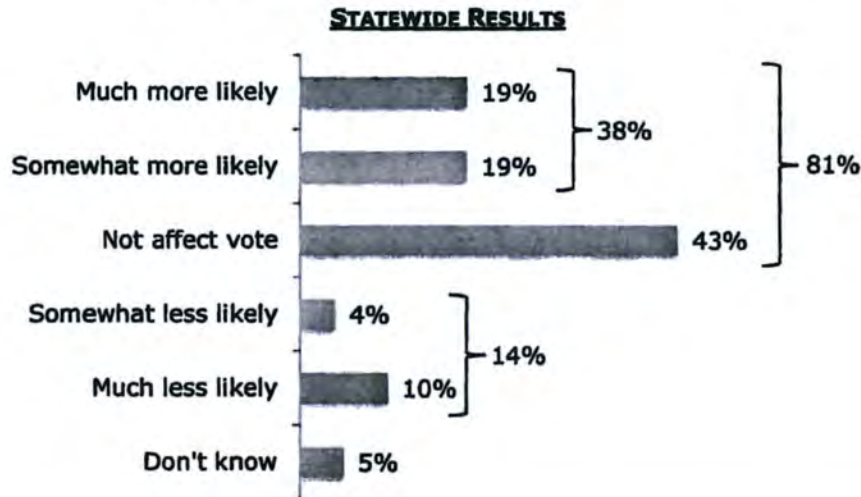
Taking a closer look at support and opposition for a statewide smoke-free law, we see strong support across nearly all subgroups. The only instance of less than majority support is among current smokers.



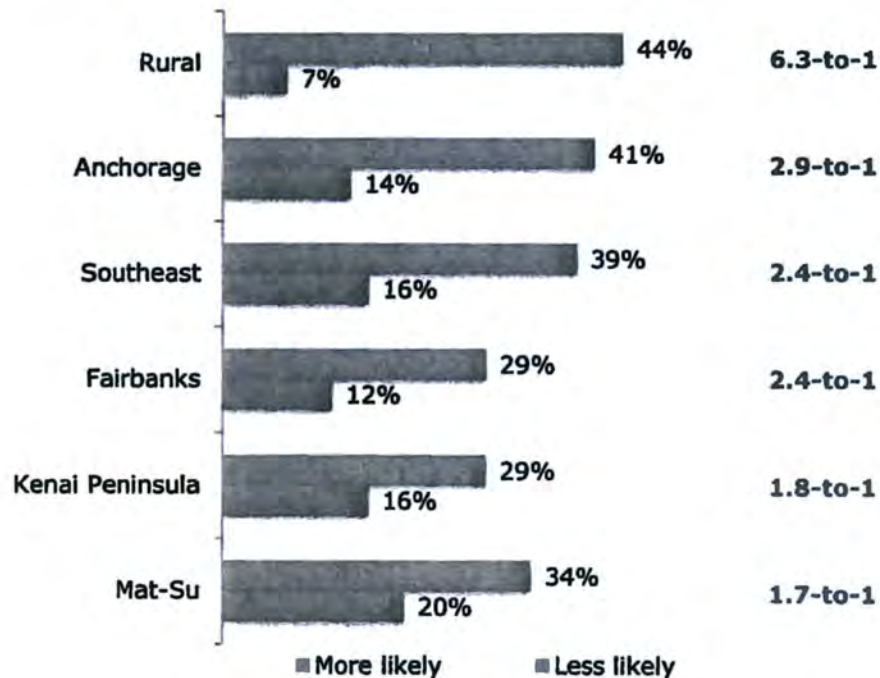


In total, a considerable percentage (38%) report that a candidate's support for a smoke-free workplace law would make them more likely to vote for that candidate. An additional 43% indicate that a candidate's position on a smoke-free workplace law would not affect their vote.

**Question:** *Would you be more likely or less likely to vote for a candidate who supports a law that would prohibit smoking indoors in public places and workplaces in Alaska, or would their opinion on this issue not affect your vote?*



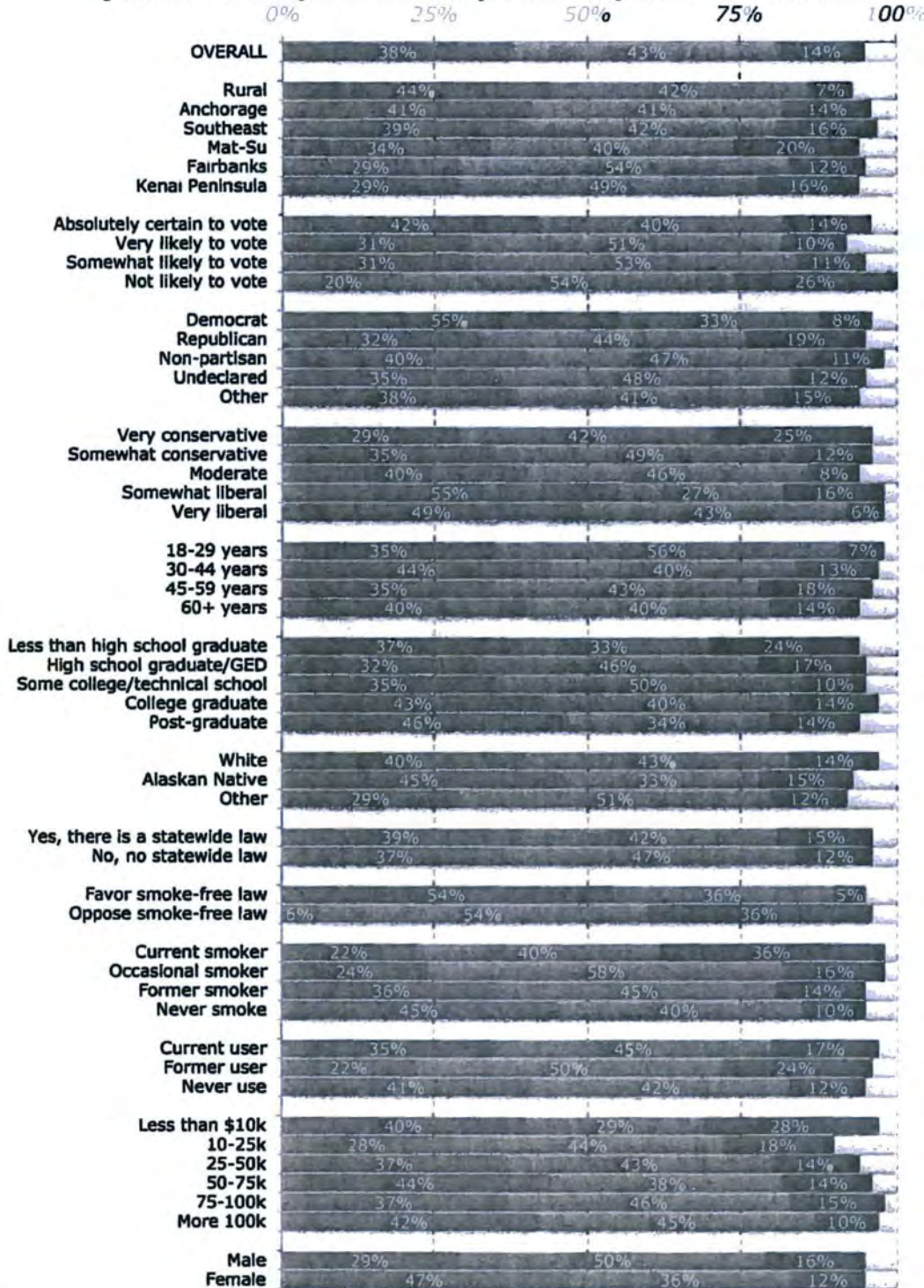
The net effect of a candidate supporting a smoke-free law would be very positive across the state.





A candidate's support for a statewide smoke-free law would have an overwhelmingly positive/neutral effect across all demographic subgroups.

Question: Would you be more likely or less likely to vote for a candidate who supports...



More likely Not affect vote Less likely Don't know

Dittman Research & Communications

**THE IMPACT OF ANCHORAGE'S 2000 AND 2007  
SMOKE-FREE POLICIES  
ON SELECT RESTAURANTS AND BARS**

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The American Lung Association in Alaska

January 2014



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## Table of Contents

<b>Executive Summary</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>5</b>
<b>Anchorage Municipal Ordinances</b> .....	<b>5</b>
Anchorage Municipal Ordinance 2000-91, Effective December 31, 2000 .....	5
Anchorage Municipal Ordinance 2006-86(S), Effective July 1, 2007 .....	6
<b>Policy Enforcement</b> .....	<b>6</b>
<b>Literature Review:</b>	
<b>Impact of Smoke-Free Laws on Employment and Air Quality</b> .....	<b>8</b>
Anchorage Studies.....	8
<b>Methodology</b> .....	<b>8</b>
Institutional Review Board.....	8
Key Informant Interviews .....	9
Recruitment.....	9
Interview Questions .....	9
Data Collection.....	9
Survey of Restaurants and Bars.....	9
Population Frame and Selection of Respondents .....	9
Survey Questionnaire .....	10
Data Collection.....	10
Analysis.....	10
<b>Key Informant Interview Findings</b> .....	<b>10</b>
<b>Survey Findings</b> .....	<b>10</b>
Benefits.....	10
Customer and Employee Feedback .....	11
Customer and Employee Compliance.....	12
Distance away from the Entrance .....	13
Additional Comments .....	15
Follow-up.....	15
<b>Limitations</b> .....	<b>15</b>
<b>References</b> .....	<b>17</b>
<b>Appendices</b> .....	<b>18</b>
A. Key Informant Semi-Structured Interview Guide.....	18
B. Survey of Restaurants and Bars Questionnaire.....	23
C. Number of Smoking-Related Complaints Received by DHHS Environmental Health program, 2007 to 2013 .....	35

**Figures**

ES Figure 1. Number of Smoking-Related Complaints Received by DHHS Environmental Health program, 2007 to 2013..... 3

ES Figure 2. Restaurant/Bar Identified Benefits of the Passage of the Smoke Free/Clean Indoor Air Ordinances..... 4

Figure 1. Number of Smoking-Related Complaints Received by DHHS Environmental Health program, 2007 to 2013..... 7

Figure 2. Restaurant/Bar Identified Benefits of the Passage of the Smoke Free/Clean Indoor Air Ordinances..... 11

Figure 3. Restaurant/Bar Perceptions of Customer and Employee Feedback to the Smoke Free/Clean Indoor Air Ordinances..... 12

Figure 4. Restaurant/Bar Perceptions of Customer and Employee Compliance with the Smoke Free/Clean Indoor Air Ordinances..... 13

**Tables**

Table 1. Potential Benefits of the Anchorage Smoke Free Ordinances: Number and Percent..... 11

Table 2. Customer and Employee Feedback: Number and Percent by Response Category ..... 12

Table 3. Customer and Employee Compliance: Number and Percent by Response Category ..... 13

Table 4. Distance Away from the Door by Respondent Type..... 14

Table 5. Distance Away from the Door: Average Required and Better ..... 14

Table 6. More Appropriate Distance from the Door, As Reported by Respondents..... 15

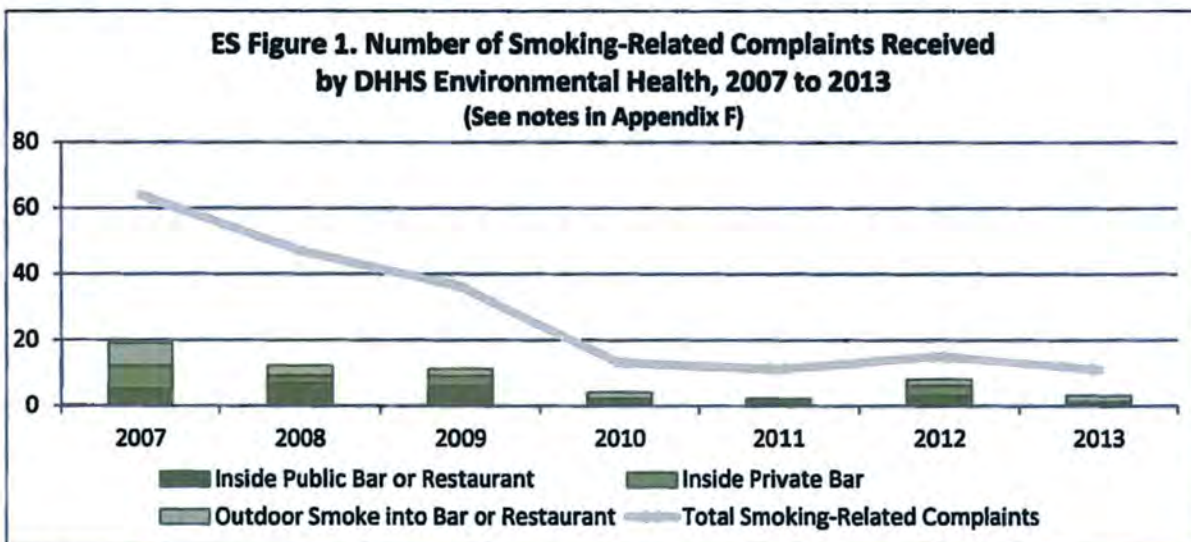
Table 7. Number of Smoking-Related Complaints Received by DHHS Environmental Health program, 2007 to 2013..... 35

## Executive Summary

The American Lung Association in Alaska (ALAA) asked the Institute of Social and Economic Research (ISER) to investigate the impact of the Anchorage 2000 and 2007 Clean Indoor Air (CIA) municipal ordinances on selected restaurants and bars. As previous U.S. studies have been conducted that speak to the economic and health impacts of CIA laws, ALAA also requested that ISER synthesize results of these existing studies and conduct a survey on restaurant and bar representatives' perceptions of the impact of the ordinances.

## Policy Enforcement

The Municipality of Anchorage (MOA), Department of Health and Human Services (DHHS), Division of Environmental Health, Food Safety and Sanitation Program is responsible for enforcing the smoke-free ordinances. Key informants shared that less than 5% of annual complaints received are for smoking related issues, and less than 5% of the investigations conducted are for smoking related issues. The number of organizations investigated for violations varied from three to six per year, and the number of complaints reported is summarized below:



## Literature Review

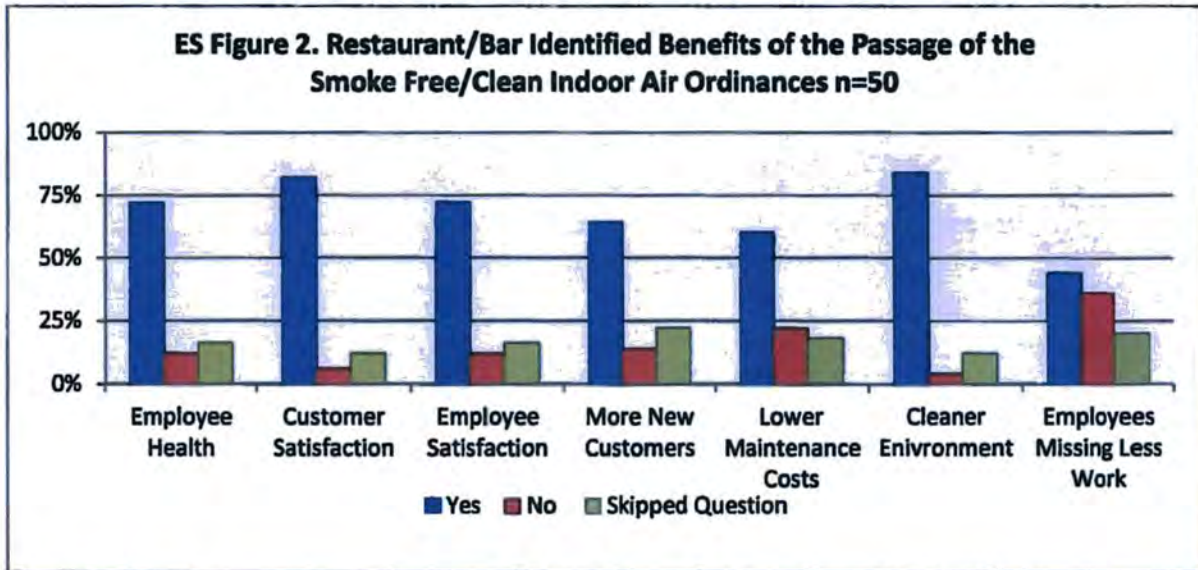
In a preliminary estimate of the economic impact of the 2000 CIA ordinance in Anchorage, Larson (2001) found that there was no detectable negative effect on employment in the hospitality industry by August of 2001. Between 2000 and 2001, employment increased by 10% in restaurants that went from restricted smoking before the ordinance to non-smoking after the ordinance, while employment increased by only 6% in restaurants that continued to allow restricted smoking after the ordinance.

Using employment data on Anchorage bars from 2001 to 2010, a report commissioned by the Alaska Department of Health and Social Services Tobacco Prevention and Control Program (2011) found that bar employment within the Municipality was 10% higher than it would have been if the 2007 Clean Indoor Air law would not have been implemented. Travers & Dobson (2008) compared the air quality in 13 smoke-free Anchorage bars after the passage of the 2007 CIA to seven Juneau bars where smoking was permitted. Similar to the results of previous studies, they found that the levels of respirable suspended particles (RSP) were 33 times higher in the Juneau bars when compared to those in

Anchorage. These particles are emitted from tobacco smoke and are particularly harmful because of their small size, making them easily inhalable into the lungs.

**Survey of Selected Restaurants and Bars**

ISER interviewed representatives of 50 full-service restaurants and bars in the Anchorage municipality on their perceptions of the smoke free indoor ordinances. A total of 96% (48/50) identified at least one benefit from the passage of the ordinances, with responses summarized below:



The majority of survey respondents (78%) indicated that customer feedback about the clean indoor air ordinances (CIA) was either very positive or somewhat positive, while 2% reported that customer feedback was very negative. The majority of respondents (76%) indicated that employee feedback on the CIA was either very positive or somewhat positive, while 6% reported that employee feedback was either somewhat negative or very negative

The majority of survey respondents (92%) reported that customer compliance with the CIA was either excellent or good, while 2% reported customer compliance as fair. Similarly, 86% of respondents indicated employee compliance with the CIA was either excellent or good while 8% reported that employee compliance was fair.

Restaurant and bar representatives reported that they required smokers to stay an average of 30.5 feet away from the entrances to their establishments. At 58%, a little more than half of respondents (29/50) reported that the mandated minimum distance for their establishment was appropriate (5 ft. for bars or restaurants that serve alcohol, 20 feet for restaurants that do not serve alcohol); 38% (19/50) reported that the mandated distance for their establishment was inappropriate. A majority of respondents, 62% (31/50), felt that a different mandated distance would be more appropriate, suggesting an average of 30 ft.

**Limitations**

The survey results are not necessarily representative of Anchorage full service restaurants and bars. However, the consistency of the findings suggests agreement on the effects of the ordinance and the lack of any systemic issues arising from implementing smoke-free workplace policies.

## **Introduction**

The American Lung Association in Alaska (ALAA) has asked the Institute of Social and Economic Research (ISER) to investigate the impact of the Anchorage 2000 and 2007 Clean Indoor Air municipal ordinances on selected restaurants and bars. As previous U.S. studies speak to the economic and health impacts of Smoke Free and Clean Indoor Air Laws., ALAA also requested that that ISER synthesize results of these existing studies, and conduct a survey on restaurant and bar representatives' perceptions of the impact of the ordinances. ALAA outlined three areas of focus for this project, including:

- Previous work and findings related to the impact of smoke free ordinances on businesses, including potential changes in employment
- Enforcement of the smoke free ordinances in Anchorage
- Restaurant and bar representatives' perspectives on the impact of the smoke free ordinances

To inform these areas of interest, ISER conducted a literature review of previous work related to smoke free policies, a survey of restaurant and bar representatives in Anchorage, and key informant interviews with individuals responsible for enforcement of the smoke free policies.

This report begins with an introduction, followed by the results of a review of the previously published literature related to smoke free policies in Alaska. The methodology for both the key informant interviews and the survey of restaurants and bars are described in the next section. The methodology includes information on the selection of respondents and details of how the data was collected and analyzed. Finally, we describe findings from the key informant interviews and survey. Appendices contain the questions posed to key informants, the survey used with restaurant and bar representatives, and verbatim comments on the impact of the Anchorage smoke free ordinances.

## **Anchorage Municipal Ordinances**

### **Anchorage Municipal Ordinance 2000-91(S), Effective December 31, 2000**

In 2000, the Anchorage Assembly amended title 16 of the municipal code, adding chapter 16.65 about smoking in work and enclosed public spaces. The law took effect December 31, 2000. The code prohibited smoking in the Anchorage municipality in:

- Enclosed public spaces
- Places of employment

Exempted from this regulation were:

- Private residences
- Places of employment with four or less employees
- 25% of hotel and motel rooms rented to guests
- Retail tobacco stores
- Private functions in restaurants, hotel and motel conference or meeting rooms and public or private assembly rooms
- Bars -defined as a "...premise licensed under AS 04.11.090 [beverage dispensary license that authorizes selling or serving of alcohol] which does not employ any person under the age of 21 and which does not serve any person under the age of 21 unless accompanied by a parent or legal guardian and where tobacco smoke cannot filter into any other area where smoking is prohibited through a passageway, ventilation system, or other means."

# ALASKA SMOKE-FREE WORKPLACES

EVERYONE HAS THE RIGHT TO BREATHE SMOKE-FREE AIR.



## Resolutions of Support for a Statewide Smoke-Free Workplace Law

This is a list of over 860 Alaska businesses and organizations who have signed a resolution in support of a statewide smoke-free indoor workplace law.

They come from businesses and organizations large and small, representing nearly every industry in Alaska. They cross all community and cultural lines. Broken out regionally, you will find they are also representative of every corner of The Great Land. From north to south, east to west, it's time for Alaska to have smoke-free workplaces!

## Statewide Supporters

- AARP
- Agnew::Beck
- Akeela
- Alaska Academy of Family Physicians
- Alaska AFL-CIO
- Alaska Association of Naturopathic Physicians
- Alaska Asthma Coalition
- Alaska Commercial Company
- Alaska Community Foundation
- Alaska Dental Association
- Alaska Dental Society
- Alaska Federation of Natives
- Alaska Native Health Board
- Alaska Native Tribal Health Consortium
- Alaska Native Veterans Association
- Alaska Nurse Practitioner Association
- Alaska Nurses Association
- Alaska Primary Care Association
- Alaska Public Health Association
- Alaska Sports Hall of Fame
- Alaska State Dental Hygienists Association
- Alaska State Hospital and Nursing Home Association (ASHNHA)
- Alaska State Medical Association
- Alaska Teen Media Institute
- Alaska Tobacco Control Alliance
- Alaska's Center for Resource Families
- American Academy of Pediatrics - Alaska Chapter
- American Cancer Society
- American Diabetes Association Alaska
- American Heart Association
- American Lung Association
- Arctic Office Products
- Asthma and Allergy Foundation of America - Alaska Chapter
- BDO USA, LLP
- Big Brothers Big Sisters of Alaska
- CIRC Alaska Tourism Corporation
- Doyon Limited
- Evangelical Lutheran Church of America - Alaska Synod
- Grant Aviation, Inc.
- Hilcorp Alaska
- March of Dimes
- Mountain Pacific Quality Health - Alaska
- Premera Blue Cross Blue Shield of Alaska
- Providence Alaska Medical Center
- Ravn Alaska
- RurAL CAP
- RurAL CAP Head Start Child Development & Policy Council
- The Alaska Club
- Tobacco Free Rainbow Alliance
- Volunteers of America - Alaska Chapter
- YWCA Alaska

## Anchorage Supporters

- 8 Star Alaska Adventures
- Advanced Physical Therapy of Alaska
- Alaska Advanced Dentistry
- Alaska Bagel Restaurant
- Alaska Enterprise Solutions, Inc.
- Alaska Fresh Seafood & The Bubbly Mermaid
- Alaska Lens Rental
- Alex Hotel & Suites
- Allergy, Asthma, and Immunology Center of Alaska
- Anchor Inn - Whittier
- Anchorage Medical Society
- Anchorage Neighborhood Health Center
- Anchorage Pediatric Group
- Anchorage School District
- Anchorage Senior Activity Center
- Anchorage Youth Court
- Anchorage Youth Development Coalition
- Arctic Management, LLC
- Arctic Roadrunner
- Batteries Plus Bulbs - Anchorage
- Bear Paw Bar & Grill
- Bernie's Pharmacy, Inc.
- Catfish Haven Restaurant
- Chilkoot Charlie's
- Club Paris
- Diagnostic Health Anchorage
- Downtown Grill
- Fell, William P., DDS
- Flattop Pizza & Pool
- Fromagio's Artisan Cheese
- Gallo's Mexican Restaurant
- Generous Health
- George, Rev. Carol
- Graceworks Alaska
- Grandview Baptist Church
- Helander, Ken
- Heritage Birth Center
- Hotel Captain Cook
- Humpy's Great Alaskan Alehouse
- Identity Inc.
- JC Rentals
- KACN TV
- Kanady Chiropractic Center
- Kay's Family Restaurant
- Lawn Wizard Lawn Care
- Living Water Baptist Church
- Lone Star Steak House
- Medical Park Family Care
- Michelsohn & Daughter Construction, Inc.
- Middle Way Cafe
- Midnight Sun Brewing Company
- Mike's Maniacs Slow Pitch Softball
- Mitchell Chiropractic
- Moose's Tooth Pub & Pizzeria
- Mountain View Family Dentistry
- Natural Pantry
- Northwest Strategies
- Obeidi Limited
- Peanut Farm Bar and Grill
- Pediatric OT Services, LLC
- Pil's Deli
- Porcaro Communications
- Pro-Care Home Medical
- Providence Pulmonary Rehab
- Puffin Inn
- Pulmonary Associates
- Repairs Unlimited, LLC
- Sacks Cafe
- Safe & Sound Inc.
- Seagalley Restaurant
- Seward's Folly Bar & Grill
- Side Street Espresso
- Smoke-Free Anchorage Coalition
- Snow City Cafe
- Snow Wizard Snow Plowing
- Sonia's Magic Hairstyles
- Spenard Roadhouse
- Starting Point, Inc.
- Sub Zero Bistro & Microlounge
- Terra Bella, Inc.
- The Builders Collaborative
- The Flying Dutchman Pastry
- Tobacco Free Rainbow Alliance
- UAA Department of Health Sciences
- UAA Physical Education Department
- UAA School of Social Work
- Uncle Joe's Pizzeria
- Walsh Sheppard
- Weaver Brothers
- Yak & Yeti Himalayan Restaurant

## Gulf Coast Supporters

- A Balanced Approach - Kodiak
- A Smiling Bear Bed & Breakfast - Kodiak
- Alaska One Realty LLC - Kodiak
- Alaskan Real Estate
- Arc N Spark Welding - Kodiak
- AT&T - Kodiak
- Bases Loaded
- Beachside Rental House - Kodiak
- Brother Francis Shelter - Kodiak
- Center Star Training, LLC - Kodiak
- Coastal Creation - Kodiak
- Connecting Ties, Inc. - Kodiak
- Daniels Jewelry - Kodiak
- E-Clips Haircare Studio - Cordova
- Emily's Alterations & Design - Kodiak
- Family Chiropractic - Kodiak
- Galley Gourmet - Kodiak
- Henry's Great Alaskan Restaurant, Inc. - Kodiak
- Humane Society of Kodiak
- Images Hair and Tanning
- Island Air Service- Kodiak
- Kendra's Kreations - Kodiak
- Kings Diner Inc.
- KMK Rentals - Cordova
- Kodiak Area Native Association
- Kodiak Bed & Breakfast
- Kodiak Island Ambulatory Care Clinic, Inc. (KIACC Inc.)
- Kodiak Island Borough School District
- Kodiak Lawn Care
- Kodiak Motors, Inc.
- Kodiak Printmasters
- Kodiak Teen Court
- Kodiak Women's Resource & Crisis Center
- M & S Enterprises
- Mill Bay Coffee & Pastries - Kodiak
- Nordic Dancer Bed & Breakfast - Kodiak
- Norman's Fine Gifts & Jewelry - Kodiak
- Northwoods Massage - Kodiak
- Old Harbor Native Corporation - Kodiak
- Orca Book and Sound
- Orion's Mountain Sports - Kodiak
- Ouzinkie Native Corporation
- Pearson Cove Bed & Breakfast - Kodiak
- Providence Kodiak Island Counseling Center
- Re/Max of Kodiak
- Sparrows - Kodiak
- St Denny Surveying - Kodiak
- St. James the Fisherman Episcopal Church - Kodiak
- St. Mary's Catholic Parish - Kodiak
- Stringbeadz by Susan - Kodiak
- Sutliff's Hardware - Kodiak
- Sweeney Insurance - Kodiak
- TC Enterprises, LLC - Kodiak
- The Sholikof Lodge - Kodiak
- Threshold Services, Inc. - Kodiak
- Ton of Fun - Kodiak
- Total Interior Furnishings - Kodiak
- Wells Fargo Bank - Kodiak
- Wild Iris Salon

## Interior Supporters

- A&K Electric, LLC - Fairbanks
- Access Alaska
- Aframe Gas Station
- Airport Equipment Rentals
- Alaska Acupuncture and Herb
- Alaska Fur Gallery
- Alaska Homegrown - Russell Bickness
- Alaska Universal Productions, Inc
- Alpine Chiropractic and Massage
- American Village of Alaska Inc. / Caribou Hotel - Glennallen
- Arctic Burner Service - Fairbanks
- Arctic Chiropractic
- Arctic Fire Hot Sauce-Fairbanks
- Arctic Lights Candle Company-Fairbanks
- Arts Venture - Fairbanks
- Baan O Yeel Kon Corporation - Rampart
- Bergeron, Daniel M., DDS
- Bettisworth North Architects
- Black Diamond Resort Company
- Bonnie's Baskets & Things-Fairbanks
- Brewster's
- Canyon Gift Company
- Castlerock Self Storage
- Cheesh'na Tribal Council
- Co-Op Diner
- Coghill's Store - Nenana
- Concierge Medicine of Alaska - Fairbanks
- Copper River Native Association
- Copper Valley Historical Society
- Cross Road Medical Center - Glennallen
- Denali Adventure Tours
- Denali ATV Adventures
- Denali Borough
- Denali Chamber of Commerce
- Denali Dome Home B&B
- Denali Gift Company
- Denali Glacier Scoops & Gifts
- Denali Jeep Excursions
- Denali Lakeview Inn
- Denali Mountain Works
- Denali Outdoor Center
- Denali Princess Wilderness Lodge
- Denali Raft Adventure
- Denali Taxi Shuttle - Healy
- do TERRA Essential Oils
- Grassroots Guitar Co.
- Greater Fairbanks Board of Realtors
- Hair Salon - Glennallen
- Hatcher Photography - Fairbanks
- Healy Heights Family Cabins
- Heartstream Yoga
- Hub of Alaska - Glennallen
- I ACT FREE Coalition
- If Only... a fine store
- Information Insights
- Interior Alaska Center for Non-Violent Living - Fairbanks
- Interior Community Health Center
- Interior Excavation & Trucking - Fairbanks
- Jazzercise Fairbanks
- Jeff King Inc. / Husky Homestead
- Jolly Roger, Inc.
- Karibu Gallery & Gifts
- Kristi's Quisine
- Lake Louis Lodge
- Last Frontier Denali Photography
- Lavelle's Bistro
- Lemongrass Thai Cuisine - Fairbanks
- McAfee Chiropractic-Fairbanks
- McCarthy Ventures LLC
- McKinley Gifts
- Miles of Alaska - Nenana
- Minto Development Corporation
- Monderosa Bar & Grill
- Motel Nord Haven - Healy
- Mount Pleasant Baptist Church - Fairbanks
- Nenana A Frame
- Nenana City Public Schools
- Nenana Native Village
- Nenana Taekwondo
- Nenana Tortella Council on Aging, Inc.
- Nenana Urban Farm
- Northern Alaska Environmental Center - Fairbanks
- Northern Alaska Tour Company - Fairbanks
- Northern Business Systems
- Northstar Youth Court - Fairbanks
- Perspicacity Contract Services
- Pichette Counseling Services - Fairbanks
- Positive Changes Coaching and Training - Fairbanks

- Donna's House of Petals & Gifts
- Duncan Designs - Fairbanks
- Eagle Tribal Buildings
- Elegant Memories
- Elem Robotics
- Enchanted Forest - Fairbanks
- Evans Industries
- European International
- Fairbanks Choral Society
- Fairbanks Clinic Insurance
- Fairbanks Daily News-Miner, Inc.
- Fairbanks Economic Development Corporation
- Fairbanks Family Dental Care
- Fairbanks Forrest and Farm
- Fairbanks Memorial Hospital
- Fairbanks Native Association
- Fairbanks Potters Guild
- Fairbanks Youth Soccer Association
- Finish Line - Fairbanks
- First Fruits Consulting -Fairbanks
- Fisher's Fuel Inc
- Food Factory-Fairbanks
- Frontier Farms
- Furred and Feathered Friends 4-H Club - Nenana
- GCI Fairbanks
- Geraldo's - Fairbanks
- Glenallen Chiropractic Clinic
- Glenn Transport LLC - Glennallen
- Granma's Quilt Shop
- Railbelt Mental Health and Addictions
- Raven Retirement Community of Fairbanks
- Resource Center for Parents and Children - Fairbanks
- Retirement Community of Fairbanks
- Robotics Think Bots
- Ronn Murray Photography
- Rose's Cafe
- Santa's Senior Center
- Shear Heaven Salon
- Sipping Streams Tea Company- Fairbanks
- Stanley Nissan
- Sue Cole Creations-Fairbanks
- Tanana Chiefs Conference
- Tartan Tundra Music
- The Himalayan
- Tosina Lodge
- Trax Outdoor Center - Fairbanks
- Tri-Valley Fire Department
- Turning Point Counseling Services - Fairbanks
- Valley Chapel
- Walsh, Kelliher & Sharp, CPAs, APC
- Warbelow's Air Ventures
- West Valley Vision Center, Inc. - Fairbanks
- White Palms Art Gallery
- Wolfrun Restaurant-Fairbanks
- Workshop Acres - Nenana
- World Eskimo Olympics
- Wright Air Service

## Kenai Peninsula Supporters

- 811 Auk Apartments 6 Plex
- A Flyin Skein LLC - Seward
- A Home Away From Home - Homer
- ABC Pregnancy Care Center
- AK Exports, LLC
- Alaska Advanced Care Chiropractic
- Alaska Christian College
- Alaska Fjord Charters - Seward
- Alaska Lanes
- Alaska Maxi Storage
- Alaska West Air - Nikiski
- Alaskan Cottages - Homer
- Alex Russell Pediatrics
- Aloha Bed & Breakfast - Homer
- Anderson Tug & Barge - Seward
- Angels Rest on Resurrection Bay LLC - Seward
- Aurora Health & Nutrition
- Aurora Taxes & Accounting - Anchor Point
- Bayan Asian Market
- Beach House Rentals - Seward
- Bear Creek Winery & Lodging - Homer
- Beemun's Variety
- Behrens, Dr. Bobbie J.
- Big 'G' Electric & Engineering Inc
- Blazy Construction Inc.
- Box Canyon Cabins - Seward
- Boys and Girls Club of the Kenai Peninsula
- Bridges Community Resource Network
- Brown and Hawkins / Sweet Darlings
- Bunnell Street Arts Center - Homer
- Captain Coffee Roasting Company - Homer
- Central Peninsula Health Foundation
- Central Peninsula Hospital
- Chez Moi Boutique
- Chilson Computer Services
- Chugachmuit
- Clinic of Chiropractic Health - Homer
- Community Action Coalition
- Cook Inlet Council on Alcohol & Drug Addiction (CICADA)
- Cooper Landing Chamber of Commerce
- Cosmic Kitchen - Homer
- Linda Loris B&B Seward
- Lisa Turner, MS
- Love, Inc of the Kenai Peninsula
- Lucky 13 Fashions
- McDonald's Restaurants of the Kenai Peninsula
- Michael P Moriarty, PC Seward
- Moose Pass Chamber of Commerce & Visitors Bureau
- Mykel's Restaurant & Soldotna Inn
- Nancy Field Insurance
- Nature's Way Rehab Services, LLC
- Neal, Gwen M., Attorney at Law - Homer
- Ninilchik Family Dentistry
- Odie's Bead-It
- Oral Surgery Associates Inc.
- Orange Poppy
- Parker and Associates
- Paul Turner, PhD
- Peninsula Accounting Services
- Peninsula Allergy & Asthma Center
- Peninsula Community Health Services
- Peninsula Dental Center
- Peninsula Health Center Inc
- Peninsula Internal Medicine, P.C.
- Peninsula Medical Center
- Peninsula Pediatric Dentistry
- Peninsula Power Sports
- Peninsula Radiation Oncology Center
- Peninsula Radio Group
- Phormation Chiropractic Inc
- Pioneers of Alaska Igloos #9 - Seward
- Pizza Boys Inc
- Preventative Dental Services PC - Homer
- Professional Escrow Services., Inc
- Qutekcak Native Tribe
- Rangeview Bed & Breakfast - Homer
- Renewal Skincare Studio
- Resurrection Bay Lions Club - Seward
- Rez Fitness
- Schiff RV & Boats
- Sea Otter Community Center - Seldovia
- Seaview Cafe & Bar

- Cottler, Dr. Harry - Soldotna
- Delta Leasing LLC
- Diamond M Ranch Resort, LLC
- Donna's Country & Victorian Gifts
- Family Medical Clinic
- Fine Thyme Cafe
- First American Title - Seward
- Foster Construction
- Frontier Community Services
- Good Karma Inn - Homer
- Havenwood Guest House - Seward
- Health North Family Medicine
- Homer Bookstore
- Homer Head Start
- Horace Mann Insurance Co. - Brenda Johnson
- Hospice of the Central Peninsula
- Hutchings Auto Group
- Integrated Robotics Imaging Systems
- Jammin Java
- Jeannie Annette Enterprises
- Jo Doug Inn - Seward
- Kaladi Brothers Coffee
- Kenai Civil Air Patrol
- Kenai Peninsula School District
- Kenai Peninsula United Way
- Kenai Peninsula Urology LLC
- Kenai Peninsula Youth Facility
- Kenai Public Health Center
- Kenai River Drifters Lodge
- Kenai Spine
- Kenai Sports & Family Chiropractic
- Kenai Watershed Forum
- Kenda's Studio
- King's Treasures Christian Bookstore
- KPO Rehabilitation and Sports Medicine
- Kruzof Fisheries LLC - Seward
- Kuskokwim Wilderness Adventures
- Le Barn Appetit Inn & Creperie - Seward
- Legends Dental
- Seaview Community Services
- Semaka Charters - Seward
- Seward Chamber of Commerce, CVB
- Seward Rotary Club
- Seward Vacation Properties
- Seward Wellness for All Coalition
- Silhouette Shingles, LLC - Seward
- Snack Shack
- Snowden Chiropractic
- Soldotna Chiropractic & Therapeutic Massage
- Soldotna Dental Arts
- Soldotna Dental Clinic
- Soldotna Mini Storage
- Soldotna Y Chevron
- Spenard Builders Supply - Kenai
- Stan's Barber Shop
- Starbird Studios - Seward
- Sunny Cove Sea Kayaking - Seward
- SVT Health and Wellness
- Sweeny's Clothing
- Tammy's Flowers and Gifts
- The Daily Buzz
- The Duck Inn
- The Fitness Place
- The Medicenter - Kenai
- The UPS Store # 2752
- Thorn's Showcase Lounge - Seward
- Tina's Hair Pros
- Trustees Services of Alaska Inc
- Turnagain Heights., LLC
- Ulmer's Drug & Hardware
- Upstream Family Medicine
- Veronica's
- VIDA!
- Weaver Brothers
- West Chiropractic Clinic
- White Crane Academy
- Wilderness Way
- Winter's Grace Guidance Center

## Mat-Su Valley Supporters

- Above Alaska Aviation, LLC - Talkeetna
- Alaska Center for Dentistry
- Alaska Center for Resource Families
- Alaska Family Services
- Alaska Midnite Scents - Wasilla
- Alaska Premier Real Estate LLC
- Alaska Sunset View Resort
- Alaska's Mat-Su Bed & Breakfast Association
- All I Saw Cookware - Wasilla
- Allison Little Steel Art
- Alpha Counseling and Education Services
- Animal Food Warehouse
- Architects Alaska
- Area 51 Hobby and Games, LLC - Wasilla
- Arkose Brewery - Palmer
- Aurora Dora - Talkeetna
- Beadberry Patch - Talkeetna
- Big Brothers and Sisters of Alaska - Mat-Su
- Board Media Group LLC
- C'est La Vie Affordable Fashions - Wasilla
- CAP Solutions
- Capstone Medical Group
- CCS Early Learning
- Chickaloon Village Traditional Council
- Choose Food Wisely LLC
- Christensen Chiropractic
- Church of the Covenant
- Classified Employees' Association of Matanuska-Susitna Borough School District
- Colony Inn
- Country Financial
- Country Legends 100.9 FM - Wasilla
- Crumb LLC
- Denali Images Art Gallery - Talkeetna
- DermaGlow Alaska - Wasilla
- Diversified Tire - Wasilla
- Ehman Outdoors
- Envision Matsu
- Family Promise Mat-Su
- Fancy Lou Boutique - Wasilla
- Fence Emporium of Alaska Inc.
- Fireside Books
- First Presbyterian Church of Wasilla
- Flagship Properties LLC
- Flying Squirrel Bakery Cafe - Talkeetna
- Forget Me Knot Hair Salon - Wasilla
- Mat-Su Education Association (MSEA)
- Mat-Su Health and Social Service Board
- Mat-Su Heath Foundation
- Mat-Su Integrative Medicine, LLC - Wasilla
- Mat-Su Midwifery and Family Health
- Mat-Su Regional Medical Center
- Mat-Su Regional Medical Center Cardiac Rehab
- Mat-Su Senior Services
- Mimi's Closet - Wasilla
- Mocha Me Crazy
- Moonstone Farm
- Murphy & Associates Engineering
- My House/The Gathering Place
- New Horizons Telecom LLC - Palmer
- Non Essentials LLC
- North Star Animal Hospital
- Northern Susitna Institute - Talkeetna
- Now Health, LLC - Palmer
- OnMission Church
- Palmer Pentecostal Church
- Percussion in the Valley - Palmer
- Pia's Custom Picture Framing - Wasilla
- Pioneer Peak Dental
- Pippel Insurance
- PJ's Crafty Corner - Wasilla
- RMG Real Estate
- Rock-On Climbing, LLC
- Rose Ridge Vacation Center
- Sea Star Strategies LLC
- Set-Free Alaska
- Sheep Mountain Lodge
- Spenard Builders Supply - Wasilla
- Stage 2 Studios, LLC
- Steve's Toyo Stove Repair
- Summit Worship Center - Wasilla
- Sunshine Community Health Center
- Susitna Mechanical
- Tailgaters Sports Bar & Grill LLC
- Take Shape for Life
- Talkeetna Roadhouse
- The Alaska Boathouse Restaurant
- The Alcove Salon - Wasilla
- The Algone Center
- The Baby Store Toys and More - Wasilla
- The Beader's Paradise - Wasilla
- The Dancing Leaf Gallery - Talkeetna

- Geneva Woods Pharmacy
- Greater Palmer Chamber of Commerce
- Hatcher Pass Bed & Breakfast
- Hitchcock Piano Studio - Palmer
- Howdie Inc. - Wasilla
- JC Brandt Insurance & Financial Services, Inc. - Wasilla
- Jensi Automotive
- Just Imagine Toys
- Knik Tribal Council
- Latitude 62 Lodge - Talkeetna
- Learning Essentials
- Locals Pub & Pizzeria
- Lodestar Family Eye Care, PC - Palmer
- Lucas Chiropractic Clinic
- Mat-Su Borough School Board
- Mat-Su Coalition on Housing & Homelessness
- Mat-Su Conservation Services
- Mat-Su Convention & Visitor Bureau
- The Grand View Inn & Suites
- The Grill @ The Grand View
- The Metro Cafe - Wasilla
- Thrive Mat-Su
- Unaccompanied Youth Task Force
- United Way of Alaska
- Urban Roots Hair Studio
- Valley Christian Conference
- Valley Orthodontics
- Valley Rotaract
- Village Arts & Crafts Gift Shop - Talkeetna
- Wasilla Chiropractic Clinic
- Wasilla Chrysler Dodge Jeep Ram
- Wasilla Physical Therapy
- Wasilla Presbyterian Church
- Wild Iris Family Medicine & Maternity Care - Wasilla
- Windbreak Café/Trouthouse Lounge

## Northern Alaska Supporters

- AC Q-Stop - Barrow
- AC Value Center Barrow
- Airport Pizza
- Alaska Airlines - Barrow
- Alaska Technical Center - Kotzebue
- Alaska Technical Center-Kotzebue
- Arctic Cab - Barrow
- Arctic Chiropractic - Kotzebue
- Arctic Grocery Inc. - Barrow
- Arctic Kitchen and Apartments - Barrow
- Arctic Pizza - Barrow
- Barrow Kitchen
- Bearing Song & Gifts
- Bering Air-Kotzebue
- Bering Air, Inc. - Nome
- City of Kiana
- Era Alaska Kotzebue
- FBX Aviation Services - Kotzebue
- Illisagvik College - Barrow
- Inupiat Cleaners - Barrow
- Inupiat Cleaners - Barrow
- KBRW FM - Barrow
- KNOM Radio Mission, Inc.
- Leeza's Beauty Salon - Barrow
- Maruskiya's of Nome Alaska Native Art
- McIntyre Optometry Services, Inc. - Barrow
- Native Village of Brevig Mission
- Native Village of Kotzebue
- Native Village of Koyuk IRA Council
- Native Village of St Michael
- Noorvik Native Community
- Northwest Arctic Borough
- Northwest Inupiat Housing Authority
- Northwest Inupiat Housing Authority - Kotzebue
- Northwestern Aviation - Kotzebue
- Osaka Asian Cuisine - Barrow
- OTZ Telecommunications, Inc. - Kotzebue
- Ravn Alaska - Kotzebue
- Ravn Alaska / Hageland Aviation - Barrow
- Ryan Air
- Ryan Air - Kotzebue
- Sam & Lee's Restaurant - Barrow
- Samuel Simmonds Memorial Hospital - Barrow
- Savoonga Native Store
- Sitmasialk Native Corporation
- The Fur Shop - Barrow
- UAF Chukchi Campus - Kotzebue
- Village of Nome IRA Council
- Village of Solomon
- Water Service - Barrow
- Wells Fargo Bank - Barrow
- Wolf Creek Sales & Service - Kotzebue

## Southeast Alaska Supporters

- 1st City 1st Aid - Ketchikan
- Adventure Karts - Ketchikan
- Aimee Shull Photography
- Alaska Arts Southeast
- Alaska Electric Light & Power Company - Juneau
- Alaska Galore Tours - Juneau
- Alaska Grafix - Juneau
- Alaska Island Community Services
- Alaska Laundry and Cleaners - Juneau
- Alaska Native Brotherhood & Alaska Native Sisterhood Grand Camp - Ketchikan
- Alaska Native Girls - Metakatia
- Alaska Native Sisterhood Camp #16
- Alaska Rainforest Sanctuary
- Alaska Robotics
- Aquatic Alaska Adventures
- Armstrong - Keta, Inc. - Baranof Island
- At the White House B& B - Skagway
- Aurora Chiropractic Center
- AWARE Inc-Juneau
- BCD Construction, Inc. - Juneau
- Bev's Flowers and Gifts
- Braveheart Volunteers
- Breakaway Adventures - Wrangell
- Brenner's Fine Clothing and Gifts
- Catholic Charities
- Changing Tides LLC - Juneau
- Chilkoot Indian Association
- City Center Chiropractic - Juneau
- Creek Street Historic Properties
- Creekside Family Health Clinic - Ketchikan
- Diamond C Cafe - Wrangell
- Diversified Investments & Insurance - Ketchikan
- Easeful Being - Juneau
- Fairweather Gallery - Juneau
- Foggy Mountain Shop - Juneau
- Frontier Shipping & Copyworks - Ketchikan
- Garnet School
- Gateway Center for Human Services/Akeela
- Glacier Auto Parts
- McDonald's of Southeast Alaska
- National Council on Alcohol and Drug Dependence
- Native Craft Co-Op - Juneau
- Natural Healthcare - Juneau
- North Star Television Network
- North to Alaska
- Northern Light United Church - Juneau
- Northwind Architects - Juneau
- Organized Village of Kasaan
- Paper Pirates-Sanctuary
- Peace Health Ketchikan Medical Center
- Petersburg Indian Association
- Petersburg Mental Health
- Petersburg School District
- Radio Shack Ketchikan
- Rainbird Community Broadcast Corp. - Ketchikan
- Rainbow Foods - Juneau
- Rainforest Crafts - Ketchikan
- Rainforest Naturopathic Medicine
- Red Onion Saloon
- Rob Cohen Music - Juneau
- Robertson's Gallery & Custom Framing
- Rodfather's Broiler Restaurant
- Seaside Yarns, LLC - Juneau
- Shattuck & Grummett Insurance
- Sitka Dental Clinic
- Sitka Tribe of Alaska
- Sitkans Against Family Violence
- Skagway Brewing Company
- Southeast Alaska Guidance Association (SAGA)
- Southeast Alaska Regional Health Consortium (SEARHC)
- Southeast Furniture Warehouse
- Southeast Medical Clinic
- Starboard Frames and Gifts - Ketchikan
- State Farm Insurance - Ketchikan
- Stereo North Inc.
- Stikine Drug - Wrangell
- Studio Max - Ketchikan

- Goldbelt Inc - Juneau
- Haines Brewing Company, Inc.
- Healing Touch Alaska - Juneau
- Hearthside Books & Toys - Juneau
- Heritage Coffee
- Heritage Northwest Inc. - Juneau
- Hi-Tide Construction - Juneau
- Hoonah Indian Association
- Hoonah Liquor Store
- Icy Straits Lodge
- Ike's Fuel
- Inn at Creek Street - Ketchikan
- Inside Passage Midwifery & Natural Medicine
- Island Pharmacy - Ketchikan
- Jerry's Books and Games - Ketchikan
- Juneau Arts & Humanities Council
- Juneau Family Health and Birth Center
- Juneau's Imagination Station
- Ketchikan Public Health
- Ketchikan Ready Mix Inc.
- Ketchikan Wellness Coalition
- Ketchikan Youth Court
- Knockout Productions - Juneau
- Lifetime Eye Care
- Love in Action - Ketchikan
- Sylvan Enterprises
- Taku Lanes - Juneau
- Taquan Air - Ketchikan
- The Fox Hole - Ketchikan
- The Office Bar - Hoonah
- The Wild Oven Bakehouse - Juneau
- Tideland Tackle Marine - Hoonah
- Tongass Federal Credit Union - Ketchikan
- Tongass Mobile Estates - Hoonah
- Trickster Company - Juneau
- TSS, Inc. - Ketchikan
- University of Alaska - Southeast Campus
- Urban Eskimo - Juneau
- Videll Entertainment
- Wanzer, Terral - Ketchikan
- Weaver, Douglas, DDS - Juneau
- Wellspring Inc Integrative Medicine
- Wellwood Center Bed & Breakfast - Copper Center
- Willow Mountain Lodge
- Wostmann & Associates Inc
- Wrangell Early Childhood Education Coalition
- Wrangell Public Health Center
- Wrangell School District
- Yoga Union Inc.

## Southwest Alaska Supporters

- 4th and Broadway Boutique
- Alakanuk Tribal Council
- Aleut Community of St. Paul
- Aleutian Pribilof Island Association
- Arctic Belle Boutique - Bethel
- ArXotica Inc
- Association of Village Council Presidents (AVCP)
- Bethel Alaska PC
- Bethel Car Rental
- Bethel Chamber of Commerce
- Bethel Community Services Foundation
- Bethel Family Clinic
- Bethel Friends of Canines
- Bethel Native Corporation
- Bethel Public Health Center
- Bristol Alliance Fuels, LLC - Dillingham
- Bristol Bay Area Health Corporation
- Bristol Express - Dillingham
- Bristol Express Fuels, Inc. - Dillingham
- Bristol Express Gas Station & C-Store - Dillingham
- Brown Slough Bed & Breakfast - Bethel
- City of Dillingham Senior Center
- Donlin Gold
- Herron, Bob
- Iqurmiut Traditional Council - Russian Mission
- Kuskokwim Commercial Supply - Bethel
- Kuskokwim Wilderness Adventures - Bethel
- Let's Get Growing
- Lime Village Traditional Council - McGrath
- Lucy's Cache - Bethel
- Marilyn's Hair Salon
- Native Village of Bill Moore's Slough
- Native Village of Eek
- Native Village of Emmonak
- Native Village of Kwinhagak
- Native Village of Marshall
- Native Village of Nunam Iqua
- Native Village of Tununak
- Northern Lights Essential Oil Products
- Ohogamiut Traditional Council - Marshall
- Orutsaramiut Native Council - Bethel
- Portraits by Pipa
- Pribilof School District
- Sammy's Market - Bethel
- Sattler Strategies - Bethel
- Snack Shack - Bethel
- Stan's Barber Shop - Bethel
- The Delta Discovery, Inc. - Bethel
- Toksook Bay Head Start
- Unalaska City School Board
- Unalaskans Against Sexual Assault and Family Violence
- USA Pools - Bethel
- Volcarce Law Office - Bethel
- Yukon-Kuskokwim Health Corporation
- Yupiit of Andreafski Tribe - St. Marys
- Yupiit Piciryarait Cultural Center - Bethel
- Yupiit Piciryarait Museum - Bethel
- Yuut Elitnaurviat - The People's Learning Center, Inc. - Bethel

# SENATOR PETER A. MICCICHE

*Alaska State Legislature*

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## **Bars and Restaurants – SB 1 support (not comprehensive)**

DISTRICT 0

*Bear Creek*

**Midnight Sun Brewing**

*Cooper Landing*

**Lone Star Steakhouse**

*Crown Point*

*Funny River*

**Spenard Roadhouse**

*Hope*

**Eagle River Alehouse**

*Kalifornsky*

**Anchor Inn in Whittier**

*Kenai*

*Lowell Point*

**Arctic Roadrunner**

*Mackey Lake*

*Moose Pass*

**Sea Galley**

*Nikiski*

**Moose's Tooth**

*Primrose*

**Gallo's Mexican Restaurant**

*Ridgeway*

**Humpy's Great Alaskan Alehouse**

*Salamatof*

*Seward*

**The Blue Loon (Fairbanks)**

*Soldotna*

*Sterling*

**Bobby's Restaurant (Fairbanks)**

**Lake Louise Lodge**

**Tonsina River Lodge (Copper Center)**

**Henry's Great Alaskan Restaurant  
(Kodiak)**

**Lavelle's Bistro (Fairbanks)**

**Lavelle's Taphouse (Fairbanks)**

**McCafferty's (Fairbanks)**

**Locals Pub & Pizzeria (Wasilla)**

**Tailgaters Sports Bar & Grill (Wasilla)**

**The Windbreak Hotel, Café & Lounge  
(Wasilla)**

**Red Onion Saloon (Skagway)**

**Skagway Brewing**

**Haines Brewing**

**The Office Bar - Hoonah**

**Mykel's Restaurant**

**Palmer City Alehouse**

**Colony Inn**

**Spurs Bar and Grill**



Enriching Our Native Way of Life

March 20, 2015

Senator Peter Micciche  
Alaska State Capitol Building Room 514  
Juneau, AK 99801

Dear Senator Micciche:

Bristol Bay Native Corporation (BBNC) supports SB 1 (currently in Committee as CS SSSB1), legislation that would limit the indoor, enclosed or public spaces where smokers could continue to smoke. BBNC currently restricts smoking inside its corporate offices and these rules serve our employees well – protecting non-smoking employees from having to endure second-hand smoke while still providing smoking employees with reasonable access to places they can use tobacco products. BBNC believes SB 1 is similarly in the best interests of all Alaskans.

BBNC appreciates your concerns about limiting state government's intrusions against individual personal liberties. We also agree with the assessment contained in your sponsor statement for SB 1, that this proposed legislation does not overstep that line. The legislation would only apply to indoor or enclosed areas of public buildings and to limited, specified types of private spaces or public outdoor spaces. It does not discriminate against smokers in hiring or employment decisions and allows local governments to adopt more restrictive ordinances should they so choose.

Most importantly, SB 1 is good legislation because it addresses a significant public health problem. According to information contained in "Alaska Tobacco Facts" (April 2012), a publication produced by the Alaska Department of Health and Social Services, exposure to second-hand smoke poses significant health concerns in that it can increase an individual's risk of developing heart disease by 25%-30% and lung cancer by 20%-30%. These are unacceptable health risks that also impose significant and avoidable economic burdens on Alaskans and Alaska businesses. By some estimates, exposure to second-hand smoke costs Alaskans millions of dollars in direct health care costs and lost income and costs Alaskan businesses significant amounts of lost employee time.

Now is the time for the Alaska state government to act on this issue because data contained in the same "Alaska Tobacco Facts" publication shows that Alaskans, smokers and non-smokers alike, overwhelmingly favor smoking bans in or at their workplaces, restaurants, and schools and school events (65%-90% favor).

Simply stated, second-hand smoke is a health and economic issue that Alaskans want addressed. BBNC supports SB1 because it addresses that need in a responsible manner.

Regards,

Jason Metrokin  
President & CEO

cc: Commissioner Valarie Davidson, HSS

# MAT-SU VALLEY Frontiersman

## Urge legislators to pass smoke-free legislation

By Dr. John Yordy

Mar 19, 2016

I recently had the wonderful opportunity to travel to Juneau on Tuesday, March 8 to support a smoke-free workplace for all Alaskans. I went with a group of advocates and concerned citizens to meet with Alaska State Legislators regarding SB1 and HB136, bills that will create a smoke-free workplace across the entire state. Today, laws, statutes and ordinances that prohibit smoking in the workplace only protect 50 percent of all Alaskans. Many cities, municipalities and Boroughs in Alaska have healthcare powers, enabling them to pass local legislation that creates and enforces a smoke-free work environment. However, there are many areas in the state that lack health care powers, including the Mat-Su Borough, and these places must rely solely on the state legislature for the creation of laws related to healthcare powers, such as the creation of a smoke-free workplace.

There is no longer any dispute directly linking smoking to disease, be it cancer, heart disease, lung disease or a myriad of other diseases directly linked to being causally related to smoking. The vast majority of Alaskans all recognize the harmful nature of smoking. Despite this knowledge, many Alaskans continue to smoke because of addiction to nicotine and to the habit of smoking itself. And just as with primary smoking, there is irrefutable data linking second-hand smoke to these same diseases. The difference between the two is that the first is an active choice and the other often is not. There are many reasons why people may feel compelled to expose themselves to second hand smoke despite a desire to the contrary. It might be the only job, or the best job, they can get. Who among us would turn down the only job we can find, or the best job we can find, the job we need to provide for our family, to buy food and medicine for our kids, because of second hand smoke? How about the up and coming musician, or one that is already established for that matter, that feels compelled to play gigs at local bars and restaurants that allow smoking?

We had musicians in our midst today that suffer from permanent lung damage from singing for years in smoke-filled venues. As another one of the attendees put it today, it is not about the right to smoke, but the right to not have to breathe in second-hand smoke. Yes, sometimes it is possible to vote with our feet, but this is, unfortunately, not always possible. No one should ever have to choose between their health and a good job.

The data regarding tobacco smoke and direct links to disease are clear. But what about e-cigarettes (eCigs)? There is a lot of confusion and misinformation regarding the health detriments of eCigs. Many purveyors of eCigs, including retailers, manufactures, and even big tobacco

companies, have launched concerted and coordinated campaigns to convince all of us that eCigs are safe, that they cannot and should not be compared to tobacco cigarettes. The data would say otherwise. There are many chemicals present in eCig vapor that are known carcinogens or small particulate irritants such as acetaldehyde, formaldehyde, benzene, toluene, propylene glycol and heavy metals such as lead, tin and nickel, along with silicate nanoparticles. Furthermore, there is no regulation on the concentration of nicotine in eCigs, with some formulations delivering doses many times higher per puff than traditional cigarettes. Second-hand vapor from eCigs is not safe and can harm those people in close proximity. eCigs must not be considered safe alternatives to smoking and must be included in a smoke-free workplace. The same is also true for marijuana, since marijuana smoke also contains carcinogens.

Smoking disproportionately affects those people that are economically disadvantaged with lower salary levels and those with lower levels of education.

Smoking exacerbates economic and health disparities since it costs real money to buy traditional cigarettes or eCigs, and translates into worse individual health and higher health care costs for smokers compared to non-smokers. This is indisputable. There is a reason why every life insurance application asks about tobacco use, because it is linked to higher rates of death in every age group. Any additional incentive to not smoke, or to smoke less, resulting in less people smoking, will result in a reduction in these economic and health disparities. Furthermore, any improvement in the health of our population will translate into money saved by the state on healthcare. In a time of fiscal and budget crises, we should look for every way possible to save the State of Alaska money, and every study ever done has demonstrated that prevention and reduction in smoking saves healthcare dollars.

Creating a smoke-free work environment for all Alaskans, thereby removing all non-smokers from unwanted second-hand smoke, effectively results in instantaneous smoking cessation for each person breathing in second-hand smoke.

We are not asking for a mandate to prohibit smoking, or telling anyone they cannot smoke. In this country, people have a right to make decisions for themselves. This includes the decision to smoke. We are only asking that those who choose to smoke take it outside so that those that choose not to smoke are not forced to breathe in secondhand smoke. The right to smoke in the workplace should not trump the right to not be forced breathe in second-hand smoke. For all of the above reasons, it is important for all Alaskans to support a statewide smoke-free workplace. We all favor and support personal liberties, and to paraphrase a quintessential quote on liberty and personal freedoms, the right of my fist to fly freely and uninhibited through the air ends at the beginning of your nose. This is a legal principle in our great country that values personal freedoms. A smoke-free workplace makes sure your nose remains untouched. Please call or write your state representatives and let them know you support the passage of this important legislation.

*Dr. John Yordy is a radiation oncologist at Valley Radiation Therapy Center in Palmer.*

*This column is the opinion of the author and does not necessarily reflect the views of the Mat-Su Valley Frontiersman or its parent company, Wick Communications.*

# Tobacco bill makes progress

Posted: March 19, 2016 - 8:13pm

By Kelly Sullivan

## Peninsula Clarion

The bill that would ban smoking in the workplace is making progress in the Alaska Senate.

SB 1, or the "Take it Outside Act", sponsored by Sen. Peter Micchiche, R-Soldotna, has passed the Senate Finance Committee, and is headed to the floor for a vote. If passed this session, smoking and the use of e-cigarettes would be illegal in all public areas and any establishment with hired employees.

"The bill is strong and will provide protections to employees in many areas of the state currently not protected by such a law," said Emily Nenon, Alaska government relations director for the American Cancer Society Cancer Action Network.

Once passed in the senate, the bill will move to the House, Nenon said. However, HB 328, sponsored by Rep. Dave Talerico, R-Healy, "Take it Outside's" companion legislation is sitting in the House, not yet having started the committee process, she said.

If it is eventually signed by Gov. Bill Walker the bill will become effective Oct. 1, she said.

The Cancer Action Network is one of many collaborating organizations, including the Alaska's chapter of the American Lung Association, the American Heart Association, the Alaska Native Health Board, among others, Nenon said. The groups have collected nearly 1,000 resolutions from businesses and organizations supporting the legislation throughout the state, she said.

Kenai Mayor Pat Porter is one of the Cancer Action Network's local advocates. She said most of the area's business owners want to go smoke-free.

"The only feedback that I have gotten over all these years is that the majority of them would love to do that, they just want to be on a level playing field," Porter said.

Those that do allow smoking in their establishment are worried they will lose business, that patrons will take their business out of town, Porter said. From what she has heard, those that have already chosen not to allow smoking in recent years have actually seen an increase in customers, she said.

Polling data collected by the Cancer Action network shows 88 percent of Alaskans want all worker protected, said Noe Baker, senior specialist of media advocacy for the cancer network. Nearly 70 percent prefer laws that prohibits smoking in public buildings, offices, bars and restaurants, she said.

**“Given Alaska’s fiscal crisis, this bill will save the state money,” Baker said. “Right now, Alaska spends \$438 million annually in health care costs associated with tobacco-related illnesses. Making all of Alaska businesses completely smoke-free will help save the state almost \$5 million in cancer, heart disease and heart attack costs within five years.”**

**Porter said her husband and his sister both have asthma, having been exposed to second-hand smoke as adolescents. She said many young people take what jobs they can get because they need the money, not thinking 30 years down the road that working that regularly inhaling tobacco products in their environment may have serious repercussions.**

**If passed, businesses would be required to post no-smoking signs, and remove ash trays from inside the establishment, Nenon said.**

**“Laws like this are largely self-enforcing,” Nenon said. “The formal enforcement of this law will be through a complaint-driven process. If a complaint is filed with the state about a violation of the law, the state will first reach out to the business with education about the law, and notify a local community tobacco prevention partner to help provide education if necessary.”**

**The Alaska Control Alliance and the state Tobacco Prevention Control Program have already been carrying out that education process, she said.**

**Nenon said municipalities that have already passed local no-smoking laws have proven education is “typically all that is needed.” Anchorage has had a comprehensive smoke-free law in place for nearly nine years and the health department has never issued a citation, she said.**

**“If a citation were necessary at any point, there is a fine structure for the business owner laid out in the bill,” Nenon said.**

***Reach Kelly Sullivan at [kelly.sullivan@peninsulaclarion.com](mailto:kelly.sullivan@peninsulaclarion.com).***

# Alaska Dispatch News

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## **Alaska is dying for a statewide smoke-free workplace policy**

Michelle Sparck

April 4, 2014

We take our smoke-free air for granted, until it is in our face, or more disturbingly, in our children's faces. We all have a right to the expectation of smoke-free air.

My father, Harold Murray Sparck, was a natural resources consultant. From 1969 on, he worked tirelessly to build up the first grassroots environmental movement to represent Native interests as stakeholders in resource exploration and exploitation, namely for the Yup'ik / Cup'ik of the Yukon Kuskokwim Delta, but also for other demographics of the coastal and interior areas of the state. With Nunam Kitlutsisti (Stewards of the Land), the Association of Village Council Presidents, the Bering Sea Fishermen's Association, the United Nations Convention on the Law of the Sea, the State of Alaska and the Alaska Board of Fisheries, Alaska Board of Game, the Mink Festival, the Community Development Quotas, and the Migratory Bird Treaty Act, my father and many of his contemporaries subjected themselves to thousands of hours in meetings as engaged citizens and advocates. In those days, my father had to endure rooms full of secondhand smoke for as much as 10 hours a day in marathon meetings. He'd come home from a trip, and his luggage and clothing would reek of smoke.

Unable to shake a cough, my father got an X-ray, revealing both lungs riddled with tumors. This was only a few weeks after his 51st birthday. The doctors gave him two weeks to live. He rallied enough to settle his affairs, but he died 10 weeks after diagnosis. My father was not a smoker.

The state of Alaska currently does not have a strong smoke-free law. However, many communities have passed strong local laws. The City of Bethel was one of the first communities to opt for a smoke-free law, three years after his death, in 1998. Anchorage, Klawock and Haines Borough have passed 100 percent smoke-free laws that cover all workplaces, including all restaurants and bars. It is still too much that only half of Alaska's population is covered by a current smoke-free workplace law. No one should have to choose between their health and a good working environment.

We need legislation to combat this workplace threat. Secondhand smoke is a major cause of needless, preventable suffering and death. And it isn't only cancer we need to worry about; non-smokers exposed to secondhand smoke increase their risk of heart disease and lung cancer by up to 30 percent. Ventilation and other "air-cleaning" methods cannot scrub the damage that secondhand smoke causes. Comprehensive smoke-free workplace policies are the only effective way to eliminate secondhand

smoke exposure in the workplace. We know enough now about the dangers of smoking, and secondhand smoke, to do something about our workplace health.

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*The views expressed here are the writer's own and are not necessarily endorsed by Alaska Dispatch, which welcomes a broad range of viewpoints. To submit a piece for consideration, e-mail [commentary\(at\)alaskadispatch.com](mailto:commentary(at)alaskadispatch.com) [1].*

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## Vital Signs: Exposure to Electronic Cigarette Advertising Among Middle School and High School Students — United States, 2014

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### Abstract

**Introduction:** Electronic cigarette (e-cigarette) use has increased considerably among U.S. youths since 2011. Tobacco use among youths in any form, including e-cigarettes, is unsafe. Tobacco product advertising can persuade youths to start using tobacco. CDC analyzed data from the 2014 National Youth Tobacco Survey to estimate the prevalence of e-cigarette advertisement exposure among U.S. middle school and high school students.

**Methods:** The 2014 National Youth Tobacco Survey, a school-based survey of middle school and high school students in grades 6–12, included 22,007 participants. Exposure to e-cigarette advertisements (categorized as “sometimes,” “most of the time,” or “always”) was assessed for four sources: retail stores, Internet, TV and movies, and newspapers and magazines. Weighted exposure estimates were assessed overall and by school type, sex, race/ethnicity, and grade.

**Results:** In 2014, 68.9% of middle and high school students (18.3 million) were exposed to e-cigarette advertisements from at least one source. Among middle school students, exposure was highest for retail stores (52.8%), followed by Internet (35.8%), TV and movies (34.1%), and newspapers and magazines (25.0%). Among high school students, exposure was highest for retail stores (56.3%), followed by Internet (42.9%), TV and movies (38.4%), and newspapers and magazines (34.6%). Among middle school students, 23.4% reported exposure to e-cigarette advertising from one source, 17.4% from two sources, 13.7% from three sources, and 11.9% from four sources. Among high school students, 21.1% reported exposure to e-cigarette advertising from one source, 17.0% from two sources, 14.5% from three sources, and 18.2% from four sources.

**Conclusions and Implications for Public Health Practice:** Approximately seven in 10 U.S. middle and high school students were exposed to e-cigarette advertisements in 2014. Exposure to e-cigarette advertisements might contribute to increased use of e-cigarettes among youths. Multiple approaches are warranted to reduce youth e-cigarette use and exposure to e-cigarette advertisements, including efforts to reduce youth access to settings where tobacco products, such as e-cigarettes, are sold, and regulation of youth-oriented e-cigarette marketing.

### Introduction

Electronic cigarettes (e-cigarettes) are battery-powered devices capable of delivering nicotine and other additives (e.g., flavorings) to the user in an aerosol form. E-cigarette use has increased considerably among U.S. youths in recent years. During 2011–2014, past-30-day e-cigarette use increased from 0.6% to 3.9% among middle school students and from 1.5% to 13.4% among high school students; in 2014, e-cigarettes

became the most commonly used tobacco product among middle school and high school students (1). Youth use of tobacco in any form (combustible, noncombustible, or electronic) is unsafe (2,3). E-cigarettes typically deliver nicotine derived from tobacco, which is highly addictive, might harm brain development, and could lead to sustained tobacco product use among youths (2). In April 2014, the Food and Drug Administration



(FDA) issued a proposed rule to deem all products made or derived from tobacco subject to FDA jurisdiction (4).

In the United States, e-cigarette sales have increased rapidly since entering the U.S. marketplace in 2007, reaching an estimated \$2.5 billion in sales in 2014 (5,6). Corresponding increases have occurred in e-cigarette advertising expenditures, which increased from \$6.4 million in 2011 to an estimated \$115 million in 2014 (7,8). Tobacco product advertising is causally related to tobacco product initiation among youths (9). Many of the themes used in conventional tobacco product advertising, including independence, rebellion, and sexual attractiveness, also are used to advertise e-cigarettes (9,10). Moreover, almost all tobacco use begins before age 18 years, during which time there is great vulnerability to social influences, such as youth-oriented advertisements and youth-generated social media posts (9). This report assesses exposure to e-cigarette advertisements among U.S. middle school and high school students.

## Methods

Data from the 2014 National Youth Tobacco Survey (NYTS) were analyzed to assess exposure to e-cigarette advertisements from four sources: retail stores (convenience stores, supermarkets, or gas stations); Internet; TV and movies; and newspapers and magazines. NYTS is a cross-sectional, school-based, self-administered, pencil-and-paper questionnaire administered to U.S. middle school (grades 6–8) and high school (grades 9–12) students.\* A three-stage cluster sampling procedure was used to generate a nationally representative sample of U.S. students who attend public and private schools in grades 6–12. In 2014, 207 of 258 selected schools (80.2%) participated, yielding a sample of 22,007 participants (91.4%) among 24,084 eligible students; the overall response rate was 73.3%.

Sources of exposure to e-cigarette advertisements were assessed by participants' responses to the following four questions: 1) Internet: "When you are using the Internet, how often do you see advertisements or promotions for electronic cigarettes or e-cigarettes?" 2) Newspapers and magazines: "When you read newspapers or magazines, how often do you see advertisements or promotions for electronic cigarettes or e-cigarettes?" 3) Retail stores: "When you go to a convenience store, supermarket, or gas station, how often do you see advertisements or promotions for electronic cigarettes or e-cigarettes?" 4) TV and movies: "When you watch TV or go to the movies, how often do you see advertisements or promotions for electronic cigarettes or e-cigarettes?" For each question, respondents could select the following options: they

do not use the specific source (e.g., "I do not read newspapers or magazines"), "never," "rarely," "sometimes," "most of the time," or "always." Respondents who said they saw promotions or advertisements "sometimes," "most of the time," or "always" were considered to have been exposed to advertisements from the source; those who selected "never" or "rarely" were considered not exposed. Respondents who did not use a source were also classified as not exposed.† Data were weighted to account for the complex survey design and adjusted for nonresponse. National prevalence estimates with 95% confidence intervals and population estimates were computed; population estimates were rounded down to the nearest tenth of a million. Estimates of exposure for each source were assessed overall and by school type, sex, race/ethnicity, and grade. T-tests were used to calculate differences between groups; a p-value <0.05 was considered statistically significant. The number of exposure sources were summed for each student and reported as the proportion who were exposed to one, two, three, or four sources.

## Results

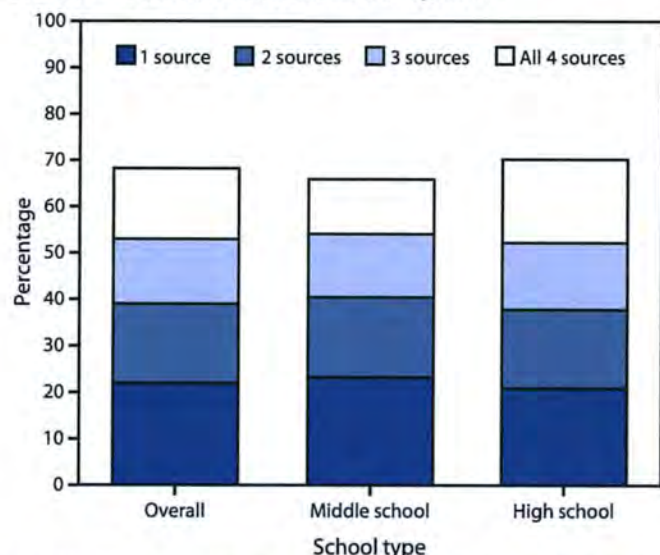
**All students.** Overall, 68.9% of participants (an estimated 18.3 million students) were exposed to e-cigarette advertisements from ≥1 source (Figure). Retail stores were the most frequently reported exposure source (54.8% of respondents, or an estimated 14.4 million students), followed by the Internet (39.8%, 10.5 million), TV and movies (36.5%, 9.6 million), and newspapers and magazines (30.4%, 8.0 million) (Table). Exposure to e-cigarette advertisements on the Internet and in newspapers and magazines was reported more frequently by females than males. Exposure in retail stores was higher among non-Hispanic whites (whites) than non-Hispanic blacks (blacks) and students of other non-Hispanic races/ethnicities. Exposure from TV and movies was higher among blacks and Hispanics than whites. Exposure was higher among students in higher grade levels for all sources. Overall, 22.1% of participants (5.8 million students) reported exposure to e-cigarette advertising from one source, 17.2% (4.5 million) from two sources, 14.1% (3.7 million) from three sources, and 15.4% (4.1 million) from four sources (Figure).

**Middle school students.** Among middle school students, 66.4% (7.7 million) were exposed to e-cigarette advertisements from at least one source (Figure). Retail stores were the most frequently reported source of exposure (52.8% of respondents, or an estimated 6.0 million middle school students), followed by the Internet (35.8%, 4.1 million), TV and movies (34.1%, 3.9 million), and newspapers and magazines (25.0%,

\* Additional information available at [http://www.cdc.gov/tobacco/data\\_statistics/surveys/nyts/index.htm](http://www.cdc.gov/tobacco/data_statistics/surveys/nyts/index.htm).

† Respondents who indicated that they did not use the specified source, and who were reclassified as not exposed, included 717 (3.3%) who did not visit retail stores, 715 (3.3%) who did not use the Internet, 697 (3.2%) who did not watch TV/movies, and 5,567 (25.3%) who did not read newspapers/magazines.

**FIGURE. Proportion of U.S. students exposed to electronic cigarette (e-cigarette) advertisements, by school type and number of exposure sources\* — National Youth Tobacco Survey, 2014**



\* The four sources were retail stores, Internet, TV and movies, and newspapers and magazines.

2.8 million) (Table). Exposure to e-cigarette advertisements on the Internet was higher among female than male middle school students. Exposure in retail stores was higher among whites than blacks and other non-Hispanic race/ethnicities. Exposure from TV or movies was higher among blacks than whites. A single source of exposure was reported by 23.4% of participants (2.7 million middle school students); two sources by 17.4% (2.0 million), three sources by 13.7% (1.5 million), and four sources by 11.9% (1.3 million) (Figure).

**High school students.** Among high school students, 70.9% of respondents (an estimated 10.5 million high school students) reported exposure to e-cigarette advertisements from at least one source (Figure). Similar to middle school students, more than half of reported e-cigarette advertising exposures (56.3%, 8.3 million) occurred in retail stores, followed by the Internet (42.9%, 6.3 million), TV and movies (38.4%, 5.6 million), and newspapers and magazines (34.6%, 5.1 million) (Table). Exposure in retail stores was higher among whites than blacks and other non-Hispanic race/ethnicities. Exposure from TV and movies was higher among blacks than whites. One source of exposure was reported by 21.1% of participants (3.1 million high school students), two sources by 17.0% (2.5 million), three sources by 14.5% (2.1 million), and four sources by 18.2% (2.7 million) (Figure).

## Conclusions and Comments

In 2014, nearly seven in 10 (18.3 million) U.S. middle school and high school students were exposed to e-cigarette

advertisements from at least one source, and approximately 15%, or 4.1 million students, were exposed to e-cigarette advertisements from all four sources. Approximately half were exposed to e-cigarette advertisements in retail stores, whereas approximately one in three were exposed on the Internet, on TV or at the movies, or while reading newspapers or magazines. Although there were slight variations by sex and race/ethnicity, the magnitude of exposure was consistent across groups. Implementation of comprehensive efforts to reduce youth exposure to e-cigarette advertising and promotion is critical to reduce e-cigarette experimentation and use among youths.

Retail store exposure to e-cigarette advertising in this study (54.8%) was lower than levels of exposure to conventional cigarette and other tobacco product advertising reported in the NYTS in 2014 (80.6%), but comparable to exposure on the Internet (39.8% versus 46.8%, respectively) and in newspapers and magazines (30.4% versus 34.3%, respectively) (11).<sup>§</sup> Advertising for conventional tobacco products, such as cigarettes, has been shown to prompt experimentation as well as increase and maintain tobacco product use among youths (9). Similarly, according to a recent randomized controlled study, adolescents who were exposed to e-cigarette advertisements on TV were 54% more likely to say they would try an e-cigarette soon, and 43% more likely to say they would try an e-cigarette within the next year, compared with adolescents who were not exposed to e-cigarette advertisements (12). The study also determined that youths exposed to e-cigarette advertisements were more likely to agree that e-cigarettes can be used in places where smoking is not allowed (12). This is consistent with findings that certain e-cigarette marketers are using advertising tactics similar to those used in the past to market conventional cigarettes, including youth-oriented themes, and promoting e-cigarette use as an alternative in places where smoking is not allowed (2,9,10). An analysis of 57 online e-cigarette vendors determined that 70.2% of vendors used more than one social network service to market e-cigarettes (13). Moreover, 61.4% of vendors only required users to click a pop-up or dialog box to self-verify age, and 35.1% of vendors had no detectable age verification process. This unrestricted marketing of e-cigarettes, coupled with rising use of these products among youths (1), has the potential to compromise decades of progress in preventing tobacco use and promoting a tobacco-free lifestyle among youths (2,9).

Research supports the importance of a multifaceted approach to youth tobacco prevention involving multiple levels of government (2,9,14). Local, state, and federal efforts to reduce youth access to the settings where tobacco products, including

<sup>§</sup> A question assessing exposure to advertisements for cigarettes and other tobacco products from TV and movies is not available for the 2014 NYTS.

TABLE. Electronic cigarette (e-cigarette) advertisement exposure among U.S. middle school and high school students, by sources of exposure — National Youth Tobacco Survey, 2014

Characteristic	Retail stores		Internet		TV and movies		Newspapers and magazines	
	% (95% CI)	Population estimate (millions)*	% (95% CI)	Population estimate (millions)	% (95% CI)	Population estimate (millions)	% (95% CI)	Population estimate (millions)
<b>Overall</b>								
<b>Total</b>	54.8 (53.6–56.0)	14.4	39.8 (38.5–41.1)	10.5	36.5 (35.3–37.7)	9.6	30.4 (29.3–31.6)	8.0
<b>Sex</b>								
Female (referent)	54.9 (53.5–56.3)	7.2	41.1 (39.4–42.9)	5.4	36.4 (34.8–38.0)	4.7	32.1 (30.2–34.1)	4.2
Male	54.6 (52.9–56.4)	7.1	38.5 <sup>†</sup> (37.1–39.8)	5.0	36.7 (35.2–38.2)	4.8	28.7 <sup>†</sup> (27.6–29.9)	3.7
<b>Race/Ethnicity</b>								
Non-Hispanic white (referent)	56.7 (55.0–58.4)	8.4	40.2 (38.5–42.0)	5.9	35.2 (33.7–36.6)	5.2	31.1 (29.7–32.5)	4.6
Non-Hispanic black	51.7 <sup>‡</sup> (49.4–53.9)	1.9	41.3 (38.5–44.2)	1.5	42.2 <sup>§</sup> (40.0–44.3)	1.5	32.2 (30.0–34.5)	1.2
Hispanic	55.6 (53.8–57.4)	3.0	39.4 (37.8–41.1)	2.1	37.4 <sup>§</sup> (35.6–39.4)	2.0	29.2 (27.1–31.3)	1.5
Other (non-Hispanic)	44.4 <sup>§</sup> (39.2–49.7)	0.5	32.6 <sup>§</sup> (28.3–37.2)	0.3	29.9 <sup>§</sup> (26.1–33.9)	0.3	25.3 <sup>§</sup> (22.1–28.7)	0.2
<b>Grade</b>								
6	50.6 <sup>¶</sup> (47.2–54.0)	1.8	32.8 <sup>¶</sup> (30.8–34.8)	1.1	31.8 <sup>¶</sup> (29.4–34.3)	1.1	24.1 <sup>¶</sup> (22.1–26.2)	0.8
7	55.0 (51.7–58.3)	2.1	36.7 <sup>¶</sup> (34.4–39.0)	1.4	35.6 (32.8–38.5)	1.4	25.9 <sup>¶</sup> (24.0–28.0)	1.0
8	52.6 (48.9–56.3)	2.0	37.6 <sup>¶</sup> (34.7–40.5)	1.4	34.6 (32.2–37.1)	1.3	25.0 <sup>¶</sup> (21.5–28.9)	0.9
9	54.7 (52.1–57.2)	2.1	39.2 <sup>¶</sup> (37.0–42.8)	1.5	37.2 (32.2–37.1)	1.4	32.0 <sup>¶</sup> (30.1–34.0)	1.2
10	56.2 (53.6–58.8)	2.1	43.4 (40.9–45.8)	1.6	38.9 (36.5–41.3)	1.4	34.0 <sup>¶</sup> (31.6–36.5)	1.2
11	57.8 (54.9–60.6)	2.0	45.5 (43.3–47.6)	1.6	39.9 (37.1–42.7)	1.4	35.9 (33.7–38.1)	1.2
12 (referent)	56.8 (54.2–59.3)	1.9	44.1 (41.7–46.6)	1.5	37.8 (34.5–41.3)	1.3	37.1 (34.7–39.5)	1.2
<b>Middle School</b>								
<b>Total</b>	52.8 (50.9–54.7)	6.0	35.8 (34.2–37.4)	4.1	34.1 (32.3–35.8)	3.9	25.0 (23.8–26.3)	2.8
<b>Sex</b>								
Female (referent)	52.1 (50.0–54.1)	2.9	37.6 (35.4–39.8)	2.1	33.3 (31.4–35.3)	1.8	26.2 (23.8–28.8)	1.4
Male	53.5 (50.8–56.2)	3.1	34.0 <sup>§</sup> (32.1–36.0)	1.9	34.9 (32.4–37.4)	2.0	24.0 (22.4–25.6)	1.4
<b>Race/Ethnicity</b>								
Non-Hispanic white (referent)	55.1 (52.7–57.5)	3.4	36.5 (34.4–38.5)	2.3	32.6 (30.2–35.2)	2.0	25.7 (23.9–27.5)	1.6
Non-Hispanic black	50.6 <sup>§</sup> (47.6–53.5)	0.7	36.4 (33.2–39.7)	0.5	40.4 <sup>§</sup> (36.8–44.1)	0.6	26.5 (23.6–29.7)	0.4
Hispanic	53.7 (50.9–56.5)	1.3	36.0 (33.9–38.2)	0.9	35.1 (33.1–37.1)	0.8	24.5 (22.3–26.9)	0.6
Other (non-Hispanic)	41.2 <sup>§</sup> (32.9–50.1)	0.2	28.8 <sup>§</sup> (23.7–34.6)	0.1	30.3 (24.8–36.6)	0.1	21.0 <sup>§</sup> (16.9–25.8)	0.1
<b>High School</b>								
<b>Total</b>	56.3 (54.7–57.9)	8.3	42.9 (41.4–44.4)	6.3	38.4 (36.8–40.1)	5.6	34.6 (33.3–36.0)	5.1
<b>Sex</b>								
Female (referent)	57.1 (55.0–59.1)	4.2	43.8 (41.5–46.1)	3.2	38.8 (36.6–41.0)	2.8	36.7 (34.7–38.7)	2.7
Male	55.5 (53.5–57.5)	4.0	42.0 (40.4–43.6)	3.0	38.1 (36.0–40.2)	2.7	32.5 <sup>§</sup> (42.2–45.5)	2.3
<b>Race/Ethnicity</b>								
Non-Hispanic white (referent)	57.8 (55.6–60.0)	4.9	43.0 (40.7–45.4)	3.6	37.1 (35.2–39.1)	3.1	35.2 (33.8–36.6)	3.0
Non-Hispanic black	52.4 <sup>§</sup> (49.4–55.4)	1.1	44.6 (41.0–48.4)	0.9	43.3 <sup>§</sup> (39.7–46.9)	0.9	36.1 (32.8–39.5)	0.8
Hispanic	57.3 (54.9–59.7)	1.6	42.3 (40.1–44.5)	1.2	39.5 (36.4–42.7)	1.1	33.1 (30.0–36.4)	0.9
Other (non-Hispanic)	46.6 <sup>§</sup> (41.6–51.5)	0.3	35.2 <sup>§</sup> (29.8–40.9)	0.2	29.5 <sup>§</sup> (25.9–33.4)	0.1	28.7 <sup>§</sup> (24.6–33.2)	0.1

Abbreviation: CI = confidence interval.

\* Population estimate (rounded down to the nearest 0.1 million).

<sup>†</sup> Statistically significant difference from referent (female) (p-value <0.05).

<sup>‡</sup> Statistically significant difference from referent (non-Hispanic white) (p-value <0.05).

<sup>§</sup> Statistically significant difference from referent (12th grade) (p-value <0.05).

e-cigarettes, are sold could reduce youth e-cigarette initiation and consumption, as well as advertising exposure. Potential strategies include requiring that tobacco products, including e-cigarettes, be sold only in facilities that never admit youths; limiting tobacco outlet density or proximity to schools; and requiring that e-cigarette purchases be made only through face-to-face transactions. Adding e-cigarettes and other tobacco

products to the list of current tobacco products prohibited from being sent through U.S. mail and requiring age verification for online sales at purchase and delivery could also prevent sales to youths. In addition, potential strategies at the federal or state level include regulation of e-cigarette advertising in media, Internet, and retail settings that are demonstrated to appeal to youths or are viewed by a substantial number of youths.

### Key Points

- E-cigarette advertising expenditures have increased dramatically in the United States in recent years, from approximately \$6.4 million in 2011 to \$115 million in 2014.
- Approximately 18.3 million U.S. middle school and high school students were exposed to at least one source of e-cigarette advertising in 2014.
- Approximately half of all middle school and high school students (an estimated 14.4 million students) were exposed to e-cigarette advertisements in retail stores.
- Approximately one third of middle school and high school students were exposed to e-cigarette advertisements on the Internet (10.5 million), on TV or at the movies (9.6 million), or while reading newspapers or magazines (8.0 million).
- Tobacco product advertising can entice youth to start using tobacco. Comprehensive efforts to reduce youth exposure to e-cigarette marketing would be expected to reduce this burden, and consequently reduce youth use of these products.
- Additional information is available at <http://www.cdc.gov/vitalsigns>.

The evidence base for restricting advertisements for conventional tobacco products indicates that these interventions would be expected to contribute to reductions in e-cigarette advertisement exposure and use among youths as well (2,9). To effectively implement these strategies, there is a need for fully funded and sustained comprehensive state tobacco control programs that address all forms of tobacco use, including e-cigarettes (14). These programs are critical to support the implementation and maintenance of proven population-based interventions to reduce tobacco use among youths, including tobacco price increases, comprehensive smoke-free laws, and high impact mass media campaigns (14). However, in 2015, states appropriated only 1.9% (\$490.4 million) of combined revenues of \$25.6 billion from settlement payments and

tobacco taxes for all states on comprehensive tobacco control programs,<sup>†</sup> representing <15% of the CDC-recommended level of funding (\$3.3 billion) for all states combined (14). Only two states (Alaska and North Dakota) currently fund tobacco control programs at CDC-recommended levels. Additionally, parents, caregivers, and health care providers can talk to children about the dangers of tobacco use, encourage or set limits on media use, and teach children critical media viewing skills to increase their resistance to pro-tobacco messages (15).

These findings are subject to at least three limitations. First, advertising exposure was self-reported and is subject to recall bias. Second, data were collected only from students who attended public or private schools and might not be generalizable to middle school- and high school-aged youths who are being homeschooled, youths who have dropped out of school, or youths in detention centers. However, data from the Current Population Survey indicate that 97.5% of U.S. youths aged 10–13 years and 95.4% of those aged 14–17 years were enrolled in a traditional school in 2014.\*\* Finally, exposure to e-cigarette advertisements might have been underestimated, as survey questions asked only about exposure from four sources, and did not assess exposure from other potential sources such as sporting events, radio, or billboards.

This report highlights youth exposure to e-cigarette advertisements, which might be contributing to increasing youth experimentation with and use of e-cigarettes in recent years. Multiple approaches are warranted to reduce youth e-cigarette use and exposure to e-cigarette advertisements, including efforts to reduce youth access to the settings where tobacco products, including e-cigarettes, are sold, and regulation of youth-oriented e-cigarette marketing. The implementation of these approaches, in coordination with fully funded and sustained comprehensive state tobacco control programs, has the potential to reduce all forms of tobacco use among youths, including e-cigarette use.

<sup>†</sup> Available at <http://www.tobaccofreekids.org/microsites/statereport2015/>.

\*\* Available at <http://www.census.gov/hhes/school/data/cps/2014/tables.html>.

<sup>1</sup>Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC; <sup>2</sup>Epidemic Intelligence Service, CDC.

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## References

1. Arrazola RA, Singh T, Corey CG, et al. Tobacco use among middle and high school students—United States, 2011–2014. *MMWR Morb Mortal Wkly Rep* 2015;64:381–5.
2. US Department of Health and Human Services. The health consequences of smoking—50 years of progress. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. Available at [http://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/index.htm).
3. England LJ, Bunnell RE, Pechacek TF, Tong VT, McAfee TA. Nicotine and the developing human: a neglected element in the electronic cigarette debate. *Am J Prev Med* 2015;49:286–93.
4. Food and Drug Administration. Deeming tobacco products to be subject to the Federal Food, Drug, and Cosmetic Act, as amended by the Family Smoking Prevention and Tobacco Control Act; regulations on the sale and distribution of tobacco products and required warning statements for tobacco products. *Federal Register* 2014;79:1–67. Available at <https://www.gpo.gov/fdsys/pkg/FR-2014-04-25/pdf/2014-09491.pdf>.
5. Herzog B, Gerber J, Scott A. Tobacco—Nielsen c-store data—e-cig \$ sales decline moderates. Charlotte, NC: Wells Fargo Securities; 2014. Available at <http://www.c-storecanada.com/attachments/article/153/Nielsen%20C-Stores%20-%20Tobacco.pdf>.
6. Herzog B, Gerber J, Scott A. Tobacco talk: vapors/tanks driving next wave of e-vapor growth. Charlotte, NC: Wells Fargo Securities; 2014. Available at [http://www.vaporworldexpo.com/PDFs/Tobacco\\_Talk\\_Vapors\\_Tanks\\_%20March%202014.pdf](http://www.vaporworldexpo.com/PDFs/Tobacco_Talk_Vapors_Tanks_%20March%202014.pdf).
7. Kim AE, Arnold KY, Makarenko O. E-cigarette advertising expenditures in the US, 2011–2012. *Am J Prev Med* 2014;46:409–12.
8. Truth Initiative. Vaporized: majority of youth exposed to e-cigarette advertising. Washington, DC: Truth Initiative; 2015. Available at <http://truthinitiative.org/research/vaporized-majority-youth-exposed-e-cigarette-advertising>.
9. US Department of Health and Human Services. Preventing tobacco use among youth and young adults: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at [http://www.cdc.gov/tobacco/data\\_statistics/sgr/2012/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/2012/index.htm).
10. Legacy for Health. Vaporized: e-cigarettes, advertising, and youth. Washington, DC: Truth Initiative; 2014. Available at [http://truthinitiative.org/sites/default/files/LEG-Vaporized-E-cig\\_Report-May2014.pdf](http://truthinitiative.org/sites/default/files/LEG-Vaporized-E-cig_Report-May2014.pdf).
11. CDC. National Youth Tobacco Survey; 2014. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. Available at [http://www.cdc.gov/tobacco/data\\_statistics/surveys/nyts/](http://www.cdc.gov/tobacco/data_statistics/surveys/nyts/).
12. Farrelly MC, Duke JC, Crankshaw EC, et al. A randomized trial of the effect of e-cigarette TV advertisements on intentions to use e-cigarettes. *Am J Prev Med* 2015;49:686–93.
13. Mackey TK, Miner A, Cuomo RE. Exploring the e-cigarette e-commerce marketplace: identifying Internet e-cigarette marketing characteristics and regulatory gaps. *Drug Alcohol Depend* 2015;156:97–103.
14. CDC. Best practices for comprehensive tobacco control programs, 2014. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. Available at [http://www.cdc.gov/tobacco/stateandcommunity/best\\_practices/index.htm](http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm).
15. American Academy of Pediatrics. Committee on Public Education. Media education. *Pediatrics* 1999;104:341–3.

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# PREVENTING CHRONIC DISEASE

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### State-Level Medicaid Expenditures Attributable to Smoking

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PEER REVIEWED

#### Abstract

##### Introduction

Medicaid recipients are disproportionately affected by tobacco-related disease because their smoking prevalence is approximately 53% greater than that of the overall US adult population. This study estimates state-level smoking-attributable Medicaid expenditures.

##### Methods

We used state-level and national data and a 4-part econometric model to estimate the fraction of each state's Medicaid expenditures attributable to smoking. These fractions were multiplied by state-level Medicaid expenditure estimates obtained from the Centers for Medicare and Medicaid Services to estimate smoking-attributable expenditures.

##### Results

The smoking-attributable fraction for all states was 11.0% (95% confidence interval, 0.4%-17.0%). Medicaid smoking-attributable expenditures ranged from \$40 million (Wyoming) to \$3.3 billion (New York) in 2004 and totaled \$22 billion nationwide.

##### Conclusion

Cigarette smoking accounts for a sizeable share of annual state Medicaid expenditures. To reduce smoking prevalence

among recipients and the growth rate in smoking-attributable Medicaid expenditures, state health departments and state health plans such as Medicaid are encouraged to provide free or low-cost access to smoking cessation counseling and medication.

#### Introduction

Medicaid is a means-tested entitlement program that provides health care coverage to approximately 58 million low-income Americans, many of whom would otherwise be uninsured (1,2). The Medicaid program is jointly financed by the federal and state governments. In 2005, depending on a state's average personal income level, the federal Medicaid matching rate ranged from 50% to 83% (1). The Congressional Budget Office estimates that federal Medicaid expenditures were \$191 billion in 2007 (3). Assuming an average Medicaid matching rate of 57%, program expenditures for all 50 states and the District of Columbia are projected to have exceeded \$144 billion in 2007 (4,5). By 2018, total federal Medicaid spending is projected to be \$445 billion, and assuming a 57% matching rate, total state Medicaid spending is projected to exceed \$335 billion (3).

As a percentage of state budgets, Medicaid expenditures increased from 8% in 1985 to 21.5% in 2006, surpassing elementary and secondary education as the largest single budget item (2,5). Medicaid expenditures are expected to consume an ever-increasing share of state budgets, and many states will have difficulty meeting their Medicaid commitments without cutting other state-funded programs (1,5,6). In response to growing concern among state governments, the chairman and vice-chairman of the National Governors Association, in testimony before the US Senate Finance Committee, recommended placing

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a greater emphasis on disease prevention as a means to contain rising Medicaid costs (6).

Tobacco-cessation programs are effective in lowering the prevalence of cigarette smoking and its consequent serious and costly medical conditions, including pregnancy-related complications, heart disease, respiratory illness, and several types of cancer (7-9). Tobacco-cessation programs should target Medicaid recipients because smoking prevalence in the adult Medicaid population is approximately 53% greater than that of the overall US adult population (34.5% vs 22.6% in 2006) (10).

We used data from the Medical Expenditure Panel Survey (MEPS) and the Behavioral Risk Factor Surveillance System (BRFSS) to update previous estimates of Medicaid smoking-attributable medical expenditures at the state level (11). These estimates might assist state health departments and Medicaid in formulating effective smoking-cessation policies to help reduce the high prevalence of cigarette use among their recipients.

## Methods

### Data

We used the 2001 and 2002 MEPS to develop a model that predicts smoking-attributable medical expenditures for the Medicaid population. MEPS is a nationally representative survey of the civilian, noninstitutionalized population that quantifies each participant's total annual medical spending, including expenditures from public- and private-sector health insurers and out-of-pocket payments. The data also include information about each participant's source of health insurance (eg, any evidence of Medicaid coverage during the year) and sociodemographic characteristics (such as race/ethnicity, sex, and education). Information about MEPS is available at [www.meps.ahrq.gov/mepsweb/](http://www.meps.ahrq.gov/mepsweb/).

The MEPS sampling frame is drawn from participants in the National Health Interview Survey (NHIS). NHIS is a nationally representative survey that collects data on selected health topics. Although MEPS does not capture information on smoking, self-reported smoking variables are available for a subset of adult NHIS participants (the Adult Sample File) and can be merged with MEPS data. We used responses to the question "Have you smoked at

least 100 cigarettes in your entire life?" to differentiate between ever smokers and nonsmokers. We excluded from the analysis sample respondents with missing data on smoking variables ( $\approx 1\%$  of respondents aged  $\geq 18$  years and all respondents aged  $< 18$  at the time of the NHIS interview) and those who did not receive Medicaid coverage. Our final MEPS-NHIS population included 1,588 adults with weighting variables that allowed us to generate nationally representative estimates of the adult, civilian, noninstitutionalized Medicaid population (Table 1).

Before constructing our national model, we used the Medical Care component of the Consumer Price Index to inflate all MEPS annual medical spending data to 2004 dollars.

### State-level representative data

The BRFSS is a state-based telephone survey of the adult (aged  $\geq 18$ ), noninstitutionalized population that tracks health risks in the United States. The most recent BRFSS surveys do not allow for stratifying participants by type of health insurance. This information was, however, available before 2001. Therefore, we used 1998-2000 BRFSS data to predict state-level medical expenditures for the Medicaid population. Information about BRFSS is available at [www.cdc.gov/BRFSS/](http://www.cdc.gov/BRFSS/). Although BRFSS does not collect medical expenditure data, it includes information about each participant's smoking status, insurance status (before 2001), and sociodemographic characteristics (such as race/ethnicity, sex, and education). Because these variables match those from MEPS-NHIS, we were able to construct an expenditure prediction model with MEPS-NHIS data and use the results to generate expenditure estimates for smokers and nonsmokers on the basis of state-representative population characteristics of BRFSS participants.

As we did with our MEPS-NHIS restrictions, we excluded those with missing smoking data ( $\approx 1\%$ ) and those who did not receive Medicaid coverage. Our final BRFSS population included 16,201 adults with weighting variables that allowed us to generate state-representative estimates of the adult, noninstitutionalized Medicaid population (Table 1).

Estimating state-specific smoking-attributable medical expenditures for the Medicaid population involved 3 steps. First, we used MEPS-NHIS data to create a model that

predicts annual medical expenditures for Medicaid recipients as a function of smoking status, body weight, and sociodemographic characteristics. Second, we used state-representative BRFSS data and results from our MEPS-NHIS national model to estimate the fraction of medical expenditures for Medicaid recipients that was attributable to smoking for each state. Third, we multiplied these fractions by previously published estimates of state-specific Medicaid expenditures to compute smoking-attributable Medicaid expenditures for each state. These steps are described in detail below.

### MEPS-NHIS national model

We used a 4-part regression model to predict annual medical expenditures for each MEPS-NHIS Medicaid recipient. The 4-part regression approach was pioneered by authors of the RAND Health Insurance Experiment to control for several unique characteristics of the medical expenditures distribution and is now commonly applied to medical expenditures data (12,13). The model estimates predicted expenditures by using the following functional form:  $EXP = Pr(C \times EXP_{IP} + [1 - C]EXP_{NIP})$ , where  $EXP$  represents predicted annual expenditures;  $Pr$  represents the predicted probability of positive medical expenditures during the year and is estimated with a logistic regression model;  $C$  represents the conditional probability of positive inpatient expenditures, given positive expenditures, and is estimated with a logistic regression model;  $EXP_{IP}$  represents ordinary least squares (OLS)-predicted medical expenditures, given positive inpatient expenditures during the year; and  $EXP_{NIP}$  represents OLS-predicted medical expenditures, given positive expenditures but no inpatient expenditures.

All OLS regression models are estimated on the logged expenditure variable to adjust for the skewness in annual expenditures (mean annual expenditures are significantly greater than the median). Logged expenditures are converted back to expenditures by using the homoscedastic smearing factor (14).

Including dummy variables that indicate smoking status (ever smoked set equal to 1 and the referent group, never smoked, set equal to 0) in each regression model allowed us to quantify the effect of smoking on annual medical expenditures. In addition to smoking status, all regressions controlled for other variables assumed to influence annual medical expenditures, including self-reported

body weight, sex, race/ethnicity, age, region of residence, education, and marital status. Regression models were estimated by using SUDAAN version 8 (RTI International, Research Triangle Park, North Carolina) to control for the complex survey design used in MEPS-NHIS. Table 2 presents results from the 4-part regression model.

### BRFSS state-level estimates

We used the coefficient estimates from the MEPS-NHIS models to predict annual medical expenditures for each BRFSS Medicaid recipient. To do this, we multiplied each person's characteristics (the independent variables) by his respective coefficients generated from the 4 MEPS-NHIS regression models and combined the results with the equation above. Using the BRFSS weighting variables and each person's predicted medical expenditures, we computed total predicted medical expenditures for each state's Medicaid population.

We estimated smoking-attributable medical expenditures as the difference between predicted expenditures for ever smokers and predicted expenditures for nonsmokers, leaving all other variables unchanged. This method allowed us to isolate the effect of smoking while maintaining any other population characteristics that may contribute to higher annual medical expenditures among smokers.

For the Medicaid population in each state, the percentage of aggregate medical expenditures attributable to smoking was calculated by dividing aggregate predicted expenditures attributable to smoking by total predicted expenditures for adult Medicaid recipients in each state. Because BRFSS is limited to adults, our results should be interpreted as the fraction of adult medical expenditures that are attributable to smoking among adults in each state.

### Estimating total and public-sector expenditures

For a variety of reasons, including the lack of data on institutionalized populations, MEPS national spending estimates (and state-level spending estimates based on MEPS) underestimate actual US health care spending (15). Therefore, to quantify annual adult smoking-attributable medical expenditures for each state, we multiplied our state-by-state smoking-attributable fractions by published estimates of 2001 state-specific Medicaid expenditures, available from the Centers for Medicare and Medicaid

Services (16). We used 2001 because it is the most recent year that annual, state-specific Medicaid expenditure estimates are available. To match our regression population, we limited Medicaid expenditures to those accrued by adult recipients ( $\geq 18$  years). We then inflated medical expenditure estimates to 2004 by using a national adjustment factor (1.31). This adjustment factor, calculated as the ratio of 2004 projected expenditures (actual expenditures not yet available) to 2001 actual expenditures, was based on data from Centers for Medicare and Medicaid Services National Health Expenditure Accounts, generally considered the standard for measuring annual health care spending (17).

## Results

State-specific estimates of smoking prevalence among Medicaid recipients vary considerably across states and range from 35% (Mississippi) to 80% (New Hampshire) (Table 3). Nationally, approximately 11% (95% confidence interval, 0.4%-17.0%) of adult Medicaid expenditures are attributable to smoking. At the state level, smoking-attributable fractions range from 6% (New Jersey) to 18% (Arizona and Washington).

Smoking-attributable medical expenditures in the adult Medicaid population total \$22 billion. State-level smoking-attributable medical expenditures among adult Medicaid recipients range from \$40 million (Wyoming) to \$3.3 billion (New York) (Figure).

## Discussion

The 2000 Public Health Service (PHS) clinical practice guideline for treating tobacco dependence recommends individual, group, and telephone counseling, as well as 5 medications (18). Treating tobacco dependence is more cost-effective than commonly covered preventive services such as mammography or treatment of mild to moderate hypertension (19). In 2002, however, only 10 states reported using the 2000 PHS guideline to design treatment benefits and programs for Medicaid recipients or to train Medicaid health care providers. Moreover, only 5 states required providers or health plans to document tobacco use in patients' medical charts, and only 2 states offered all counseling and pharmacotherapy treatments recommended by the guideline to their Medicaid recipients (20).



**Figure.** State-by-state distribution of Medicaid smoking-attributable medical expenditures.

The growth rate in Medicaid expenditures has led the National Governors Association to propose a bipartisan plan to reform the program. A key element of this plan is to make Medicaid more effective and efficient by developing policies that will “maintain or even [improve] health outcomes while potentially saving money for both the states and the federal government” (6). One way to improve the health of Medicaid recipients and potentially reduce the rate of growth in Medicaid program expenditures is by covering PHS-recommended treatments, including individual and group telephone counseling and approved drugs (9,21-24).

## Strengths and limitations

The MEPS-NHIS national model that was used to calculate our state-level estimates is an improvement on a previous study that used data from the 1987 National Medical Expenditure Survey (NMES) to estimate smoking-attributable Medicaid expenditures (11). Results from the 1987 NMES are dated, and unlike NHIS, many of the key smoking variables that NMES used were imputed (25). Using recent data and actual, as opposed to imputed, smoking information in our calculations provides states with updated and accurate information that may better inform policy decisions. In addition, these differences may, in part, explain why the nationwide Medicaid smoking-attributable fraction of 11.0% is more conservative than the previous estimate of 14.5% generated for 1993 (11). Other changes that may account for the difference in our estimated smoking-attributable fraction include potential changes in the number of people treated for smoking-

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related illness from 1993 to 2002 and any change in treatment disposition from inpatient to outpatient care. Finally, our estimates differ from previous estimates, and probably understate Medicaid smoking-attributable expenditures, because they exclude expenditures for nursing home care, which are not available in the MEPS-NHIS model.

Despite these strengths, our study has several limitations. First, both the MEPS-NHIS and BRFSS are limited to noninstitutionalized populations, but we apply the resulting smoking-attributable fractions to expenditure estimates that include both institutionalized and noninstitutionalized populations. If these fractions are different for the institutionalized population, our expenditure estimates would be biased. Second, data limitations precluded us from quantifying smoking-attributable medical expenditures for smokers younger than 18 years and nonsmokers exposed to secondhand smoke. The effects of secondhand smoke on children's health are considerable (7). Secondhand smoke exposure can lead to acute lower respiratory infections, such as bronchitis and pneumonia in infants and young children, and can cause children who already have asthma to experience more frequent and severe attacks (26). Although health care expenditures attributable to secondhand smoke exposure may be high, quantifying these expenditures is difficult. As a consequence, our estimates understate smoking-attributable expenditures. Third, our analysis is limited to health care expenditures and therefore does not address other expenses (eg, disability, decreased productivity, absenteeism) that result from smoking (7). Finally, because our focus was not to test statistically whether smoking-attributable expenditures were larger in some states than others, we did not calculate standard errors at the state level.

### Conclusions

An estimated 443,000 Americans die prematurely each year as a result of smoking or exposure to secondhand smoke (27). Medicaid recipients are disproportionately affected by tobacco-related disease because their smoking prevalence is approximately 53% greater than that of the overall US adult population (10). In addition to the individual health toll, the disproportionately higher smoking prevalence among Medicaid recipients imposes substantial costs on society. We estimate that smoking accounts for approximately 11% of Medicaid program expenditures. To improve the health of Medicaid recipients and potentially reduce the growth rate of expenditures, Medicaid

programs in all 50 states and the District of Columbia are encouraged to follow the 2000 PHS guidelines and cover all recommended tobacco-dependence treatments and approved medications (18). The cost-effectiveness of these programs, combined with the high cost of smoking, suggests that such coverage may provide cost savings to the financially strapped Medicaid programs.

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### References

1. Smith VK, Moody G. Medicaid in 2005: principles and proposals for reform. A report prepared for the National Governors Association. Lansing (MI): Health Management Associates; 2005. <http://www.healthmanagement.com/files/NGA-HMA-23Feb2005.pdf>. Accessed June 4, 2008.
2. State expenditure report 2006. Washington (DC): National Association of State Budget Officers; 2007. <http://www.nasbo.org/Publications/PDFs/fy2006er.pdf>. Accessed June 4, 2008.
3. The budget and economic outlook: fiscal years 2008 to 2018. Washington (DC): Congressional Budget Office; 2008. [http://www.cbo.gov/ftpdocs/89xx/doc8917/01-23-2008\\_BudgetOutlook.pdf](http://www.cbo.gov/ftpdocs/89xx/doc8917/01-23-2008_BudgetOutlook.pdf). Accessed June 4, 2008.
4. Medicaid formula: differences in funding ability by states often are widened. A report to the Honorable

- Dianne Feinstein, US Senate. Washington (DC): US General Accounting Office; 2003. <http://www.gao.gov/new.items/d03620.pdf>. Accessed June 4, 2008.
5. State expenditure report 2003. Washington (DC): National Association of State Budget Officers; 2004. <http://www.nasbo.org/Publications/PDFs/2003ExpendReport.pdf>. Accessed June 4, 2008.
  6. Medicaid reform: statement of Governor Mark R. Warner, chairman, and Governor Mike Huckabee, vice chairman, before the Committee on Finance of the United States Senate. Washington (DC): National Governors Association; June 15, 2005.
  7. The health consequences of smoking: a report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention, US Department of Health and Human Services; 2004.
  8. Centers for Disease Control and Prevention. Annual smoking-attributable mortality, years of potential life lost, and productivity losses — United States, 1997-2001. *MMWR Morb Mortal Wkly Rep* 2005;54(25):625-28.
  9. Issue brief: state employee wellness initiatives. Washington (DC): National Governors Association Center for Best Practices; 2005.
  10. Pleis JR, Lethbridge-Çejku M. Summary health statistics for US adults: National Health Interview Survey, 2006. *Vital Health Stat* 10 2007;10(235):1-153.
  11. Miller LS, Zhang X, Novotny T, Rice DP, Max W. State estimates of Medicaid expenditures attributable to cigarette smoking, fiscal year 1993. *Public Health Rep* 1998;113(2):140-51.
  12. Manning W, Newhouse J, Duan N. Health insurance and the demand for medical care: evidence from a randomized experiment. *Am Econ Rev* 1987;77:251-77.
  13. Finkelstein E, Fiebelkorn I, Wang G. National medical spending attributable to overweight and obesity: how much and who's paying? *Health Aff Millwood* 2003;(Suppl):W3-219-26.
  14. Manning W. The logged dependent variable, heteroscedasticity, and the retransformation problem. *J Health Econ* 1998;17:283-95.
  15. Seldon T. Reconciling medical expenditure estimates from MEPS and the NHA. *Health Care Financ Rev* 1996;23(1):161-78.
  16. Centers for Medicare and Medicaid Services. FY 2001 Medicaid medical vendor payments by age group of beneficiaries. [http://www.cms.hhs.gov/medicaid/msis/01\\_table19.pdf](http://www.cms.hhs.gov/medicaid/msis/01_table19.pdf). Accessed June 4, 2008.
  17. Centers for Medicare and Medicaid Services. National health care expenditures projections: 2004-2014. <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/nheprojections2004-2014.pdf>. Accessed June 4, 2008.
  18. Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz ER, et al. Treating tobacco use and dependence: clinical practice guideline. Rockville (MD): Public Health Service, US Department of Health and Human Services; 2000.
  19. Eddy DM. David Eddy ranks the tests. *Harv Health Lett* 1992;Suppl:10-11.
  20. Centers for Disease Control and Prevention. State Medicaid coverage for tobacco-dependence treatments — United States, 1994-2002. *MMWR Morb Mortal Wkly Rep* 2004;53:54-7.
  21. Warner KE. Smoking out the incentives for tobacco control in managed care settings. *Tobacco Control* 1998;7(Suppl):S50-4.
  22. Partnership for Prevention. Priorities for America's health: capitalizing on life-saving, cost-effective preventive services. <http://www.prevent.org/content/view/46/96/>. Accessed June 4, 2008.
  23. Hopkins DP, Husten CG, Fielding JE, Rosenquist JN, Westphal LL. Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *Am J Prev Med* 2001;20(2 Suppl):67-87.
  24. Solberg LI, Maciosek MV, Edwards NM, Khanchandani HS, Goodman MJ. Repeated tobacco-use screening and intervention in clinical practice: health impact and cost effectiveness. *Am J Prev Med* 2006;31(1):62-71.
  25. Cutler DM, Epstein AM, Frank RG, Hartman R, King III C, Newhouse JP, et al. How good a deal was the tobacco settlement? Assessing payments to Massachusetts. NBER Working Paper. 2000; No. 7747.
  26. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention, US Department of Health and Human Services; 2006.
  27. Centers for Disease Control and Prevention. Smoking-attributable mortality, years of potential life lost, and productivity losses — United States, 2000-2004. *MMWR Morb Mortal Wkly Rep* 2008;57(45):1226-8.

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Tables

**Table 1. Characteristics of Adult MEPS-NHIS (2001 and 2002) and BRFSS (1998-2000) Medicaid Recipients With Data on Smoking Status<sup>a</sup>**

Characteristic	MEPS-NHIS		BRFSS	
	Nonsmokers (n = 768)	Ever Smokers (n = 820)	Nonsmokers (n = 7,701)	Ever Smokers (n = 8,500)
<b>Sex</b>				
Male	21	33	23	32
Female	79	67	77	68
<b>Race/ethnicity</b>				
White	32	60	32	58
Black	34	23	28	21
Hispanic	26	12	35	17
Asian	6	2	3	1
Other	1	3	1	3
<b>Mean age, y</b>	36	40	36	38
<b>Region of residence</b>				
Northeast	20	19	36	29
Midwest	21	24	11	18
South	35	38	28	28
West	24	18	25	25
<b>Weight category</b>				
Underweight	2	3	3	3
Normal	24	31	33	37
Overweight	36	31	29	30
Obese	36	34	30	26
Missing data	2	1	6	3
<b>Education</b>				
Less than high school graduate	35	34	33	38
High school graduate	56	58	61	58
College graduate	9	8	6	4
<b>Marital status</b>				
Married	34	24	37	32
Widowed	4	3	5	4
Divorced/separated	24	35	18	27
Single	39	38	40	37

Abbreviations: MEPS, Medical Expenditure Panel Survey; NHIS, National Health Interview Survey; BRFSS, Behavioral Risk Factor Surveillance System.  
<sup>a</sup> All data are percentages, except age.

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**Table 2. Four-Part Model Regression of the Effect of Smoking on Annual Medical Expenditures**

Variable	Correlation (Standard Error)			
	Probability of Positive Expenditures	Probability of Positive Inpatient Expenditures	Logged Expenditures for Users of Inpatient Services	Logged Expenditures for Nonusers of Inpatient Services
Intercept	4.19 (1.62)	-1.51 (1.21)	9.39 (0.80)	5.41 (0.70)
<b>Smoking status</b>				
Nonsmoker	Reference	Reference	Reference	Reference
Ever smoker	0.06 (0.24)	0.22 (0.14)	0.13 (0.11)	0.05 (0.12)
<b>Weight category</b>				
Underweight	0.06 (0.89)	0.35 (0.56)	0.64 (0.51)	0.45 (0.38)
Normal weight	Reference	Reference	Reference	Reference
Overweight	-0.08 (0.27)	-0.24 (0.27)	-0.16 (0.20)	-0.04 (0.16)
Obese	0.28 (0.26)	0.34 (0.26)	-0.02 (0.20)	0.21 (0.13)
Missing data	-0.88 (0.48)	-1.71 (0.72)	0.62 (0.22)	0.79 (0.34)
<b>Sex</b>				
Male	Reference	Reference	Reference	Reference
Female	0.81 (0.24)	-0.29 (0.24)	0.01 (0.16)	0.33 (0.18)
<b>Race/ethnicity</b>				
White	Reference	Reference	Reference	Reference
Black	-0.79 (0.30)	-0.34 (0.22)	-0.26 (0.16)	-0.57 (0.18)
Hispanic	-0.85 (0.28)	-0.08 (0.26)	-0.19 (0.13)	-0.55 (0.17)
Asian	-1.17 (0.54)	-0.72 (0.63)	-0.76 (0.35)	-0.85 (0.39)
Other	-0.96 (0.70)	-0.26 (0.59)	0.59 (0.36)	0.62 (0.30)
Age	-0.22 (0.10)	-0.04 (0.06)	-0.01 (0.04)	0.01 (0.04)
Age squared	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
<b>Region of residence</b>				
Northeast	Reference	Reference	Reference	Reference
Midwest	-0.22 (0.40)	0.17 (0.28)	0.23 (0.17)	0.14 (0.25)
South	-0.33 (0.33)	0.37 (0.24)	0.10 (0.15)	0.19 (0.20)
West	0.12 (0.31)	-0.17 (0.28)	0.20 (0.20)	0.09 (0.21)
<b>Education</b>				
Less than high school diploma	Reference	Reference	Reference	Reference
High school diploma	0.37 (0.22)	0.18 (0.19)	-0.03 (0.12)	0.15 (0.12)
College	0.87 (0.65)	0.06 (0.31)	-0.21 (0.24)	0.03 (0.25)

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**Table 2. (continued) Four-Part Model Regression of the Effect of Smoking on Annual Medical Expenditures**

Variable	Correlation (Standard Error)			
	Probability of Positive Expenditures	Probability of Positive Inpatient Expenditures	Logged Expenditures for Users of Inpatient Services	Logged Expenditures for Nonusers of Inpatient Services
<b>Marital status</b>				
Married	Reference	Reference	Reference	Reference
Widowed	0.44 (0.77)	0.28 (0.48)	0.24 (0.28)	0.71 (0.33)
Divorced/separated	1.30 (0.30)	-0.05 (0.21)	0.07 (0.16)	0.24 (0.13)
Single	0.35 (0.22)	-0.09 (0.21)	0.01 (0.14)	0.19 (0.14)
<b>Pregnancy</b>				
Not pregnant	Reference	Reference	Reference	Reference
Pregnant	3.67 (1.09)	3.77 (1.17)	-1.69 (0.59)	-0.64 (0.54)
R <sup>2</sup>	0.10	0.13	0.21	0.17

**Table 3. Smoking Prevalence and Estimated Fraction and Total Annual Medicaid Expenditure Attributable to Smoking, by State**

State	Smoking Prevalence, %	SAF, % <sup>a</sup>	SAE, million, 2004 \$
Alabama	52	9	285
Alaska	68	15	67
Arizona	49	18	377
Arkansas	54	11	167
California	45	11	2,254
Colorado	61	17	338
Connecticut	49	7	249
Delaware	58	10	55
District of Columbia	51	11	95
Florida	46	11	951
Georgia	42	10	372
Hawaii	62	11	69
Idaho	62	14	97
Illinois	58	11	905
Indiana	68	15	521
Iowa	61	10	166
Kansas	54	12	171

Abbreviations: SAF, smoking-attributable fraction; SAE, smoking-attributable expenditure.

<sup>a</sup> Estimates for states are based on Behavioral Risk Factor Surveillance System state-representative data and the Medical Expenditure Panel Survey and National Health Interview Survey (MEPS-NHIS) national model. The fraction for the United States as a whole is based solely on the MEPS-NHIS national model.

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**Table 3. (continued) Smoking Prevalence and Estimated Fraction and Total Annual Medicaid Expenditure Attributable to Smoking, by State**

State	Smoking Prevalence, %	SAF, % <sup>a</sup>	SAE, million, 2004 \$
Kentucky	65	12	390
Louisiana	43	12	364
Maine	63	14	190
Maryland	51	12	386
Massachusetts	53	11	696
Michigan	64	13	727
Minnesota	54	11	423
Mississippi	35	9	197
Missouri	66	14	514
Montana	70	15	70
Nebraska	64	15	167
Nevada	62	11	66
New Hampshire	80	15	103
New Jersey	36	6	309
New Mexico	50	12	159
New York	54	11	3,343
North Carolina	63	11	622
North Dakota	63	12	53
Ohio	65	13	1,171
Oklahoma	58	12	233
Oregon	67	15	290
Pennsylvania	70	11	849
Rhode Island	48	8	94
South Carolina	41	11	336
South Dakota	69	16	68
Tennessee	58	11	443
Texas	43	11	987
Utah	54	14	149
Vermont	67	15	74
Virginia	58	11	294
Washington	67	18	464
West Virginia	67	11	180
Wisconsin	63	13	440
Wyoming	62	16	40
US total	51	11	21,951

Abbreviations: SAF, smoking-attributable fraction; SAE, smoking-attributable expenditure.

<sup>a</sup> Estimates for states are based on Behavioral Risk Factor Surveillance System state-representative data and the Medical Expenditure Panel Survey and National Health Interview Survey (MEPS-NHIS) national model. The fraction for the United States as a whole is based solely on the MEPS-NHIS national model.

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