

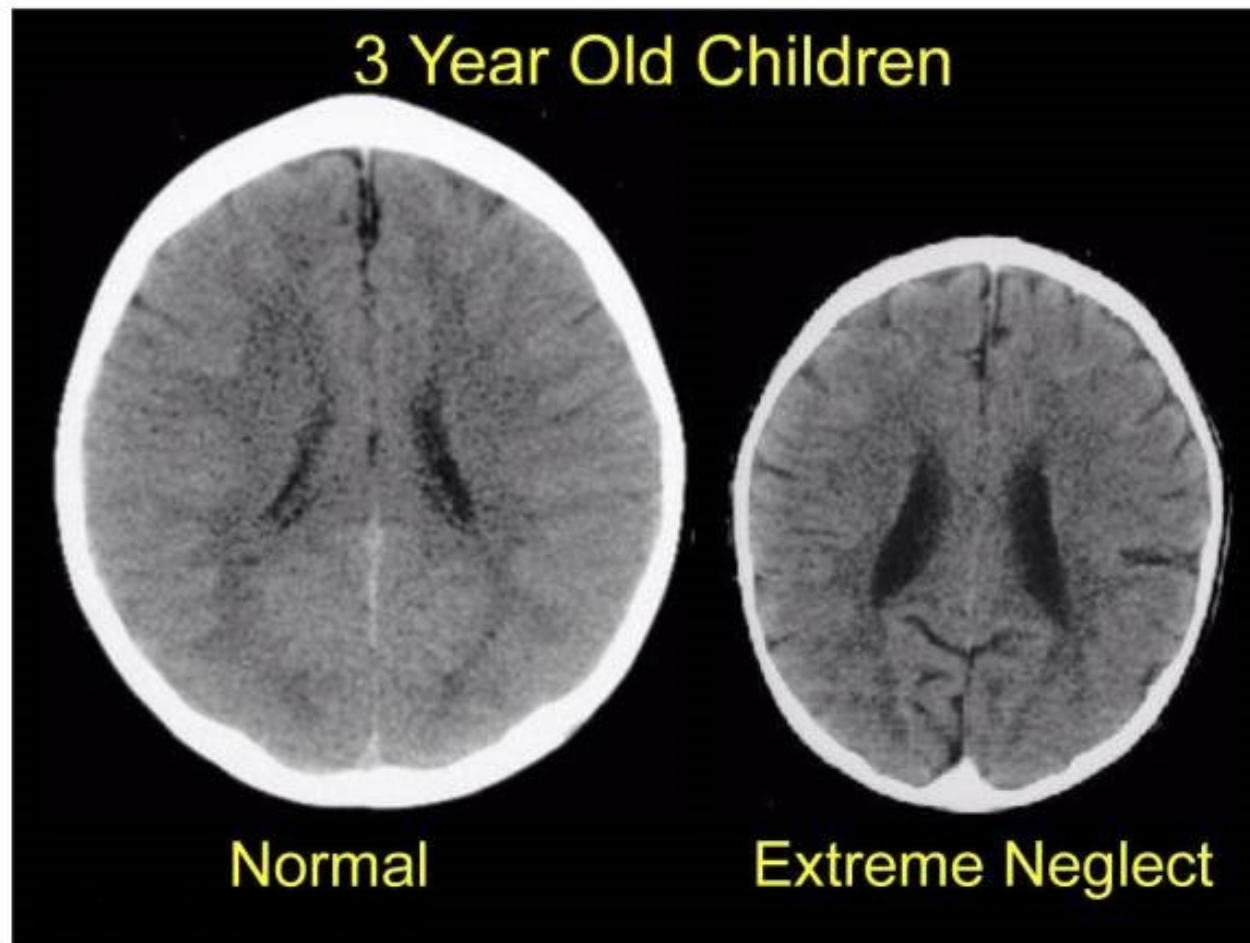
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# A Systemic Approach and the Economic Benefits of Identifying and Treating Family Trauma

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# The Developing Brain





# Evidence

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## The Adverse Childhood Experience Study:

- Collaborative between CDC and Kaiser Permanente HMO.
- > 17,000 adults surveyed about adverse childhood experiences.
- Average participant age - 57 years.
- Medical histories available for all participants.

V Felitti et al. 1998. Am J Prev Med 14:245-58.

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# Adverse Childhood Experience Study

## 10 adverse childhood experiences surveyed:

1. Physical abuse
  2. Sexual abuse
  3. Emotional abuse
  4. Emotional neglect
  5. Physical neglect
  - 
  6. Witness domestic violence
  7. Mental illness in home
  8. Family member incarcerated
  9. Alcohol/drug problems
  10. Parental separation or divorce
-

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# ACE: Prevalence data

- Key finding:
    - About 2/3rd of those surveyed reported at least one ACE.
    - The 1/3 of participants with no reported ACEs were consistently healthier across all measures.
-

# Health Measures Now Linked to Adverse Childhood Experiences Score

## ▶ Stepwise increased risk for:

- Heart disease
- Asthma
- Diabetes
- Cancer
- COPD
- Skeletal fractures
- Sexually transmitted diseases
- Liver disease
- Autoimmune disorders
- Osteoarthritis
- Smoking
- Alcohol abuse
- Over eating and obesity
- Illicit drug use
- Promiscuity
- IV drug use
- Clinical depression

## ▶ And

- Autobiographical memory disturbance
- Poor anger control
- Relationship problems
- Employment problems
- Early age at first intercourse
- Teen pregnancy
- Unintended pregnancy
- Teen paternity
- Fetal death
- Suicide
- Domestic violence
- Anxiety disorders
- Hallucinations
- Sleep disturbances
- Chronic pain
- Headaches
- Early death

# 2013 Alaska BRFSS

ACE SCORE	0	1	2	3	4	5+
All Alaskan Adults	35.6%	22.3%	14.7%	10.1%	6.5%	10.8%
Age Group						
18-24	34.0%	26.0%	15.9%	8.2%	5.8%	10.0%
25-34	33.3%	19.8%	15.5%	10.9%	8.4%	12.1%
35-44	30.4%	26.8%	10.5%	10.7%	6.2%	15.3%
45-54	33.8%	20.5%	13.6%	12.8%	6.3%	13.0%
55+	41.7%	20.6%	16.7%	8.6%	5.9%	6.5%
Gender						
Male	38.9%	22.5%	16.1%	8.5%	5.6%%	8.5%
Female	32.0%	22.2%	16.1%	11.9%	7.5%%	13.2%

Adverse Childhood Experience*	Alaska	Arkansas	Louisiana	New Mexico	Tennessee	Washington
<u>Abuse</u>	%	%	%	%	%	%
Emotional	31.0	24.3	21.1	28.1	19.2	34.9
Physical	19.1	14.1	10.5	19.5	12.9	18.1
Sexual	14.8	10.9	9.9	12.9	12.7	13.5

**\*Percentages in red are the highest of the states compared.**

**Source:** Alaska data from the 2013 Alaska Behavioral Risk Factor Surveillance System, Alaska Department of Health and Social Services, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion

**Source:** Five States Study data from the Centers for Disease Control and Prevention, *Adverse Childhood Experiences Reported by Adults --- Five States, 2009*, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5949a1.htm>



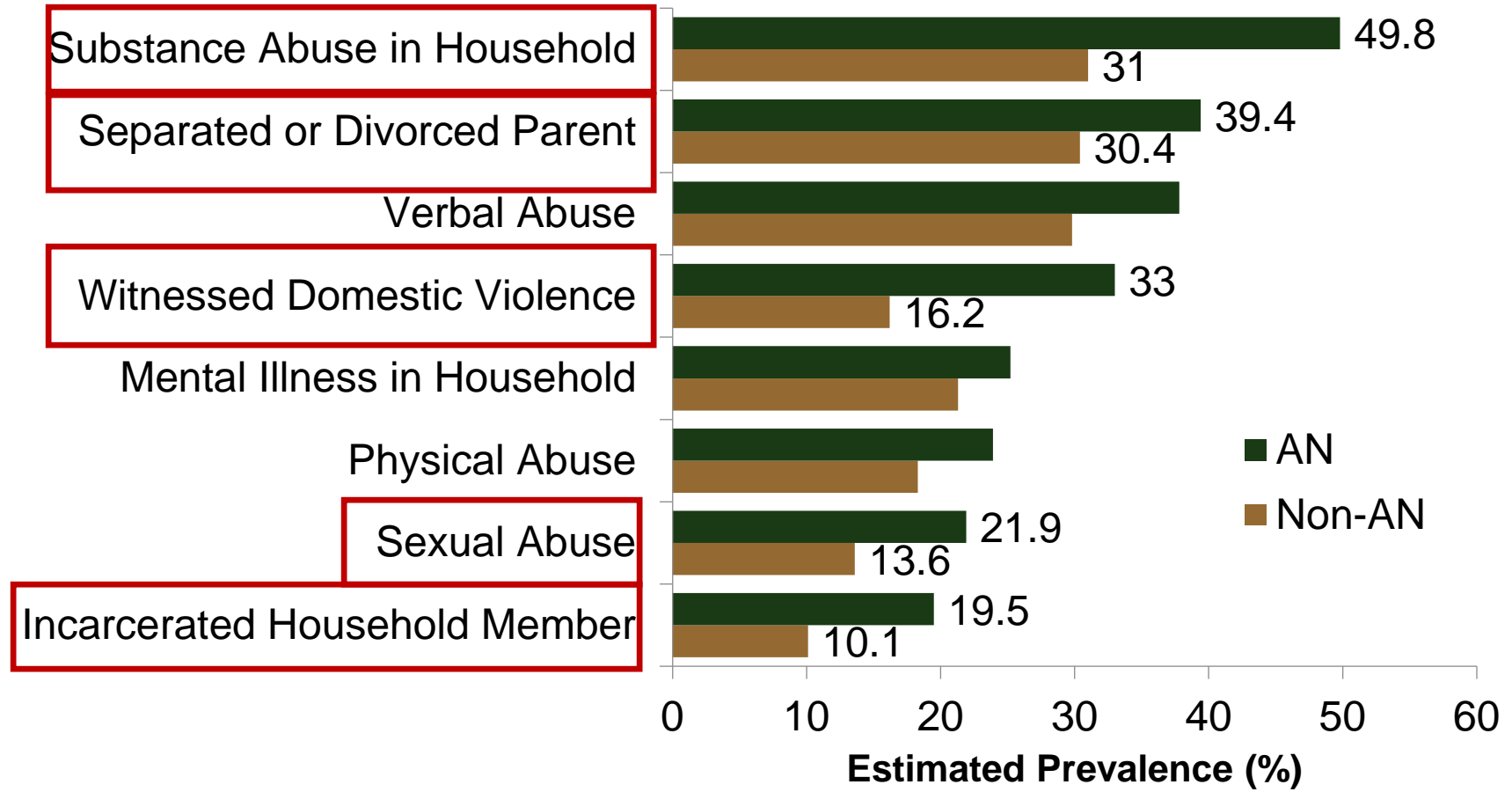
<b>Adverse Childhood Experience*</b>	<b>Alaska</b>	<b>Arkansas</b>	<b>Louisiana</b>	<b>New Mexico</b>	<b>Tennessee</b>	<b>Washington</b>
<b><u>Household Dysfunction</u></b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
<b>Mental Illness in the Home</b>	<b>21.9</b>	<b>17.0</b>	<b>16.6</b>	<b>19.4</b>	<b>17.1</b>	<b>24.3</b>
<b>Incarcerated Family Member</b>	<b>11.5</b>	<b>5.5</b>	<b>7.2</b>	<b>7.1</b>	<b>8.6</b>	<b>6.6</b>
<b>Substance Abuse in Home</b>	<b>33.8</b>	<b>25.5</b>	<b>26.6</b>	<b>29.9</b>	<b>28.3</b>	<b>32.7</b>
<b>Separation or Divorce</b>	<b>31.7</b>	<b>23.3</b>	<b>27.1</b>	<b>24.4</b>	<b>29.1</b>	<b>26.0</b>
<b>Witnessed Domestic Violence</b>	<b>18.7</b>	<b>15.1</b>	<b>14.5</b>	<b>18.9</b>	<b>17.1</b>	<b>16.6</b>

**\*Percentages in red are the highest of the states compared.**

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# Prevalence of Specific ACEs Experienced by AN People Compared with Non-AN



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# How Do We Work Together to Decrease Alaska ACEs?

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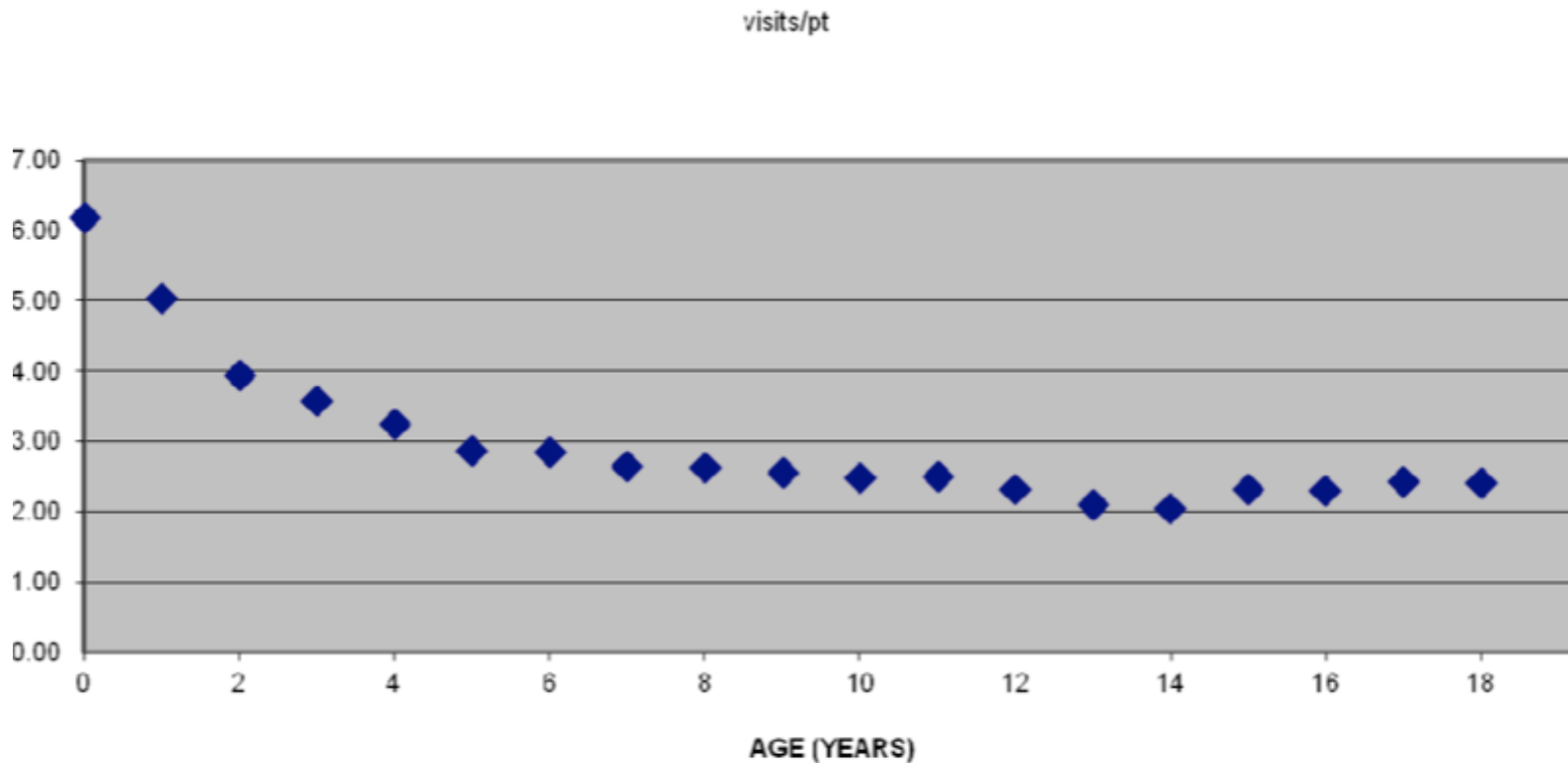
# American Academy of Pediatrics

## Policy Statement

### ■ Front line: Providers

- Providers need to *actively assist* parents, child care providers, teachers, policy makers, civic leaders, and the general public to address many of the most persistent and costly problems facing contemporary society, including:
    - Limited educational achievement
    - Diminished economic productivity
    - Criminality
    - Disparities in health
-

# Why Are Providers the Front Line?



**Age at Which Children Are Seen in a Provider's Office**

# Parent-Screening Questionnaires



## Parent Questionnaire (PQ)

**Dear Parent or Caregiver:** Being a parent is not always easy. We want to help families have a safe environment for kids. So, we're asking everyone these questions. They are about problems that affect many families. If there's a problem, we'll try to help.

Please answer the questions about your child being seen today for a checkup. If there's more than one child, please answer "yes" if it applies to any one of them. This is voluntary. You don't have to answer any question you prefer not to.

Today's Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Child's Name: \_\_\_\_\_

Child's Date of Birth: \_\_\_\_/\_\_\_\_/\_\_\_\_

### PLEASE CHECK

- |                              |                             |   |
|------------------------------|-----------------------------|---|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Do you need the phone number for Poison Control?  |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Do you need a smoke detector for your home?   |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Does anyone smoke tobacco at home?  |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | In the last year, did you worry that your food would run out before you got money or Food Stamps to buy more? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | In the last year, did the food you bought just not last and you didn't have money to get more?                |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Do you often feel your child is difficult to take care of?  |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Do you sometimes find you need to hit/spank your child?   |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Do you wish you had more help with your child?  |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Do you often feel under extreme stress?   |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | In the past month, have you often felt down, depressed, or hopeless?  |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | In the past month, have you felt very little interest or pleasure in things you used to enjoy?                |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | In the past year, have you been afraid of your partner?   |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | In the past year, have you had a problem with drugs or alcohol?   |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | In the past year, have you felt the need to cut back on drinking or drug use?                                 |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Are there any other problems you'd like help with today?  |

Please give this form to the doctor or nurse you're seeing today. Thank you!

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CENTER FOR  
**YOUTH WELLNESS**  
health begins with hope

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# Three Questions—Gets Almost Everything

- Has anything really stressful happened to your child since the last time I saw you?
  - How has that affected your child's behavior?
    - Corollary question: How has this event and any changes in your child's behavior affected you?
  - What have you done that's really fun with your child since the last time I saw you?
  - Give me three words to describe your child
-

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# HelpMeGrow

- Connects at-risk children with the services they need
    - Four Core Components
      - Child health care provider outreach to support screening
      - Community outreach to identify resources
      - Centralized telephone access point
      - Collection of data, including service gap analysis
    - Builds collaboration across sectors to improve access
    - Identifies gaps and barriers to access systems
    - [www.helpmegrownational.org](http://www.helpmegrownational.org)
-





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## Care Coordinators provide

- Assessment of needs & referrals to services
  - Education on development, behavior management and programs
  - Ongoing developmental monitoring
  - Advocacy and follow up
-

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# What Can Policy Makers and Funders Do?

- Support reimbursement of screening and other aspects of the patient-centered medical home
  - Support the development of programs like Help Me Grow that have been shown to improve family wellness and decrease system costs
  - Preferentially support organizations and programs that focus on intervention in early childhood
    - ACEs Resolution in the House
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# What If We Reduced Alaska's ACE Score by $\frac{1}{2}$ Point

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# Reducing Alaska's ACE Score by $\frac{1}{2}$

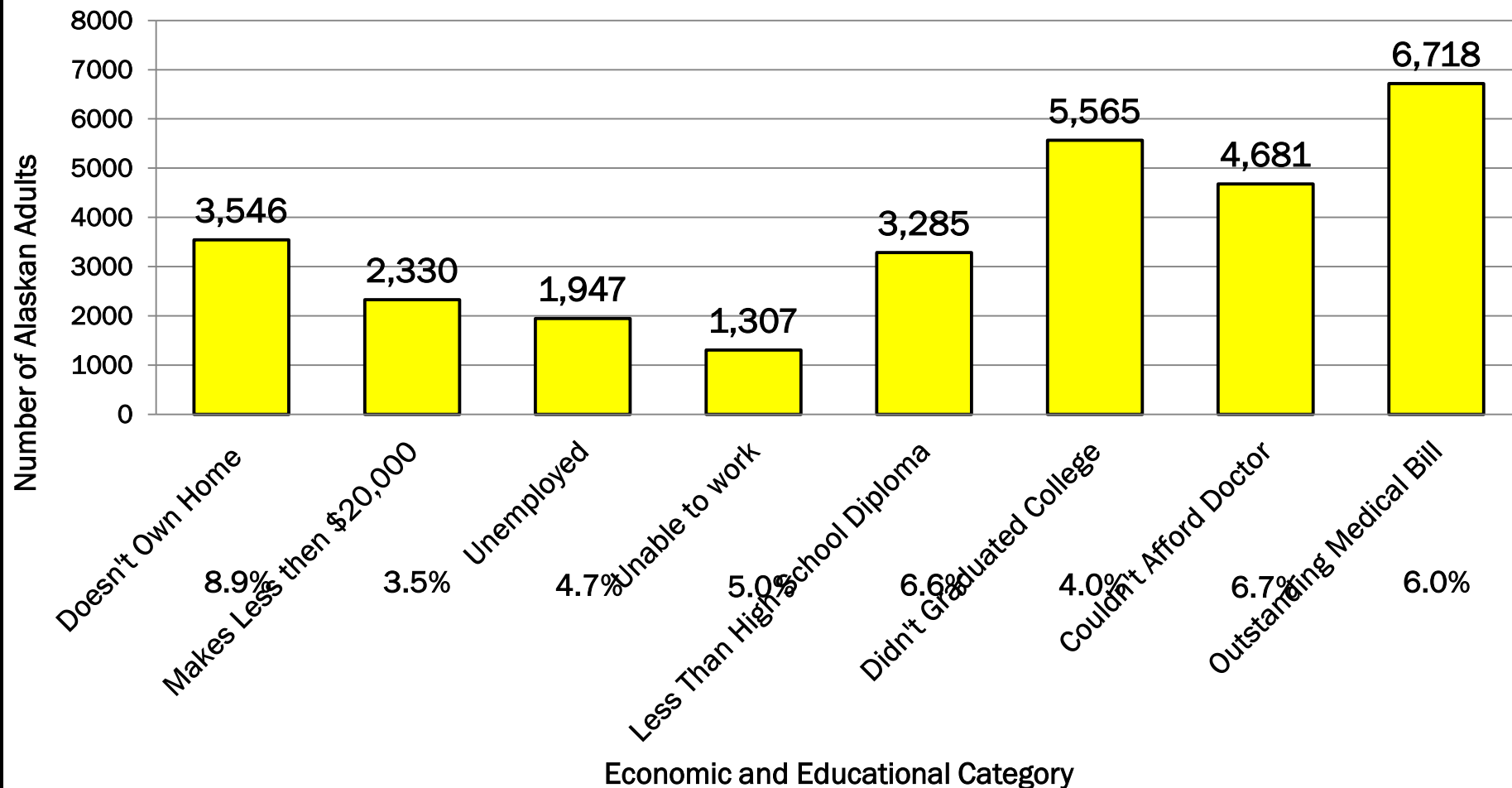
- If we just look at the reduction of
    - ❑ Obesity
    - ❑ Adult Medicaid recipients
    - ❑ Smoking
    - ❑ Binge drinking
    - ❑ Diabetes
    - ❑ Arthritis
  - *Alaska will save \$90 million annually*
-

# What Does \$90 Million Buy in Alaska?

- 258 three bedroom homes in Anchorage (average price \$347,000)
- 915 kindergarten teachers (wages only \$66,384 + 40%) \$97,938
- 846 police officers (wages only \$75,672 + 40%) \$105,941
- 518 mechanical engineers (wages only \$123,600 + 40%) \$173,040
- 339 pediatricians (wages only \$189,000 + 40%) \$264,600
- Office of Children's Services - General Funds 2016 – Operations
- All of the Behavioral Health State Medicaid Costs + \$18 million
- The General Funds for the Department of Commerce, Community & Economic Development + The Department of Labor & Workforce Development
- 103,307 Flights from Ketchikan to Barrow in July (\$868)
- Boeing 737-800 + \$17 million for fuel and crew.

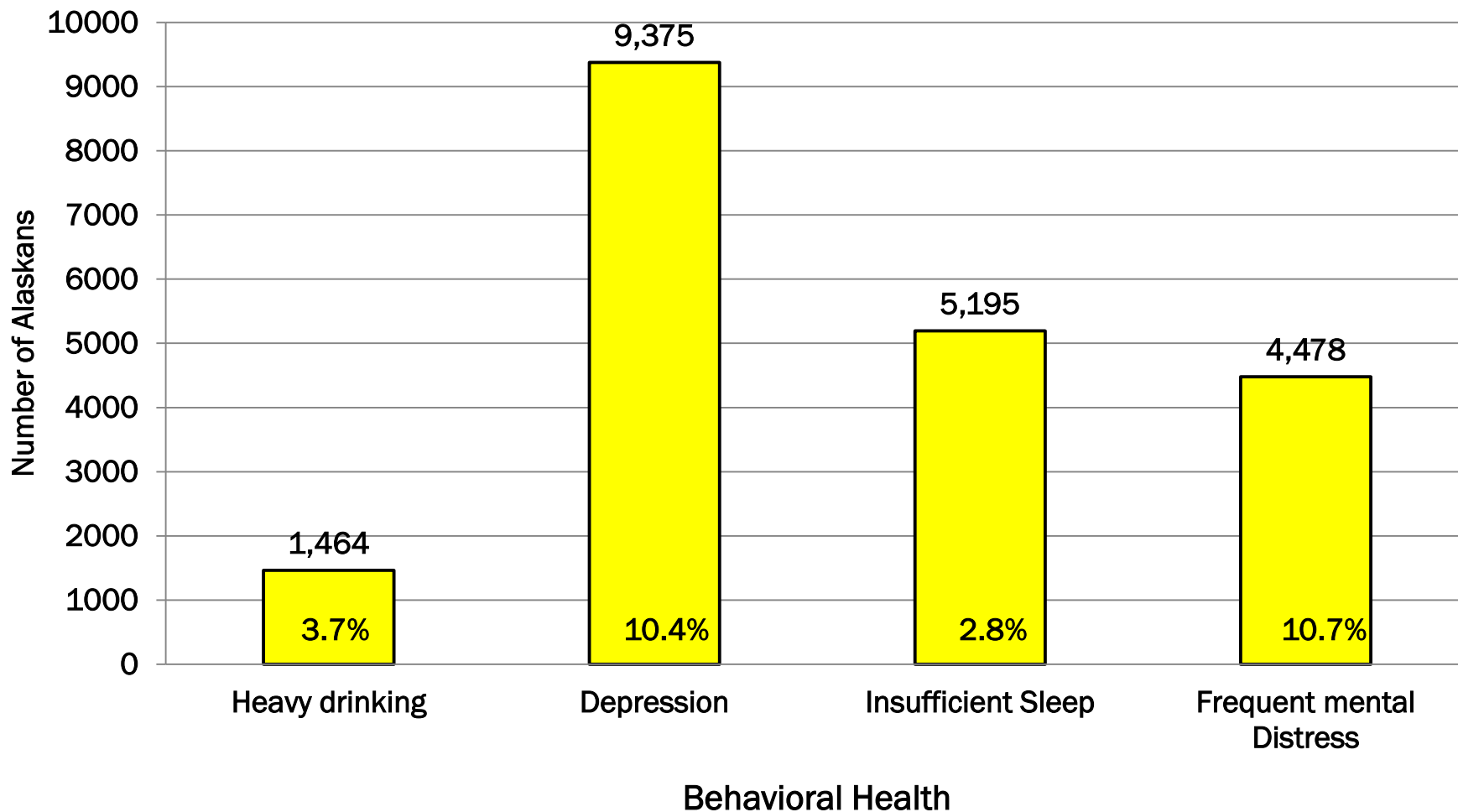
**Pick One!**

# If Alaska Had ACE Rates Similar to Arkansas and Vermont the Estimated Reduction in Number of Alaskan Adults for Each Category of Economic and Educational Outcome



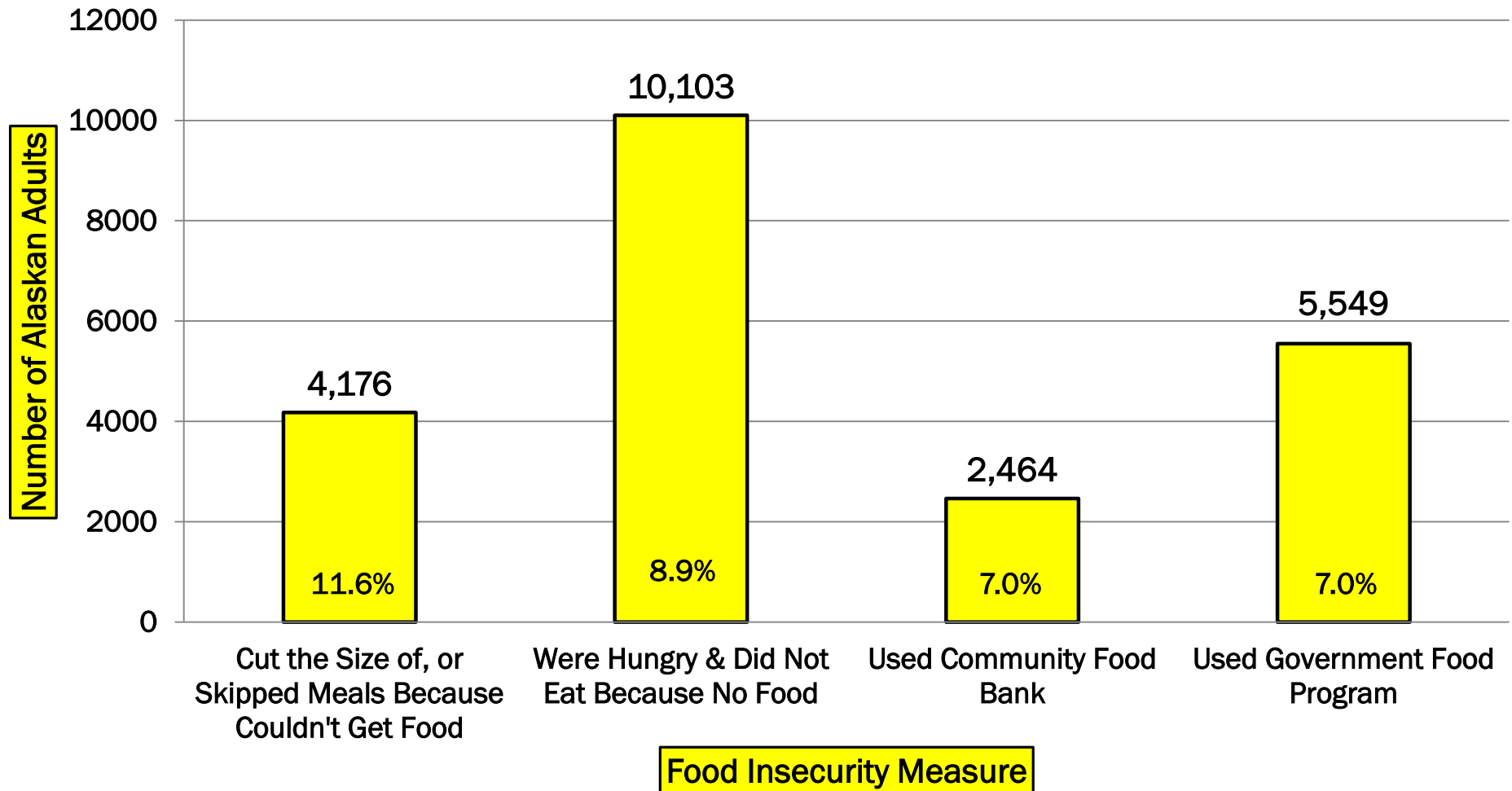
Calculations based on 2013 Alaska BRFSS data conducted by the Alaska Mental Health Board and Advisory Board on Alcoholism and Drug Abuse Staff

**If Alaska Had ACE Rates Similar to Arkansas and Vermont the  
Estimated Reduction in Number of Alaskan Adults for Each Category  
of Behavioral Health Outcome**



Calculations based on 2013 Alaska BRFSS data conducted by the Alaska Mental Health Board and Advisory Board on Alcoholism and Drug Abuse Staff

# If Alaska Had ACE Rates Similar to Arkansas and Vermont the Estimated Reduction in Number of Alaskan Adults for Each Category of Food Insecurity Outcome



Calculations based on 2013 Alaska BRFSS data conducted by the Alaska Mental Health Board and Advisory Board on Alcoholism and Drug Abuse Staff



“In the brain, as in the economy, getting it right the first time is ultimately more effective and less costly than trying to fix it later. “

James Heckman  
Nobel Laureate Economist

National Scientific Council  
on the Developing Child, Perspectives:  
The Cradle of Prosperity. (2006).  
<http://www.developingchild.net>

# Thank you!!!

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  - (907) 729-1084

