

HB

378

Alaska State Legislature

House Finance Committee

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HB 378

Sponsor Statement

HB 378 amends provisions in Title 17 relating to the powers of the Commissioner of the Department of Environmental Conservation (DEC) relating to food offered or sold to the public. The bill makes it possible for DEC to require food-handling operators to become trained and certified and assess fines. Both of these capacities are needed as part of the new food safety paradigm - Active Managerial Control. In addition, the bill defines a violation of labeling or advertising as a violation of the unfair trade and consumer protection provisions.

Currently, AS 17.20.005 allows the Commissioner of DEC to issue orders, regulations, permits, embargoes, and quarantines. This includes inspection, sanitation standards, food handling methods, and labeling. Under this bill, the Commissioner of DEC will have additional authority to ensure knowledge of food safety and sanitation by individuals who handle or prepare food for the public, and persons who supervise or employ those individuals. This bill also authorizes DEC to impose a civil fine for a violation of the Alaska Food, Drug, and Cosmetic Act.

HB 378 also clarifies that a violation of the label or advertisement provisions in AS 17.20, or a violation of the representation requirement in AS 17.06 is an unfair or deceptive trade practice under Alaska's Statutes. This will allow the Attorney General's office to investigate labeling violations that are not food safety or sanitation concerns.



Knowledgeable Workforce

Trained Workers

Certified Managers

Managing Risks

Quarterly Self Assessments

Standard Operating Procedures:

- Cleaning & Sanitizing
- Receiving & Storage
- Handwashing
- Employee Health
- Risk Factor related SOPs

Enforcement

Record Audits

Risk Based Inspections

Enforcement Actions

Testimony HB 378

Kristin Ryan - Director, Division of Environmental Health

- Restaurant industry sales account for 4 percent of the U.S. gross national product. According to the National Restaurant Association, Alaska saw sales of \$878 million in 2003, and is projected to see sales of \$922 million in 2004 (a 5% increase).
- Nationwide, the industry employs 12 million people, the nation's largest private-sector employer. In Alaska the numbers vary by season but averages to about 20,000 or 3% of the population (total pop 626,932).
- In 2000, an E. Coli outbreak at a Kenai restaurant resulted in 31 known sick Alaskans and an estimated 300 more unknown. The cause was infected workers, poor hand washing, food temperature control and cross contamination - All things easily avoided by a knowledgeable workforce. The operation permanently closed as a result.

Alaska needs a more effective food safety system - a system that ensures operators and staff are knowledgeable about food safety and accountable for controlling practices and procedures that contribute to foodborne illness. A system that sets reasonable standards, can be equitably implemented in both urban and rural settings, and does not rely on an infrequent government inspection to determine if standards are being met on a day-to-day basis.

- **Certification is a necessary part of an effective food safety system.**
- **Enforcement tools are necessary to promote compliance.**
- **Certification and enforcement are key components of Alaska's new Food Safety protection system called Active Managerial Control.**

1. Certification is a necessary part of an effective food safety system.

- a. Government food protection programs across the country are grappling with diminishing resources and ineffective delivery systems. Relying on government inspections as the primary tool to ensure high sanitary standards is no longer considered an effective method to ensure food offered or sold to the public is safe. The premise that inspections can improve sanitation of restaurants is flawed. Alaska has never been able to inspect frequently enough to truly protect public health. A national trend toward a more effective food safety program makes it a food worker's responsibility to practice established safe food handling skills 365 days a year, and prove it through certification and testing.
- b. A national study found restaurants for which managers were required to attend a training and certification program demonstrated significantly improved sanitation practices that were sustained over a two-year follow-up period.
- c. Alaska's food permit holders were asked what they needed for a safe food handling system. Out of 321 respondents 89% stated mandatory food manager certification was necessary and 82% believed mandatory food handler training was also necessary.

- d. Forty-one States or local governments have mandated certification requirements. Most remaining jurisdictions have voluntary programs like Alaska's current program.
- e. It is a mark of professionalism to meet criteria determined by one's peers. Lawyers take the bar examination, doctors pass boards, and public accountants become CPAs. The process of certification and demonstrated knowledge raises professional esteem and expectations.

2. Enforcement tools are necessary to promote compliance.

- a. Issuing a notice of violation, closing a facility, or pursuing criminal prosecution are currently the only enforcement tools DEC can use to promote compliance. Closing a facility is only appropriate when a serious health threat exists, and there are practical, procedural, and economic constraints to pursuing criminal prosecution for regulatory violations. Having the capacity to issue appropriate fines for violations that are significant or repeat violations provides a more reasonable, efficient, and effective mechanism to ensure food offered or sold to the public is safe and deter subsequent violations.
- b. Some say that the threat of consumer lawsuits is adequate motivation for operators to serve safe food. However, many foodborne illnesses go unreported and cannot be attributed to a specific eating establishment. The median reported cases were 25:1.

3. Certification and enforcement are key components of Alaska's new Food Safety protection system called Active Managerial Control.

Each individual in the food chain from farmer to processor to retailer to consumer has some responsibility for food safety. The ultimate responsibility at the retail level lies not with the regulator but with the food service operators.

What makes an effective food safety system or regulatory program?

- a. Unambiguous statutory authority. Alaska has a solid statutory foundation to ensure sanitary practices are used in the operation of a food handling establishment.
- b. Documented basis for concern.
 - 1. Centers for Disease Control estimates 76 million illnesses, 325,000 hospitalizations and 5,000 deaths a year caused by foodborne illness
 - 2. Foodborne illness can be traced to several sources--61% is traced to the foodservice industry, 32% to homes and 7% to food processing plants.
- c. Protective standards - With nearly 100 years of food safety regulation experience in the U.S. we know that the 5 risk factors that must be controlled are: food from unsafe sources, inadequate cooking, inadequate holding, contaminated equipment and poor personal hygiene.

- d. Rational regulatory scheme. 32 Alaska food safety experts (Food Safety and Sanitation staff) have reviewed how jurisdictions and industry ensure food safety in other states and developed Alaska's new regulatory scheme called Active Managerial Control. As the name implies, responsibility for food safety has been clearly placed on operators. It consists of food service workers that are knowledgeable about the causes of foodborne illness and practices to control them, written standard operating procedures and self-audits, and DEC enforcement implemented through on-sight inspections and record audits. HB 378 is needed to make the proposed rational regulatory scheme of AMC possible.
- e. Documented compliance. AMC incorporates various ways for operators to document and DEC health officers to verify compliance.
- f. Enforcement. Flexible mechanisms are needed to promote compliance through appropriate actions that prevent and deter rather than ineffective mechanisms that only react and punish.

- **Certification is a necessary part of an effective food safety system.**
- **Enforcement tools are necessary to promote compliance.**
- **Certification and enforcement are key components of Alaska's new Food Safety protection system called Active Managerial Control.**

Memorandum

DATE: November 7, 2000

TO: FOR THE RECORD

FROM: Michael Beller, M.D., M.P.H.
Medical Epidemiologist

THRU: Sue Anne Jenkerson, R.N.C., M.S.N., F.N.P.
Nurse Epidemiologist

FROM: Kim Mynes-Spink, R.N., B.S.N.
Nurse Epidemiologist

SUBJECT: Final Report - Escherichia coli O157:H7 outbreak-Kenai Peninsula

Introduction

On July 18, 2000, the microbiologist at Central Peninsula General Hospital in Soldotna reported four laboratory-diagnosed cases of Escherichia coli O157 infection and said other patients with diarrhea had been seen in the emergency department. An outbreak investigation was immediately begun. This report summarizes Interim Reports of July 20, 21, and 28 and presents additional information collected since the last Interim Report.

Methods

We interviewed persons living on or visiting the Kenai Peninsula in July who developed an acute gastrointestinal illness (diarrhea, abdominal cramping, or bloody diarrhea) or had a positive stool specimen for E. coli O157. Initially, subjects were interviewed because they presented to Central Peninsula Hospital with gastrointestinal symptoms. After notification of Kenai Peninsula physicians of the outbreak and news media coverage beginning on July 20, other ill persons contacted the Section of Epidemiology. A questionnaire was used for the interviews (Attachment 1).

Because the interviews suggested that the source of the outbreak was the Mad Moose restaurant in Sterling (see Results), we interviewed all workers there. We obtained

worker schedules and compared shifts with times and dates that ill patrons had eaten at the restaurant.

Stool specimens were collected from all restaurant workers (irrespective of illness status) and requested from ill persons identified during the interviews. Some ill persons did not submit specimens. Positive specimens from hospital laboratories were sent to the State Public Health Laboratory and the U.S. Centers for Disease Control and Prevention (CDC) for confirmation, complete identification, and pulsed field gel electrophoresis (PFGE), a type of "genetic fingerprinting." The enzymes used for the PFGE were XbaI and BlnI. PFGE also was performed on an Anchorage E. coli O157:H7 isolate from July 2000 and a Sterling isolate from September 2000. In order to examine isolates unrelated to the outbreak, PFGE was done on three E. coli O157:H7 isolates from sporadic Alaska cases during 1998.

On July 19, the Department of Environmental Conservation (DEC) inspected the implicated restaurant. Food samples, including ground beef and hamburger patties, were obtained and sent to the State Public Health Laboratory and cultured for E. coli O157. The next day, the DEC inspector used culturette swabs to collect samples from a cutting board, a meat slicer, and kitchen surfaces. The swabs were sent to the DEC laboratory in Palmer and used as cleanliness indicators and for quality control at the laboratory.

On July 18, the U.S. Department of Agriculture issued a recall for ground beef contaminated with E. coli O157 that had been sold by an Anchorage meat supplier. We obtained information on the ground beef sold by the supplier and the sources of meat used by the restaurant. CDC compared the PFGE pattern of the E. coli O157 isolate from the recalled ground beef to the isolates from ill restaurant patrons and workers.

We obtained from the restaurant owner a list of 28 patrons that had eaten at the restaurant during July 6 to 9, 2000 and paid by check. They were interviewed about illness in their households.

On August 23, Dr. Michael Beller and Kim Mynes-Spink met with the restaurant owner to review our findings and answer questions. The owner was given information about E. coli O157:H7, graphs used in the investigation, and the PFGE results.

Results

In all, 58 persons were investigated who either had gastrointestinal illness or worked at the restaurant. Stools were collected from 39 of them, including all 12 restaurant workers. Since all persons with a positive stool culture had eaten at the Mad Moose 2 to 7 days before becoming ill and no other common exposures - restaurants, grocery stores, or social gatherings - were identified, we defined cases as follows:

1. A **confirmed case** was a person who within 8 days eating or working at the Mad Moose on or after July 1, 2000 either
 - had a stool culture positive for E. coli O157:H7, or

- met the clinical case definition (see below) **and** had eaten one or more meals at the restaurant with a person with a positive stool culture.
2. A **clinical case** was a person who ate or worked at the Mad Moose on or after July 1 and within 8 days had diarrhea, abdominal cramping or bloody diarrhea but did not have a positive stool culture.
 3. A **secondary case** was a person with a stool culture positive for E. coli O157:H7 who developed acute gastrointestinal symptoms within 3 weeks of having contact with a household member who had eaten or worked at the Mad Moose.

There were 19 confirmed cases (16 patrons and three workers; all but two of which were laboratory confirmed), 10 clinical cases (nine patrons and one worker), and two secondary cases (both were siblings of a worker). This left 18 persons who reported being ill but had not eaten at the Mad Moose (five submitted stool for culture; all were negative) and nine employees who did not report having gastrointestinal symptoms and had negative stool cultures. All persons with E. coli O157:H7 infection in Alaska during April to August 2000 (except for an Anchorage resident with E. coli O157:H7 infection during June, see below) had either eaten or worked at the Mad Moose or lived with someone who had.

The most common symptoms experienced by cases were bloody diarrhea and abdominal cramping (Table 1). Cases ranged from 10 months to 73 years of age. Nearly 75% of the cases (23/31 or 74%) resided on the Kenai Peninsula; 12 in Kenai or Soldotna and 11 in Sterling. The remaining cases resided in Anchorage (n = 3), the State of Arizona (n = 3), and Wasilla (n = 2). For confirmed cases, 11 were male and eight were female; clinical cases included five males and four females; both secondary cases were male. Eleven cases were hospitalized; there were no deaths or serious sequelae, such as hemolytic uremic syndrome.

Among Mad Moose patrons, illness onset dates ranged from July 10 to July 24 (Figure 1). Patrons ate at the restaurant from July 7 to July 19 (Figure 2). The restaurant was closed on July 10, July 17, and July 20 to August 4. The mean interval between eating at the Mad Moose and onset of symptoms was 2.8 days (range: 2 – 7 days).

Among the 25 patron cases, none reported eating breakfast at the restaurant, 11 had lunch, 11 had dinner, and three had more than one lunch or dinner. Two were unsure of meal dates. No common food items were identified: nine had hamburgers, five had prime rib, three had club sandwiches, and one each had cashew salad, chef's salad, turkey sandwich, bacon-lettuce-tomato sandwich, and chicken fried steak (Table 2). Because patrons had difficulty recalling food items other than the main course, we did not ask them about salads, side dishes, or beverages.

Four restaurant workers reported having gastrointestinal symptoms during July, onsets were from July 11 to July 16 (Figure 2). Three of the four had positive stool cultures. The ill worker with a negative culture had illness onset on July 11 but did not submit a stool specimen until July 31. Employees had meal privileges at the restaurant and ill workers had eaten multiple meals.

Nine of the E. coli O157:H7 isolates were submitted to CDC; all were confirmed. The State Public Health Laboratory conducted PFGE on isolates from 17 confirmed cases, an isolate from an Anchorage infection in July 2000, an isolate from a Sterling infection in September 2000, and three unrelated isolates from 1998. Twelve patron isolates and three employee isolates had an indistinguishable PFGE pattern, which was termed the "outbreak pattern." Two of the outbreak pattern isolates were submitted to the State Public Health Laboratory by an Arizona laboratory since the patients, both patrons of the Mad Moose, had returned home to Arizona by the time of illness onset. Two patron isolates were indistinguishable from the outbreak pattern with the BlnI enzyme but had a one band difference with XbaI enzyme. The three isolates from previous infections and the July Anchorage isolate had PFGE patterns markedly different from the outbreak pattern (the ill Anchorage resident had not eaten at the restaurant). The September Sterling isolate was similar to the outbreak pattern though the patient had not eaten at the restaurant (see attachment).

Findings from the DEC inspection conducted on July 19 were: inadequate separation of cooked meat, uncooked meat and other foods; use of a cutting board that could not be cleaned thoroughly; inappropriate cooling process for prime rib; and inadequate hand washing between handling uncooked meat and other foods.

All 13 food samples taken on July 19 tested negative for E. coli O157:H7. Results from the culturette swabs varied from common organisms such as Streptococcus to Enterobacter cloacae; no E. coli O157:H7 was identified.

A small amount of ground beef used by the restaurant was purchased from a major retail store in Soldotna. Most of the ground beef served during the outbreak was purchased from a supplier on the Kenai Peninsula. From July 6 to July 18 the restaurant received three 80-pound shipments. The supplier had purchased meat from an Anchorage distributor. This distributor had sold ground beef to multiple suppliers including the Kenai Peninsula supplier and an Anchorage supplier that had been the subject of the USDA recall.

The PFGE pattern of the E. coli O157:H7 isolate obtained by USDA from the recalled ground beef was different than the outbreak pattern. The restaurant owner denied purchasing any meat from the Anchorage supplier. The sausage and bacon served during breakfast were purchased from a different supplier on the Kenai Peninsula. The restaurant also obtained steak, prime rib, seafood, produce and miscellaneous items from this supplier.

We completed telephone interviews with 29 residents from 14 households on the list of restaurant patrons that had paid by check during July 6 to July 9. Five patrons had breakfast, five had lunch, and 21 had dinner; two of the lunch patrons also had breakfast during July 6 to July 9 (Table 3). Four reported having diarrhea 2 to 7 days after eating at the restaurant, all four reported having lunch or dinner at the restaurant on July 7 or July 9. The restaurant owner said 150 to 200 patrons ate lunch or dinner each day during July.

By applying the attack rate for lunch and dinner patrons in the survey (4/26 or 15%) to the estimated 1,500 to 2,000 lunch or dinner patrons served during July 7 to 19, we estimated at 225 to 300 persons may have been ill after eating at the restaurant.

All three workers with laboratory confirmed infection worked during the outbreak period. The other ill worker (with a negative stool culture) last worked on July 8 and became ill on July 11. All employees were involved in some food handling, preparation, or serving. There was no individual work schedule that matched the dates that ill patrons ate at the restaurant.

After the restaurant re-opened on August 4, one case of E. coli O157:H7 was reported from Sterling through the end of September. This case was not linked to the implicated restaurant (see attachment). There were seven other E. coli O157:H7 infections reported in Alaska between August 4 and September 30: five in Anchorage and one each in Seward and Fairbanks. None of these were linked to the restaurant

Discussion

Alaska has had very few E. coli O157:H7 infections reported (an average of 6.3 per year during 1997-1999), so the occurrence of almost 20 cases in less than a month is very unusual. The facts that all 19 laboratory confirmed cases either ate or worked at the Mad Moose and that 15 had an identical PFGE pattern were overwhelming evidence of a link between illness and the restaurant. The conclusion is further supported by the:

- absence of any other common exposure despite careful and extensive questioning,
- presence of serious sanitation deficiencies at the restaurant,
- mean interval between eating at the restaurant and illness onset was the same as the established incubation period (3 to 4 days, range 2 to 8 days) for E. coli O157:H7 infection, and
- observation that the outbreak stopped when the restaurant closed.

Although the epidemiologic and laboratory evidence demonstrated that the restaurant was the source of the outbreak, the investigation did not implicate any particular food item, food handler, or practice. This does not alter the conclusion that the outbreak came from the restaurant. Nearly all the patrons who became ill after eating on July 7, 9, and 11 had eaten hamburgers or prime rib. Given the well-established link between beef and E. coli O157:H7 and DEC's observation of food handling deficiencies, it is possible that the initial patrons and employees became ill after eating undercooked meat. Subsequently, infected restaurant workers could have been the source of illness among patrons who ate during July 13 to 19. A ground beef recall which occurred at the same time as the outbreak had no connection to the outbreak.

Food and kitchen surface samples taken on July 19 and 20 tested negative for E. coli O157:H7. These samples were collected 10 to 12 days after the outbreak started and were not from the same food shipments the ill patrons ate. Environmental swabs were collected after the restaurant closed and cleaning had occurred. Clearly, the culture results do not mean that meat served earlier did not contain E. coli O157:H7, that kitchen

surfaces were not contaminated, or that foods were not cross-contaminated with E. coli O157:H7 from meat.

Humans generally excrete E. coli O157:H7 for 1 or 2 weeks after being infected. Therefore, some of the nine workers who had negative stool cultures in mid- to late-July could have been culture positive earlier in the month. In particular, the worker with illness onset on July 11 could have had E. coli O157:H7 infection despite a negative culture of a stool collected on July 31.

Because the infectious dose is low, E. coli O157:H7 is readily transmitted from one person to another. Since the three workers with positive stool cultures worked while ill, a worker could have passed infection to patrons. We did not find a link between employee schedules and when patrons dined. However, the restaurant owner said the work schedule we were given was not the actual schedule (employees were allowed to trade days off or shifts). We requested a copy of the actual work schedule, but the owner did not provide one.

This outbreak was probably larger than the 31 cases identified. Investigation suggested that 15% of lunch and dinner patrons during the outbreak, or 225 to 300 persons, might have been sickened. Since some persons with E. coli O157:H7 infection have relatively mild symptoms, and many persons with diarrhea do not obtain medical care, we suspect that the true number of cases was substantially larger than the number of confirmed and clinical cases. The restaurant was in a community with a large influx of out-of-state tourists and additional cases may have returned home before becoming ill.

In conclusion, our investigation traced an E. coli O157:H7 outbreak to a restaurant. The restaurant was closed and the outbreak stopped. DEC worked with the owner and employees to correct all deficiencies before the restaurant re-opened. Because the source of the outbreak was quickly identified, disease transmission was stopped even though the precise mechanism of spread was not determined.

Acknowledgments: Janet Gleason and Lenore Winkopp at Central Peninsula Hospital were extremely helpful in providing up-to-date information as the outbreak progressed. Patty Little, PHN at the Kenai Health Center quickly and efficiently completed interviews and collected stool specimens.

Attachments: Interim Reports

Memo to the Record, Escherichia coli O157 – Sterling

CC: Brad Tufto, DEC
Jerry Ferrington, DEC
Cory Willis, DEC
Janet Gleason, Central Peninsula Hospital
Patty Little, Kenai Health Center

The Eating and Drinking Industry

by Neal Fried
Brigitta Windisch-Cole
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Labor Economists

Many Alaskans find work at eating and drinking places

"A man hath no better thing under the sun, than to eat, and to drink and to be merry."
Ecclesiastes 8:15

"The finest landscape in the world is improved by a good inn in the foreground."
Samuel Johnson

It is not just your imagination that eating places appear to be popping up literally everywhere these days—in gas stations, schools, airports, hotels, stores, along with those ubiquitous coffee shacks, and your actual stand-alone fast food eateries, bars, and sit-down restaurants. The eating and drinking industry is mushrooming across the nation. A third of all adults in the nation have worked in it some time in their lives. According to the National Restaurant Association, the average person eats 4.2 meals away from home every week, a frequency that has some home economists worried that cooking at home is becoming just a hobby, rather than a basic skill.

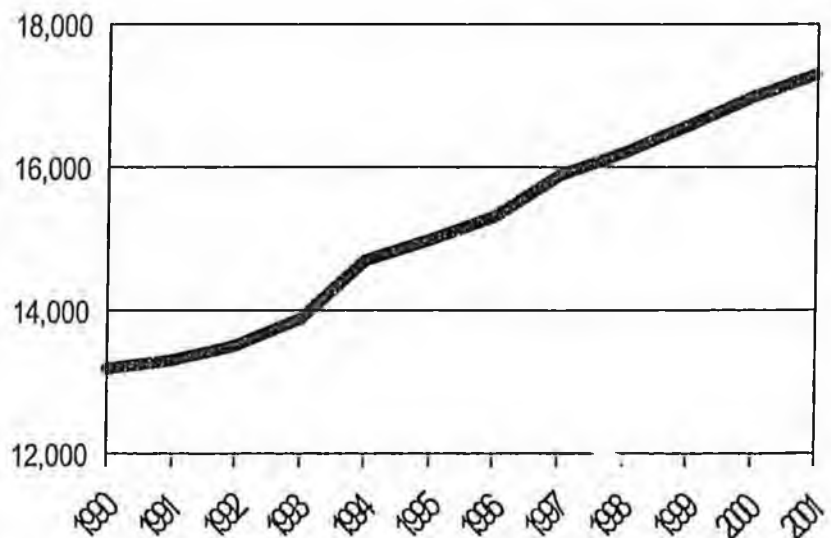
Alaska had 1,811 eating and drinking places in 2000, with sales projected to reach \$982 million in 2001, according to the National Restaurant Association. These numbers grow every year, and competition intensifies. Eating and drinking is one of Alaska's more dynamic and competitive sectors, growing faster than most other industries. The industry's shape and look is constantly in flux, driven by changes in demographics, the economy, technology, fashions, tastes, and the state's visitor industry.

Recognizing eating and drinking places

An eating and drinking place is defined as any business that prepares food and drink away from

home, that is consumed either at a restaurant, bar, cafeteria, at home, at a grocery store, in sports facilities, in jail, on the go, at work, or in a car. In fact, it is estimated that one-fifth of all meals are eaten in a car. Employment data for eating and drinking places include nearly all of the above-mentioned kinds of places. However, this employment count does miss some players. Many hotels have restaurants and bars incorporated in their business and this employment is most likely captured in the hotel industry, not eating and

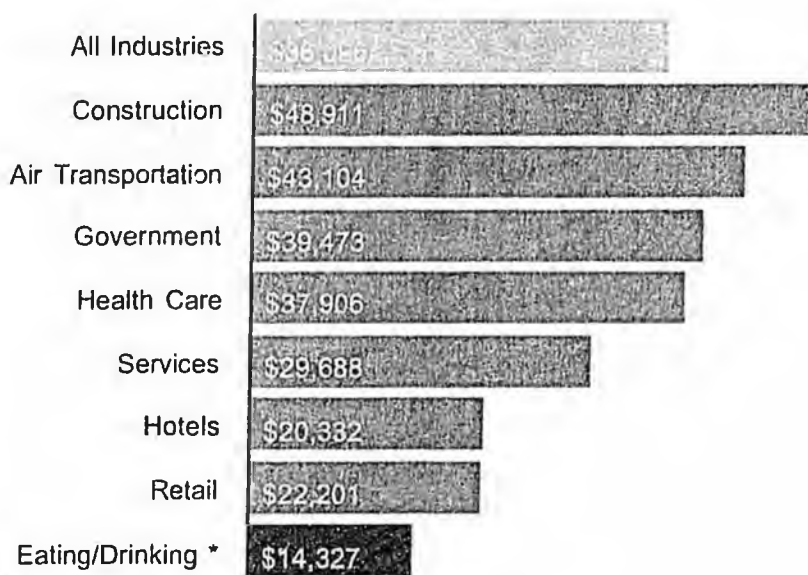
Restaurants Show Strong Growth In employment



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

2 Wages in Eating and Drinking Compared to other industries

2001 average annual wage



* Not including tips

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

3 Employment Growth Eating and Drinking vs. other industries

Percent employment growth 1990-2001



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

drinking. Nationally, estimates project that about 4.4% of all food consumed away from home is eaten in hotel restaurants. That figure may be higher in Alaska because of the size of the visitor industry. Another example of missed eating and drinking places employment is today's super-market, which often devotes a large slice of the business to ready-to-eat or ready-to-heat meals. Employment numbers are counted in the grocery store category. So, impressive as these eating and drinking employment numbers are, they tend to underestimate employment in the food-away-from-home businesses.

The industry employs more than 17,300

During the past decade, employment in Alaska's eating and drinking establishments has grown 2.8% per year versus 1.8% for total employment. This industry has grown steadily and without interruption for over a decade. (See Exhibit 1.) It supports 4,200 more jobs today than a decade ago. In 2001, 17,300 jobs in Alaska were directly tied to the eating and drinking industry—more jobs than oil, or construction, the federal government, or a number of other industries. Measured by payroll, the figures tell a different story. Total payroll for eating and drinking places was \$248 million compared to \$736 million for construction in 2001. Lower wages and the pervasiveness of part-time or seasonal employment put the average eating and drinking wage at the bottom of all industries. (See Exhibit 2.)

Employment for eating and drinking establishments grew quickly, faster than overall employment in Alaska, (see Exhibit 3) and in the nation as a whole over the past decade. The industry's share of the Alaska employment pie has expanded over the past two decades. In 1980, eating and drinking establishments generated four percent of all wage and salary employment in Alaska. By 2001, that share had more than doubled to 8.5 percent of all employment, compared to 6 percent nationwide. Nevertheless, the average Alaska consumer spends a smaller portion on food away from home than other Americans.

Eating and drinking employment is concentrated on the road system

More than 82 percent of all eating and drinking employment occurs in Anchorage, Fairbanks, the Kenai Peninsula, and the Mat-Su Borough. More than half of all workers are in Anchorage alone. Most of Alaska's population lives in these four urban areas, which are road accessible and on the most traveled visitor routes. Among the rural areas, the heaviest concentration of eating and drinking workforce is at the entrance to Denali National Park. There, the population to industry worker ratio is extreme, with only four residents per eating and drinking employee. (See Exhibit 4.) This underscores the tremendous impact the summer workforce, catering to visitors, has on the Denali Borough. Tourist areas in Southeast employ over nine percent of the state's eating and drinking workforce, but their ratio of population to industry worker is much larger. Most tourists in Southeast are cruise ship passengers, who typically take their meals on board. It is interesting to note that in the two places that can be reached by road, Skagway and Haines, the concentration of eating and drinking worker to population intensifies. Rural areas off the beaten path typically have much smaller eating and drinking industries. The exception is the North Slope Borough, where a relatively large food service workforce supports the oil industry.

More than a third of food dollars spent away from home

The average Anchorage consumer spent \$2,498 per year on food away from home—which was 17 percent more than the average U.S. consumer, who spent \$2,126. Some of this higher expense for Anchorage can be explained by higher costs, higher income and other factors. Expenditures in eating and drinking establishments generate business activity in other industries. According to the National Restaurant Association, each dollar spent in Alaska's eating and drinking industry generates another \$.62 in sales elsewhere. But

Restaurant Employment And population by area—2001 **4**

	Restaurant Employment 2001	Population	Ratio of Population to Restaurant Employment
Statewide	17,301	626,932	36
Aleutians East Borough	2	2,697	1,349
Aleutians West Census Area	51	5,465	107
Anchorage, Municipality	9,820	260,283	27
Bethel Census Area	26	16,006	616
Bristol Bay Borough	15	1,258	84
Denali Borough	479	1,893	4
Dillingham Census Area	26	4,922	189
Fairbanks North Star Borough	2,212	82,840	37
Haines Borough	62	2,392	39
Juneau Borough	708	30,711	43
Kenai Peninsula Borough	1,216	49,691	41
Ketchikan-Gateway Borough	337	14,070	42
Lake and Peninsula Borough	n/a	1,823	n/a
Northwest Arctic Borough	36	7,208	200
Kodiak Island Borough	322	13,913	43
Matanuska-Susitna Borough	1,009	59,322	59
Nome Census Borough	110	9,196	84
North Slope Borough	271	7,385	27
Prince of Wales Census Area	91	6,146	68
Sitka Borough	192	8,835	46
Skagway-Hoonah-Angoon	92	3,436	37
Southeast Fairbanks Area	90	6,174	69
Valdez-Cordova Area	175	10,195	58
Wade Hampton Census Area	n/a	7,208	n/a
Wrangell-Petersburg CA	95	6,684	70
Yakutat Borough	19	808	43
Yukon Koyukuk Census Area	14	6,551	468

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

5 Restaurant Sales by State

Projected 2001

	Sales	Per Capita Sales
Alabama	\$3,785,512,000	\$848
Alaska	981,836,000	1,546
Arizona	5,803,522,000	1,093
Arkansas	2,108,463,000	783
California	38,791,181,000	1,124
Colorado	5,532,611,000	1,252
Connecticut	3,556,800,000	1,038
Delaware	1,028,488,000	1,292
Florida	19,977,170,000	1,218
Georgia	9,372,042,000	1,118
Hawaii	2,729,595,000	2,229
Idaho	1,183,084,000	896
Illinois	13,442,251,000	1,077
Indiana	6,507,865,000	1,064
Iowa	2,743,588,000	939
Kansas	2,589,664,000	961
Kentucky	3,876,847,000	954
Louisiana	3,976,505,000	891
Maine	1,278,021,000	993
Maryland	5,949,301,000	1,107
Massachusetts	7,887,413,000	1,236
Michigan	10,386,132,000	1,040
Minnesota	5,207,177,000	1,047
Mississippi	1,866,886,000	653
Missouri	5,909,281,000	1,050
Montana	1,053,856,000	1,165
Nebraska	1,768,602,000	1,032
Nevada	2,635,773,000	1,252
New Hampshire	1,374,268,000	1,091
New Jersey	8,435,056,000	994
New Mexico	1,953,459,000	1,068
New York	18,624,395,000	980
North Carolina	8,565,389,000	1,046
North Dakota	618,254,000	974
Ohio	12,108,456,000	1,065
Oklahoma	3,276,514,000	947
Oregon	3,961,123,000	1,141
Pennsylvania	11,757,078,000	957
Rhode Island	1,112,729,000	1,051
South Carolina	4,350,145,000	1,071
South Dakota	737,355,000	975
Tennessee	6,033,354,000	1,051
Texas	22,516,648,000	1,056
Utah	2,035,897,000	897
Vermont	672,066,000	1,096
Virginia	7,163,242,000	997
Washington	7,223,415,000	1,206
West Virginia	1,357,741,000	753
Wisconsin	5,504,860,000	1,019
Wyoming	577,941,000	1,169
U.S.	303,326,361,000	1,065

among all U.S. states, Alaska's multiplier not surprisingly ranked weakest. Very little of the food and drink consumed by patrons is produced in the state. Other economic leakages also exist.

The 2000 expenditure survey conducted by the U.S. Department of Labor established that Anchorage residents spent more than a third (36 percent) of their food budget on food consumed away from home, while the average American consumer spent 42 percent of their food dollar away from home—a significantly higher figure. The difference is puzzling, given Anchorage's demographics that favor dining out. Per capita expenditures on dining out paint an altogether different picture. Per capita spending in eating and drinking places was \$1,546 in Alaska versus \$1,065 nationally—a full 45 percent above the national average, according to the National Restaurant Association's 2001 figures. In proportion of food dollars spent on meals eaten out, Alaska is below the national norm, suggesting room for more growth. The per capita expenditures, on the other hand, mean Alaska's eating and drinking industry benefits from the patronage of non-Alaskans.

Visitors are big patrons of eating and drinking

Visitors are important patrons of the eating-away-from-home industry, and the visitor industry in Alaska has grown much faster than most other industries. According to a 1999 visitor expenditure study, visitors spent \$63 million for eating and drinking and generated 4,120 eating and drinking jobs in Alaska in 1998. This represents nearly a third of all of the jobs in the industry. Only hotels and lodging generated more jobs. The Denali Borough, where the visitor industry reigns king, provides a special example of the influence visitors have on the eating and drinking sector. In 2001, there were 36 Alaskans for each eating and drinking job in the state, and only four residents for each such job in the Denali Borough. (See Exhibit 4.) Visitors, of course, are not counted in resident population figures, and during the summer months they far outnumber the resident population. Visitors spend most of their food dollar in local eating establishments, boosting the jobs-to-residents ratio way above the statewide average. Visitor impact on

Source: National Restaurant Association

this industry also probably explains why Alaska ranks number two among the states in per capita eating and drinking sales, bested only by Hawaii. (See Exhibit 5.)

The visitor share of the eating and drinking industry also explains most of its seasonal nature. In 2001, the low point in this industry's employment was January at 15,200 compared to its peak in August at 19,800. (See Exhibit 6.)

Restaurant food sales vary across state

Alaska's eating and drinking industry grossed over \$730 million in 1997. (See Exhibit 7.) On a statewide basis, full service restaurants took in the largest share of revenues, followed by fast food and food service companies. Bar sales were 11 percent of the statewide eating and drinking revenues in 1997. (See Exhibit 8.) Anchorage claimed well over half of all restaurant and bar sales in the state, a disproportionately large share. Fairbanks, the Kenai Peninsula, Juneau, and the Mat-Su Borough fell in line in descending order. In 1997, 41.7% of Alaska's population lived in Anchorage but it booked 56 percent of Alaska's restaurant/bar industry sales. As Alaska's commercial center, Anchorage entertains business and in-state travelers, tourists, commuters, and its own growing population. Anchorage's relative high income compared to the rest of the state also helps to support the large number and variety of dining places.

Anchorage's restaurants tend to be large

Anchorage, the culinary hot spot of the state, had nearly 600 eating and drinking places in 2001. According to municipal records, about a third of Anchorage restaurants are small with seating up to 25; nearly 17 percent of the restaurants can seat between 26 and 50 patrons; but over half can seat more than 50 guests. (See Exhibit 9.) Many of the small places sell take-out fast food such as pizzas, hamburgers, sandwiches, Asian, and Mexican food specialties. Cafés, delis, and snack bars in hotels, meeting places, and grocery and convenience stores are sub-groups of the small eating establishments. The medium and large

sized establishments sell similar food items but many are more specialized and offer more variety on their menus.

Asian food leads Anchorage's specialty menu

Among the specialty eating establishments, Asian restaurants, pizza, and hamburger places claim the top spots. (See Exhibit 10.) Many other specialty places present choices. Steakhouse and seafood restaurants are classified in the all variety section, which forms the largest portion of Anchorage's restaurant mix. Among Asian restaurants the Chinese kitchen dominates, and Mexican restaurants are in the runner-up position in the foreign food specialty group. (This assumes that pizza is an all-American food.) In continental specialties, restaurants featuring Italian cuisine (excluding pizzerias) are in the lead spot.

In restaurants, services personnel dominate the employment mix

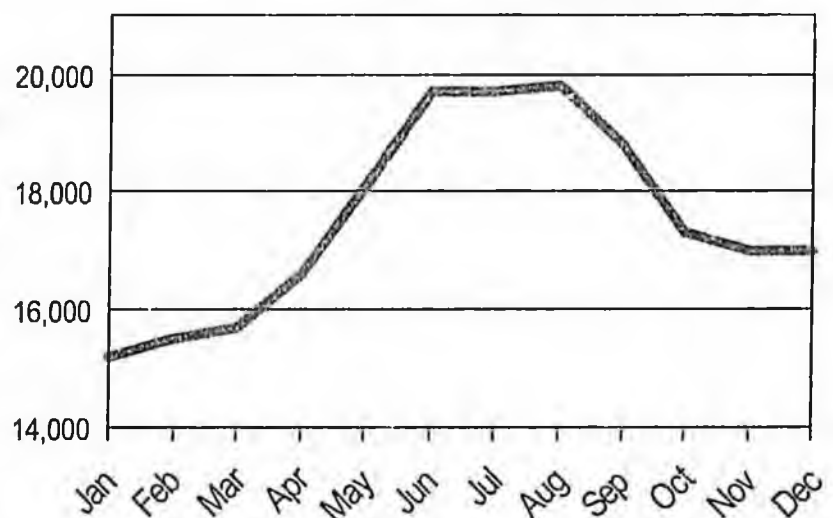
Eating places have distinct occupational patterns by type. In catering establishments or camp kitchens, for example, food preparation workers

Employment Swings Seasonally

In the eating and drinking business

6

Employment 2001



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

form the largest portion of the staff. In Alaska, they are the largest occupation in the eating and drinking industry because of full food service support to industries with remote work site locations such as the North Slope and the Northwest Arctic Borough. Cafeterias, fast food, take-out places, and even delis tend to have more kitchen staff, but restaurants employ mainly services personnel.

Data compiled from a sample of 28 full service restaurants in the state show waiters and waitresses claiming the largest occupational slice. (See Exhibit 11.) In combination with other service personnel, nearly 52 percent of all staff had direct contact with the customer. Basic kitchen functions were carried out by 34 percent of the employees, and support functions, including management, make up the remaining 14 percent of all restaurant staff.

7 Eating and Drinking Sales

By area—1997

	Restaurant Sales
Statewide	\$730,221,000
Aleutians West Census Area	n/a
Aleutians East Borough	n/a
Anchorage, Municipality	408,202,000
Bethel Census Area	1,115,000
Bristol Bay Borough	1,545,000
Denali Borough	2,659,000
Dillingham Census Area	n/a
Fairbanks North Star Borough	79,155,000
Haines Borough	2,935,000
Juneau Borough	40,315,000
Kenai Peninsula Borough	43,544,000
Ketchikan-Gateway Borough	15,485,000
Lake and Peninsula Borough	n/a
Northwest Arctic Borough	8,551,000
Kodiak Island Borough	10,773,000
Matanuska-Susitna Borough	37,854,000
Nome Census Borough	4,535,000
North Slope Borough	26,610,000
Prince of Wales-Outer Ketchikan CA	4,611,000
Sitka Borough	10,273,000
Skagway-Hoonah-Angoon CA	3,163,000
Southeast Fairbanks Census Area	3,623,000
Valdez-Cordova Census Area	9,897,000
Wade Hampton Census Area	n/a
Wrangell-Petersburg Census Area	n/a
Yakutat Borough	n/a
Yukon-Koyukuk Census Area	2,931,000

Source: U.S. Census Bureau, 1997 Economic Census

Alaska's eating and drinking workforce is large and dynamic

In 2001, the eating and drinking industry employed more than 49,600 individual workers, which compares with an average annual job count of 17,300. This indicates considerable turnover in the industry. Seasonality, lower wages, and part-time employment help drive turnover. In 2000, over 30,650 new hires were recorded for the industry. A new hire is a worker who did not work for the same employer in the previous four quarters. According to national statistics, 38 percent of all eating and drinking industry workers are part-time employees, double the overall average, and they work typically 25.5 hours per week. The industry is attractive to workers seeking a flexible schedule, income during slack times such as for students, or to supplement existing employment in other industries. Many employees in Alaska work only the summer season, which implies that students from other places and transient workers form a large group within the seasonal workforce. In 2000, nearly 6,400 or 23 percent of Alaska's eating and drinking workforce were non-resident workers, considerably above the all-industry average of 18 percent.

Workforce is young and female

According to a 1999 workforce age analysis, the typical eating and drinking industry worker is only 29.2 years old, making it the youngest major industry workforce in the state. The average age of an Alaska worker was 37.3 years. Women workers predominate in the industry, which has 130 women workers for every 100 men. Four out of every five wait-staff are females. But some

occupations are male dominated; the male/female ratio for cooks, for example, is 140 to 100.

Wages tend to be low

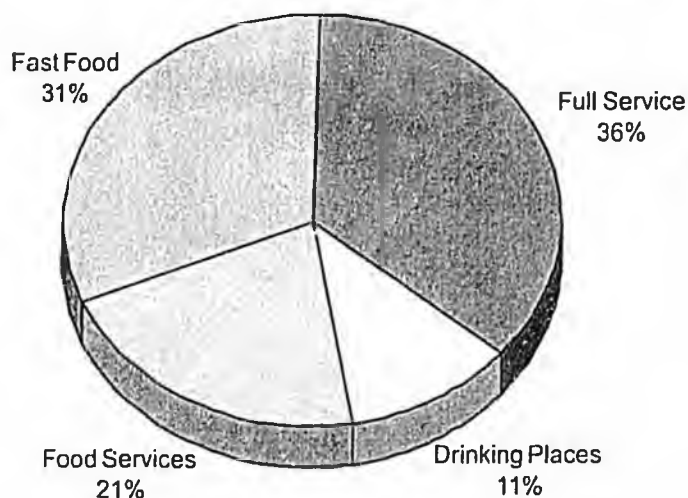
In general, eating and drinking jobs do not require previous training, which in part explains the relatively low hourly earnings. (See Exhibit 12.) The higher paying jobs in the industry usually require work experience and/or specialty training. Chefs/head cooks, food service managers, other food preparation supervisors, and bookkeepers belong to this group. In all, Alaska's hourly wages in 2000 compare favorably to the national averages. In some cases the differential is quite significant. The hourly pay rate for cooks in institutions or cafeterias in Alaska, for example, exceeded the national average by 62 percent. Fast food cooks and food preparation workers also earn substantially more per hour than their colleagues in the rest of the nation. Their differentials were 50 percent and 46 percent higher than the national average. Only a few exceptions countered the higher Alaska pay rule. Hourly pay rates for food service managers and drivers were a bit lower in the state than in the nation.

Tip earning personnel, such as waiters, waitresses and bartenders, gross more per hour than their posted wage rates. Many restaurant and bar patrons add about fifteen percent for tips to their food/bar bill for good service. Theoretically, tips are included in pay rates, but often only those noted on credit card sales are included. Cash tips may not be considered in wage rate surveys, simply because they bypass the employer's business records.

Geographic earning differentials exist within the state

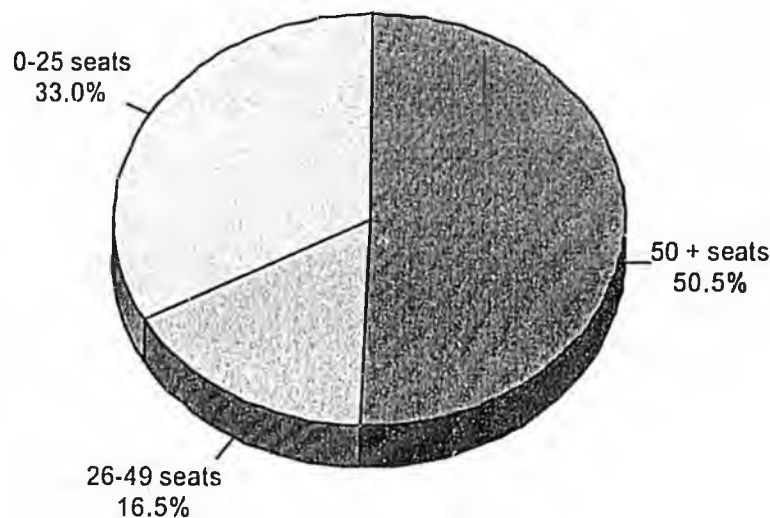
In some ways, the concentration of food service companies explains the vast disparities in earnings in different Alaska locations. In 2001, the highest average quarterly earnings per industry worker occurred on the North Slope, where the food service employees support the oil industry workforce on a year round basis. Overtime plays

Where the \$730M is Spent **8** In the state's eating/drinking places



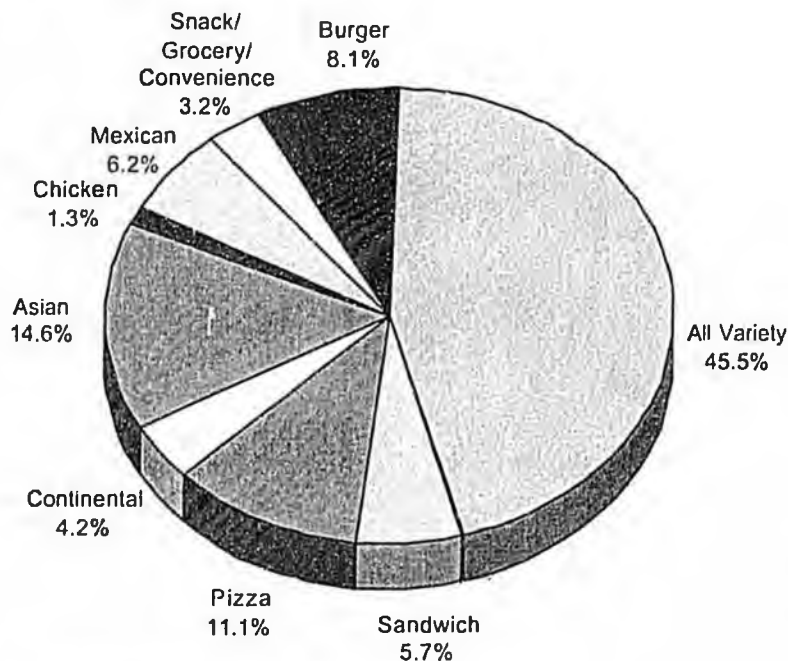
Source: U.S. Census Bureau, 1997 Economic Census

Large Restaurants Dominate **9** In Anchorage



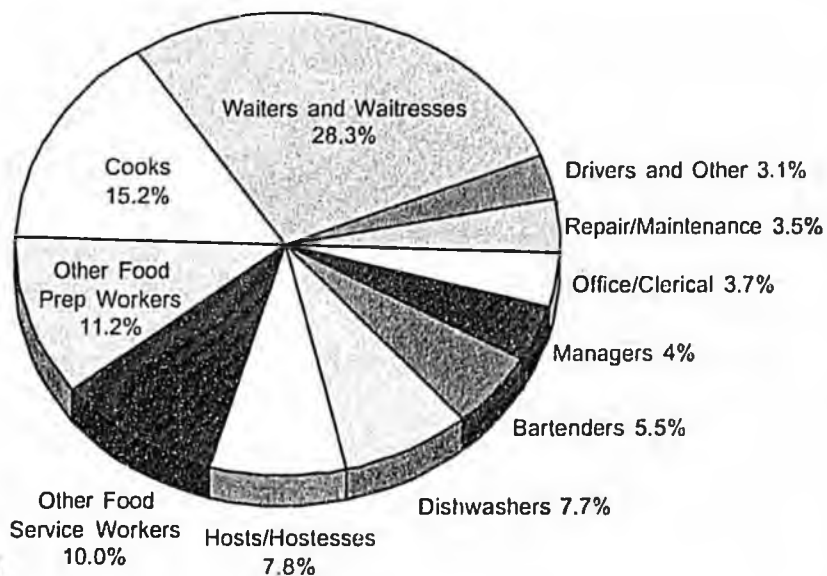
Source: Municipality of Anchorage, Food Safety and Sanitation Program

10 Anchorage Specialty Menus Offer variety



Source: Municipality of Anchorage, Food Safety and Sanitation Program

11 Employee Occupation Mix At 28 Alaska full service restaurants



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

a big role in these wages. Food service workers typically are on shift rotation just like the oil industry workforce. The Northwest Arctic Borough's eating and drinking wages were the second highest because of the Red Dog Mine. Its remote work site location and year-round operation explain these higher wages. The Denali Borough's third place is harder to explain. Here, most money is earned during the second and third quarters of the year. Above average hourly pay and considerable overtime most likely play a role.

In some ways Alaska's eating and drinking industry is unique

Among the largest employers in Alaska's eating and drinking industry are food service companies and caterers. (See Exhibit 13.) Remote camp support, institutional kitchens, and resorts are their marketing niche. Companies such as Nana/Marriott, Doyon/Universal Ogden, Aramark Leisure Services, and Skychefs contract with oil, metal mining, resort, and airline industries. Currently, both Aramark and Nana/Marriott also have cafeteria contracts with the University of Alaska in Anchorage and Fairbanks. Several chain restaurants, managed by specific franchise holders in the state, also made the state's list of the largest eating and drinking employers. However, most eating and drinking industry employees work for small employers. (See Exhibit 14.)

The future of eating and drinking

Continued growth in the eating and drinking industry appears certain—particularly in Alaska's urban communities. A recent ten-year industry forecast predicted that the eating and drinking places industry will grow faster than the overall economy. Many factors will influence the rate and shape of this growth. The state of the economy, growth in consumer income and spending power, population growth, demographics, trends in the visitor industry, and consumer preferences will all be important determinants. The long-term outlook for Alaska's visitor industry remains a big positive—not just in urban Alaska but also in the more rural parts of the state. In ten years, the eating and drinking landscape in Alaska will offer residents even more entrée choices. *Bon appétit.*

Wage Rates for Eating and Drinking Occupations

2000

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	Alaska Average Hourly Wage *	National Average Hourly Wage *
Food Preparation		
Combined Food Preparation and Serving Workers, Including Fast Food	\$7.42	\$6.84
Cooks, Restaurant	11.12	9.68
Food Preparation Workers	11.65	7.78
Food Preparation and Serving Related Workers, All Other	13.28	n/a
Cooks, Fast Food	9.87	6.78
Cooks, Short Order	9.83	7.92
First-Line Supervisors/Managers of Food Preparation and Serving Workers	14.00	11.83
Cooks, Institution and Cafeteria	14.10	8.68
Chefs and Head Cooks	14.68	13.73
Bakers	10.54	10.12
Food Service		
Waiters and Waitresses	7.39	7.09
Dishwashers	8.50	7.00
Bartenders	9.38	7.77
Dining Room and Cafeteria Attendants and Bartender Helpers	7.41	6.95
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	8.81	7.23
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	7.79	7.32
Food Servers, Nonrestaurant	8.47	7.77
Laborers		
Driver/Sales Workers	10.64	11.08
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	11.40	9.17
Office/Clerical		
Food Service Managers	16.10	16.51
Bookkeeping, Accounting, and Auditing Clerks	14.75	12.96

* Based on Occupational Employment Statistics Survey data - 2000

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

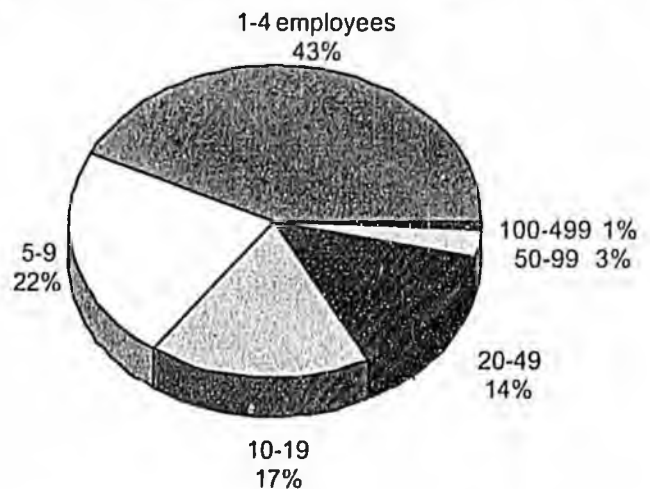
13 Eight of the Top 100 Private sector employers Are in eating and drinking

	Employment 2000	Primary function
NANA/Marriott, Joint Venture	1,093	catering
Aramark Leisure Services	520	catering
Doyon/Universal Ogden, JV	519	catering
Pizza Hut	467	restaurants
Burger King	465	restaurants
Denali Food/Taco Bell	381	restaurants
Skychefs	277	catering
McDonalds	258	restaurants

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Most Employees Work for small employers Eating and drinking industry employees—1999

14



Source: U.S. Department of Commerce, County Business Patterns 1999

Audits and Inspections

Audits

- ▶ New and existing establishments will initially be required to submit their SOPs, records, and self-inspections for review.
- ▶ Annually, and as part of the permit review process, a percentage of randomly selected establishments will be required to submit their self-inspections and records.

Inspections

- ▶ On-site evaluations of establishments will be conducted to determine their control of risk factors, to review SOPs and how they are implemented, and to audit required records and self-inspections.
- ▶ Enforcement actions, including administrative fines, may be initiated for risk factors that are not being controlled, imminent health hazards and other serious violations of the regulations.

Implementing the New System

Target Schedule

- ▶ Public Notice Food Code Spring 04
- ▶ Revisions Adopted Fall 04
- ▶ CFPM Required Fall 04
- ▶ Food Worker Training Fall 04
- ▶ AMC Workshops Fall 04
- ▶ AMC Required Fall 05

GOAL

Elements of this new food safety system will be included in draft revisions to the Food Code (18 AAC 31). Food Establishment operators are encouraged to comment and will be directly notified when the draft regulations go out for public notice.

Your input is important, and can improve the regulations. Every comment will be considered, and changes may be made based on the comments received.

For more information visit our website:

www.state.ak.us/dec/deh/



Food Safety & Sanitation

12/01/2003

Active Managerial Control: Improving Alaska's Food Safety System



Active Managerial Control is a comprehensive food safety system. It includes operators and staff who are knowledgeable about food safety issues, and are responsible for controlling practices and procedures that contribute to foodborne illness. It can be implemented in both urban and remote settings.

This new system offers greater assurance that safe food is served throughout Alaska.

Alaska Department of Environmental
Conservation
Division of Environmental Health
Food Safety and Sanitation Program
555 Cordova Street
Anchorage, AK 99501
(907) 269-7501 FAX (907) 269-7510

Elements of "Active Managerial Control"

Elements of Alaska's Food Safety System include trained food workers, standard operating procedures, monitoring and recordkeeping of certain risk factors, self-inspections, audits, and field evaluations. The details of these elements are explained below.

1. Training

- ▶ Establishments that serve unpackaged food will need to have a Certified Food Protection Manager (CFPM). She/he must pass a nationally recognized exam to become certified.
- ▶ All food workers must have food safety training and pass an exam.
- ▶ Many options will be available for both manager and food worker training, including self-study, online, and classroom training.

2. Written SOPs (Standard Operating Procedures)

Establishments must have SOPs that describe their policies on,

- ▶ proper handwashing,
- ▶ employee health,
- ▶ training,
- ▶ food sources,
- ▶ receiving and storage,
- ▶ chemical use and storage, and
- ▶ sanitation.

3. **SOPS, monitoring, and recordkeeping** will also be required, where applicable, for the following:

- ▶ hot and cold holding
- ▶ cooking,
- ▶ cooling,
- ▶ reheating, and
- ▶ handling ready-to-eat food.

4. Food Safety Checks

- ▶ Regular food safety checks, conducted by the operator, will help verify that the establishment's procedures, and good retail practices are being followed, and any required records are maintained.

The 5 Risk Factors for Foodborne Illness

Unsafe Holding Temperatures
Inadequate Cooking
Contaminated Equipment
Food from Unsafe Sources
Poor Personal Hygiene

Food Safety and Sanitation Program: Operator Assistance

DEC will hold workshops and provide training to help operators understand and implement Active Managerial Control. In addition, FSS plans to:

Provide Food Safety Training Opportunities

- ▶ Publish a list of CFPM Training Courses and Exams.
- ▶ Conduct Train the Trainer courses for employers and others who want to provide food worker employee training.
- ▶ Offer food worker training, testing, and certification online.
- ▶ Provide free training materials online and in print.

Provide Model SOPs and Forms

- ▶ Publish a Compliance Manual which will include permit applications, plan review requirements, instructions on identifying processes and risk factors, templates for writing customized SOPs, and example forms for recordkeeping and self-inspections. It will be available online and in print.
- ▶ Publish a Resource Manual to help operators implement their active managerial control system. It will include procedures for controlling risk factors, examples of policies, reproducible signs, and other information.