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# Alaska State Legislature

During Session  
P.O. Box V  
Juneau, Alaska 99811  
(907) 465-2828

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During Interim  
3111 C Street, Suite 510  
Anchorage, Alaska 99503  
(907) 561-2040

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## Senator Virginia Collins

### Senate Bill 320

### Injury Prevention Program

According to the National Institute of Occupational Safety and Health, Alaska has the highest worker fatality rate in the nation. Between 1980 and 1986, Alaska had a worker fatality rate of 34.2 cases per 100,000 workers -- four times higher than the U.S. rate of 7.9.

Between 1988 and 1989, the estimated number of OSHA recordable injuries in Alaska's private sector increased by 20%.

The high-risk industries of Alaska's logging and seafood processing industries contribute to Alaska's leading the nation in fatality and injury rates, but even the injury and illness rates in some lower risk industries have risen somewhat. In retail trade, the total OSHA case rate has been above 10.0 for the last three years and the service industry rates have been higher recently.

In 1990, Congress dramatically increased the penalties for OSHA violations. Alaska is required to increase its standards to comply with these new penalties or face having the federal government take over regulating workplace safety in Alaska.

Senate Bill 320 requires employers to establish a written injury prevention program. Such a program would help in the reduction of on-the-job fatalities and injuries. This would provide a safer work environment for employees and would help employers by cutting down on work time losses and by decreasing the number of costly penalties that have become even more expensive under the new OSHA regulations.

FIRST COMMITTEE OF REFERENCE

DATE: 1/13/92

FURTHER: Finance

Date of 5-Day Notice: 1/29/92  
(in accordance with Uniform Rule 23)

DATE TURNED INTO OFFICE: 2/19/92  
~~1/27/92~~

L&C Committee considered SENATE BILL NO. 320

"An Act relating to occupational safety and health; and providing for an effective date."

and recommends:

replace with \_\_\_\_\_ CS SB 320 (LTC)  same title  
 attaches amendment(s)  new title  
 technical title change (HB only)

adopts \_\_\_\_\_ Letter of Intent

further referral to the \_\_\_\_\_

do pass

do not pass

no recommendation

individual recommendations

**NEW FISCAL NOTES:** Dept/Date

zero fiscal notes LABOR - 1/30/92

fiscal notes ADM - 1/3/92

appropriation--no fiscal note

**PREVIOUS FISCAL NOTES:** Dept/Date

Governor's bill with fiscal notes:  
zero fiscal notes \_\_\_\_\_

fiscal notes \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DO PASS:

[Signature]  
Shirley Craft

OTHER RECOMMENDATIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[Signature]  
Chair: Signature and Recommendation

Suggested amendments to SB 320:

lines 15-21 of page 3:

Sec. 18.60.043. LIST OF HIGH HAZARD INDUSTRIES; REGIONAL ENFORCEMENT PLANS. (a) The commissioner shall establish a list of the 100 high hazard industries in the state, at the four digit industry level as set out in the 1987 Standard Industrial Classification Manual (SIC). To assess safety hazards and health hazards, the commissioner shall use data from the Bureau of Labor Statistics (BLS) annual survey of occupational safety and health injuries and illnesses, Alaska Workers' Compensation Board, and the division of labor standard and safety, [THE OSHA REVIEW BOARD,] and all other appropriate information available for determining which industries to include on the list because of safety hazards, health hazards, or both. The commissioner shall review the list every [TWO] year[S].

lines 18-22 of page 2

(e) The department shall adopt, by regulation, a standard setting out the employer's duties under this section. In adopting the standard, the department shall include substantial compliance criteria for use in evaluating an employer's injury prevention program. The department [MAY ADOPT LESS STRINGENT CRITERIA FOR] shall exclude employers with fewer employees and employers in industries with insignificant occupational safety and health hazards from meeting the requirements of (a) through (d) of this section, if they have an effective program of communicating with employees on occupational health and safety matters, including provisions to encourage employees to inform the employer of hazards at the worksite without fear of reprisal.

lines 23-25 of page 2

(f) The standard adopted under (e) of this section should [MUST SPECIFICALLY PERMIT] set out recommendations for the establishment of an employer-employee occupational safety and health committee as part of the employer's injury prevention program.

lines 6-9 of page 3

(g) If an employer has established an occupational safety and health committee that meets the criteria established by the department under this section, the employer shall be [REBUTTABLY] presumed to be in substantial compliance with the requirement to maintain a system of communication with employees under (a)(5) of this section.

# STATE OF ALASKA

## DEPARTMENT OF LABOR

### LABOR STANDARDS AND SAFETY DIVISION OCCUPATIONAL SAFETY AND HEALTH

WALTER J. HICKEL, GOVERNOR

P.O. BOX 21149  
JUNEAU, ALASKA 99802-1149  
PHONE: (907) 465-4855  
FAX: (907) 465-2784

February 10, 1992

The Honorable Drue Pearce  
Alaska State Senate  
P.O. Box V  
Juneau, AK 99811

Dear Senator Pearce:

This is in response to your request for information concerning employers who would be affected by Senate Bill No. 320. All employers in the State of Alaska, with the exception of mining and federal government classifications, would be affected. The number of employers, from our Research and Analysis section are as follows:

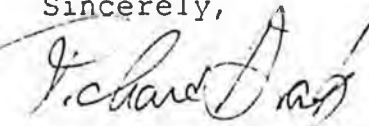
Private industry sector employers	14,000
Number of state agencies (division level)	640
Municipalities & other local government agencies	340

Total estimated employers (or government agencies) 14,980  
that could be affected by SB 320

You had also requested a current list of high-hazard industries. Enclosed is a preliminary list that may include some industries that do not currently exist in Alaska. Research and Analysis will review this list for current, high-hazard industries operating in Alaska and provide you with a final version.

Please do not hesitate to contact the department if you would like further information.

Sincerely,



Richard Arab  
Occupational Safety & Health

RA:kh

Enclosure

cc: Arbe Williams, Special Assistant, Commissioner's Office  
Randy Carr, Acting Director, LS&S  
David Teal, Director, ASD

TABLE 1A

## THE HIGH HAZARD HEALTH LIST

ALASKA FY 1992

<u>SIC</u> <u>CODES</u>	<u>INDUSTRY DESCRIPTION</u>
2013	SAUSAGES AND OTHER PREPARED MEATS
2026	FLUID MILK
2038	FROZEN SPECIALTIES, NEC
2051	BREAD, CAKE, AND RELATED PRODUCTS
2092	FRESH AND FROZEN PREPARED FISH
2394	CANVAS AND RELATED PRODUCTS
2399	FABRICATED TEXTILE PRODUCTS, NEC
2434	WOOD KITCHEN CABINETS
2452	PREFABRICATED WOOD BUILDINGS
2499	WOOD PRODUCTS
2511	WOOD HOUSEHOLD FURNITURE
2512	UPHOLSTERED HOUSEHOLD FURNITURE
2522	METAL HOUSEHOLD FURNITURE
2611	PULP MILLS
2621	PAPERBOARD MILLS
2752	COMMERCIAL PRINTING, LITHOGRAPHIC
2759	COMMERCIAL PRINTING, NEC
2851	PAINTS AND ALLIED PRODUCTS
2899	CHEMICAL PREPARATIONS, NEC
2952	ASPHALT FELTS AND COATINGS
3241	CEMENT, HYDRAULIC
3251	BRICK AND STRUCTURAL CLAY TILE
3253	CERAMIC WALL AND FLOOR TILE, NEC
3269	POTTERY, NEC
3272	CONCRETE PRODUCTS, NEC
3281	CUT STONE AND STONE PRODUCTS
3339	GLASS PRODUCTS, PURCHASED GLASS
3423	HAND AND EDGE TOOLS, NEC
3441	FABRICATED STRUCTURAL METAL
3443	FABRICATED PLAT WORK (BOILER SHOPS)
3444	SHEET METAL WORK
3446	ARCHITECTURAL METAL WORK
3499	FABRICATED METAL PRODUCTS, NEC
3533	OIL AND GAS FIELD MACHINERY
3599	INDUSTRIAL MACHINERY, NEC
3691	STORAGE BATTERIES
3692	PRIMARY BATTERIES, DRY AND WET

3728	AIRCRAFT PARTS AND AUXILIARY EQUIP.
3731	SHIP BUILDING AND REPAIRING
3732	BOAT BUILDING AND REPAIRING
3911	JEWELRY, PRECIOUS METAL
3914	SILVERWARE AND PLATED WARE
3944	GAME, TOYS', TOY VEHICLES
3993	SIGNS AND ADVERTISING SPECIALTIES
3999	MANUFACTURING INDUSTRIES, NEC.
4215	COURIER SERVICES, EXCEPT BY AIR
4222	REFRIGERATED WAREHOUSING AND STORAGE
4952	SEWERAGE SYSTEMS
4953	REFUSE SYSTEMS
4959	SANITARY SERVICES, NEC
5012	AUTOMOBILES AND OTHER MOTOR VEHICLES
5085	INDUSTRIAL SUPPLIES
5093	SCRAP AND WASTE MATERIALS
5169	CHEMICALS AND ALLIED PRODUCTS
5511	NEW AND USED CAR DEALERS
5984	LIQUIFIED PETROLEUM GAS DEALERS
7261	FUNERAL SERVICES AND CREMATORIES
7532	TOP & BODY REPAIR & PAINT SHOPS
7539	AUTOMOTIVE REPAIR SHOPS, NEC.
7692	WELDING REPAIR
7699	REPAIR SERVICES, NEC
8021	OFFICE AND CLINICS OF DENTISTS
8051	SKILLED NURSING AND CARE FACILITIES
8059	NURSING AND PERSONAL CARE, NEC

TABLE 1B

LOCAL EMPHASIS HEALTH LIST

ALASKA FY 1992

<u>SIC</u>	<u>INDUSTRY DESCRIPTION</u>
2091	CANNED AND CURED FISH AND SEAFOOD
7999	ICE SKATING RINK OPERATIONS
8734	TESTING LABORATORIES

SIC 2091 - Canned and Cured Fish and Seafood:

There is a need to continue to include this industry in the local emphasis program for health inspections because of the extensive use of chlorine in most canneries refrigeration system; the noise exposure from some of the machinery used in the industry; ergonomic hazards of processing fish; and a need to evaluate this industry's hazard communication program. AKOSH's industrial hygienists cited various violations when this industry was on its 1991 local emphasis list which indicates that AKOSH needs to continue inspecting this industry at least through 1992 to assure that the seafood canneries not inspected in 1991 are inspected for health hazards.

SIC 7999, Amusement and Recreational Services, Not Elsewhere Classified:

AKOSH investigated a fatality that occurred at an ice skating rink and determined that the fatality was caused because of poor installation and maintenance of the freon system used in the ice skating rink. In order to prevent another fatal accident from occurring the Department plans to inspect all other ice skating rinks which use a freon system to create ice. There are eight ice skating rinks in Alaska. AKOSH does not plan to inspect other amusement operations that may be listed under SIC 7999.

SIC 8734, Testing Laboratories:

This industry is being kept on the local emphasis health inspection list for another year because AKOSH did not inspect a sufficient number of these laboratories in FY 1991. AKOSH believes that it is important to inspect these laboratories to determine if they are complying with the "Hazardous Chemicals in Laboratories" and "Hazard Communication" standards.

TABLE 1-C  
HIGH HAZARD "SAFETY" LIST  
FOR FY 1991

<u>SIC</u>	<u>INDUSTRY DESCRIPTION</u>
2011	MEAT PACKING PLANTS
2013	SAUSAGES AND OTHER PREPARED MEATS
2024	ICE CREAM AND FROZEN DESSERTS
2026	FLUID MILK
2032	CANNED SPECIALTIES
2033	CANNED FRUITS, VEGETABLES, ETC.
2037	FROZEN FRUITS AND VEGETABLES
2038	FROZEN SPECIALTIES, NEC.
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS
2052	COOKIES AND CRACKERS
2064	CANDY AND CONFECTIONERY PRODUCTS
2082	MALT BEVERAGES
2084	WINES, BRANDY, AND BRANDY SPIRITS
2091	CANNED AND CURED FISH AND SEAFOOD
2092	FRESH AND FROZEN PREPARED SEAFOOD
2099	FOOD PREPARATIONS, NEC
2391	CURTAINS AND DRAPERIES
2394	CANVAS AND RELATED PRODUCTS
2399	FABRICATED TEXTILE PRODUCTS, NEC.
2411	LOGGING
2421	SAWMILLS AND PLANING MILLS, GENERAL
2426	HARDWOOD DIMENSIONS & FLOORING MILLS
2429	SPECIAL PRODUCT SAWMILLS, NEC
2431	MILLWORK
2434	WOOD KITCHEN CABINETS
2435	HARDWOOD VENEER AND PLYWOOD
2436	SOFTWOOD VENEER AND PLYWOOD
2451	MOBILE HOMES
2452	PREFABRICATED WOOD BUILDINGS
2499	WOOD PRODUCTS, NEC.
2511	WOOD HOUSEHOLD FURNITURE
2512	UPHOLSTERED HOUSEHOLD FURNITURE
2519	HOUSEHOLD FURNITURE, NEC
2521	WOOD OFFICE FURNITURE
2522	OFFICE FURNITURE, EXC. WOOD
2611	PULP MILLS
2732	BOOK PRINTING

2754	COMMERCIAL PRINTING, GRAVURE
2851	PAINTS AND ALLIED PRODUCTS
2861	GUM AND WOOD CHEMICALS
2873	NITROGENOUS FERTILIZERS
2875	FERTILIZERS, MIXING ONLY
2899	CHEMICAL PREPARATIONS, NEC
2951	ASPHALT PAVING MIXTURES AND BLOCKS
2952	ASPHALT FELTS AND COATINGS
3231	GLASS PRODUCTS, PURCHASED GLASS
3251	BRICK AND STRUCTURAL CLAY TILE
3253	CERAMIC WALL AND FLOOR TILE
3259	STRUCTURAL CLAY PRODUCTS, NEC
3269	POTTERY PRODUCTS, NEC.
3271	CONCRETE BLOCKS AND BRICK
3272	CONCRETE PRODUCTS, NEC
3273	READY-MIXED CONCRETE
3281	CUT STONE AND STONE PRODUCTS
3339	PRIMARY SMELTING AND REFINING
3421	CUTLERY
3423	HAND AND EDGE TOOLS, NEC
3441	FABRICATED STRUCTURAL METAL
3442	METAL DOORS, SASH, FRAMES, ETC.
3443	FABRICATED PLAT WORK (BOILER SHOPS)
3444	SHEET METAL WORK
3446	ARCHITECTURAL METAL WORK
3448	PREFABRICATED METAL BUILDING
3449	MISCELLANEOUS METAL WORK
3533	OIL AND GAS FIELD MACHINERY
3599	INDUSTRIAL AND COMMERCIAL MACHINERY
3691	STORAGE BATTERIES
3731	SHIP BUILDING AND REPAIRING
3732	BOAT BUILDING AND REPAIRING
3914	SILVERWARE AND PLATED WARE
3944	GAMES, TOYS, AND TOY VEHICLES
3999	MANUFACTURING INDUSTRIES, NEC.

TABLE 1-D

## CONSTRUCTION HIGH HAZARD LIST

<u>Industry Name</u>	<u>SIC</u>	<u>INDUSTRY IR</u>
Building Construction- General Contractors and Operative Builders	15	14.9
Heavy Construction Contractors	16	16.3
Construction, Special Trades	17	12.8

TABLE 1-E

## SAFETY LOCAL EMPHASIS INDUSTRIES

(Industries with a lost workday injury and illness rate one point above the State's average of 4.8)

<u>SIC</u>	<u>INDUSTRY DESCRIPTION</u>
<u>Oil and Gas</u>	
1389	<i>Oil and Gas Field Services</i>
<u>Transportation</u>	
4011	<i>Railroad</i>
4212	<i>Local Trucking Without Storage</i>
4213	<i>Trucking, Except Local</i>
4215	<i>Courier Services, Except by Air</i>
4512	<i>Air Transportation, Scheduled</i>
4513	<i>Air Courier Service</i>
4581	<i>Airports, Flying Fields, and Airport Terminal Services</i>
<u>Communications</u>	
4841	<i>Cable and Other Pay Television Stations</i>
<u>Electric, Gas, and Sanitary Services</u>	
4953	<i>Refuse Systems</i>
<u>Wholesale Trade</u>	
5013	<i>Motor Vehicle Supplies and New Parts</i>
5032	<i>Brick, Stone, and Related Construction Materials</i>
5033	<i>Roofing, Siding, and Insulation Materials</i>
5051	<i>Metals Service Centers and Offices</i>
5093	<i>Scrap and Waste Materials</i>
5147	<i>Meats and Meat Products</i>
5182	<i>Wine and Distilled Alcoholic Beverages</i>

Retail Trade

5211

*Lumber and Other Building Materials Dealers*

5311

*Department Stores*

Services

7641

*Reupholster and Furniture Repair*

7692

*Welding Repair*

7694

*Armature Rewinding Shops*

7699

*Repair Shops and Related Services, NEC*

Suggested amendments to SB 320:

lines 15-21 of page 3:

Sec. 18.60.043. LIST OF HIGH HAZARD INDUSTRIES; REGIONAL ENFORCEMENT PLANS. (a) The commissioner shall establish a list of the 100 high hazard industries in the state, at the four digit industry level as set out in the 1987 Standard Industrial Classification Manual (SIC). To assess safety hazards and health hazards, the commissioner shall use data from the Bureau of Labor Statistics (BLS) annual survey of occupational safety and health injuries and illnesses, Alaska Workers' Compensation Board, and the division of labor standard and safety, [THE OSHA REVIEW BOARD,] and all other appropriate information available for determining which industries to include on the list because of safety hazards, health hazards, or both. The commissioner shall review the list every [TWO] year[S].

lines 18-22 of page 2

(e) The department shall adopt, by regulation, a standard setting out the employer's duties under this section. In adopting the standard, the department shall include substantial compliance criteria for use in evaluating an employer's injury prevention program. The department [MAY ADOPT LESS STRINGENT CRITERIA FOR] shall exclude employers with fewer employees and employers in industries with insignificant occupational safety and health hazards from meeting the requirements of (a) through (d) of this section, if they have an effective program of communicating with employees on occupational health and safety matters, including provisions to encourage employees to inform the employer of hazards at the worksite without fear of reprisal.

lines 23-25 of page 2

(f) The standard adopted under (e) of this section should [MUST SPECIFICALLY PERMIT] set out recommendations for the establishment of an employer-employee occupational safety and health committee as part of the employer's injury prevention program.

lines 6-9 of page 3

(g) If an employer has established an occupational safety and health committee that meets the criteria established by the department under this section, the employer shall be [REBUTTABLY] presumed to be in substantial compliance with the requirement to maintain a system of communication with employees under (a)(5) of this section.

STATE OF ALASKA  
**DEPARTMENT OF ADMINISTRATION****DIVISION OF RISK MANAGEMENT**P.O. BOX 110218  
JUNEAU, ALASKA 99811-0218  
PHONE: (907) 465-2180  
FAX: (907) 465-3690

February 7, 1992

The Honorable Drue Pearce, Chair  
Labor and Commerce Committee  
Alaska State Senate  
State Capitol  
Juneau, AK 99811-3100

Dear Senator Pearce:

During the February 3 Labor and Commerce Committee hearing on SB 320, you asked the Department of Administration to determine which State agencies presently have a "written injury prevention program" as would be required by SB 320.

We have polled the 15 State departments; the Governor's office; the Office of the Ombudsman; the Alaska Court System, as well as offices in the legislative branch. Following is a brief description of the written safety programs which exist in these agencies:

1. Department of Education: Has a draft plan for Disaster and Employee Safety which is in use while being completed.
2. Department of Military and Veterans' Affairs: Has a formal written plan with assigned safety officers but only for the National Guard units.
3. Department of Fish and Game: Has a draft plan which is being completed.
4. Department of Corrections: Has an evacuation plan for inmates but no written employee safety program.
5. Department of Transportation and Public Facilities: Has a written program which they practice as part of their union agreements.

We are further informed that several divisions within departments have safety programs designed for their special needs--these include:

Division of Marine Highways  
Division of Public Health, Emergency Services  
Alaska Division of Emergency Services, DMVA  
Division of Spill Prevention and Response

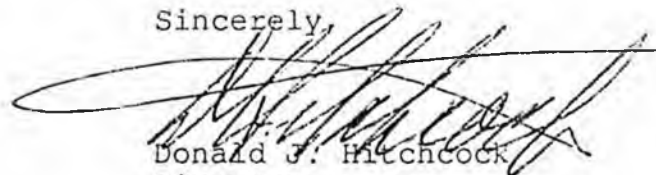
February 7, 1992

With these exceptions, agencies do not presently have a written employee program, even though many adhere to certain safety measures depending on occupational hazards involved. A number of the departments advised that they have disaster plans but that they do not necessarily address employee safety on a daily basis.

The Division of Risk Management is now able to provide almost any statistical exhibits that may be required. Indeed, we are presently involved in preparation of a program to provide additional workers' compensation loss analysis exhibits to agencies along with recommendations where necessary to address specific problem areas.

Thank you.

Sincerely,



Donald J. Hitchcock  
Director

DJH/nl

cc: Paul Fuhs  
Legislative Liaison  
Office of the Governor

Nancy Bear Usera  
Commissioner  
Department of Administration

**FISCAL NOTE**

**STATE OF ALASKA**  
**1992 LEGISLATIVE SESSION**

**BILL NO :** SB 320

Revision Date: \_\_\_\_\_  
 Title: "An Act relating to occupational safety & health..."  
 Sponsor: Senators Collins & Pearce  
 Requestor: Senate Labor & Commerce

Department Affected: Labor  
 BRU: Workers' Compensation & LS&S  
 Component: Workers' Compensation & Occupational Safety & Health  
 COMPONENT SERIAL NO. 344 & 970

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND&STRUCTURES						
GRANTS,CLAIMS						
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>CAPITAL</b>						
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<b>REVENUE FUND SOURCE:</b>						
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**FUNDING: (Thousands of Dollars)**

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
<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>

**POSITIONS:**

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary)

Prepared by: Arbe Williams, Special Assistant Phone: 465-2700  
 Division: Commissioner's Office Date: 1/30/92  
 Approved by Commissioner: John Abshire, Acting Commissioner  
 Agency: Department of Labor Date: 1/30/92

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

FISCAL NOTE

FEB 3 1992  
FEB 3 1992

BILL NO. SB 320

STATE OF ALASKA  
1992 LEGISLATIVE SESSION

Revision Date: \_\_\_\_\_  
Title: An Act relating to occupational safety and health

Department Affected: Administration  
BRU: Division of Risk Management  
Component: Risk Management

Sponsor: Collins, Pearce  
Requestor: Labor and Commerce

COMPONENT SERIAL NO. 

0	0	7	1
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Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES	190.2	190.2	190.2	190.2	190.2	190.2
TRAVEL	75.0	75.0	75.0	75.0	75.0	75.0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	4.8	4.8	4.8	4.8	4.8	4.8
EQUIPMENT	5.0	5.0	5.0	5.0	5.0	5.0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
<b>TOTAL OPERATING</b>	<b>275.0</b>	<b>275.0</b>	<b>275.0</b>	<b>275.0</b>	<b>275.0</b>	<b>275.0</b>

CAPITAL	0	0	0	0	0	0
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REVENUE FUND SOURCE:	0	0	0	0	0	0
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FUNDING: (Thousands of Dollars)

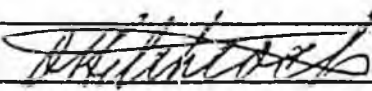
GENERAL FUND	275.0	275.0	275.0	275.0	275.0	275.0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER FUND SOURCE:	0	0	0	0	0	0
<b>TOTAL</b>	<b>275.0</b>	<b>275.0</b>	<b>275.0</b>	<b>275.0</b>	<b>275.0</b>	<b>275.0</b>

POSITIONS:

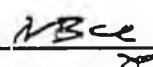
FULL-TIME	3	3	3	3	3	3
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary.) SB 320 would require Risk Management to contract and develop or implement training programs, provide inspection services, investigate accidents and provide required record keeping. We estimate a minimum of three professionally qualified safety personnel with travel. This would service only those agencies not presently involved in special hazards.

Prepared by: Donald J. Hitchcock   
Division: Risk Management

Phone: 465-2180  
Date: January 31, 1992

Approved by Commissioner: Nancy Bear Usura   
Agency: Administration

Date: 2/3/92

Distribution (by preparer): Leg. Fin., Legislative Sponsor, Requestor, OMB/DBR, Gov. Legis. Ofc., & Impacted Agency(ies).



1

AMENDMENT

OFFERED IN THE SENATE

BY SENATOR COLLINS

TO: SB 320

Page 4, line 23, before "employees":

Delete [250], insert 50

2

AMENDMENT

OFFERED IN THE SENATE

BY SENATOR COLLINS

TO: SB 320

Page 3, line 16, before "highest hazard":

Delete [100], insert 10

3

7-LS1466A.1  
Cramer  
02/06/92

A M E N D M E N T

OFFERED IN THE SENATE

BY SENATOR COLLINS

TO: SB 320

Page 1, line 4, after "employer":

Insert "covered by this section"

Page 2, line 23, after "employer":

Insert "covered by this section"

Page 3, after line 14:

Insert a new subsection to read:

"(i) This section does not apply to an employer regulated by the federal Mine Safety and Health Act, 30 U.S.C. 801 - 962, as amended."

Page 4, line 1, after "shall":

Insert ", if applicable,"

Page 4, line 21, after "including":

Insert ", for employers covered by AS 18.60.042,"

4

7-LS1466A.2  
Cramer  
02/06/92

A M E N D M E N T

OFFERED IN THE SENATE

BY SENATOR COLLINS

TO: SB 320

Page 1, line 4, after "employer":

Insert "covered by this section"

Page 2, line 23, after "employer":

Insert "covered by this section"

Page 3, after line 14:

Insert a new subsection to read:

"(i) This section does not apply to an employer who has fewer than seven employees."

Page 4, line 1, after "shall":

Insert ", if applicable,"

Page 4, line 21, after "including":

Insert ", for employers covered by AS 18.60.042,"

# Alaska State Legislature

During Session  
P.O. Box V  
Juneau, Alaska 99811  
(907) 465-2828

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During Interim  
3111 C Street, Suite 510  
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## Senator Virginia Collins

### Senate Bill 320

### Injury Prevention Program

According to the National Institute of Occupational Safety and Health, Alaska has the highest worker fatality rate in the nation. Between 1980 and 1986, Alaska had a worker fatality rate of 34.2 cases per 100,000 workers -- four times higher than the U.S. rate of 7.9.

Between 1988 and 1989, the estimated number of OSHA recordable injuries in Alaska's private sector increased by 20%.

The high-risk industries of Alaska's logging and seafood processing industries contribute to Alaska's leading the nation in fatality and injury rates, but even the injury and illness rates in some lower risk industries have risen somewhat. In retail trade, the total OSHA case rate has been above 10.0 for the last three years and the service industry rates have been higher recently.

In 1990, Congress dramatically increased the penalties for OSHA violations. Alaska is required to increase its standards to comply with these new penalties or face having the federal government take over regulating workplace safety in Alaska.

Senate Bill 320 requires employers to establish a written injury prevention program. Such a program would help in the reduction of on-the-job fatalities and injuries. This would provide a safer work environment for employees and would help employers by cutting down on work time losses and by decreasing the number of costly penalties that have become even more expensive under the new OSHA regulations.

Bill No: Senate Bill No. 320

Date: January 30, 1992

Title: "An Act relating to occupational safety and health; and providing for an effective date."

Contact: Arbe Williams  
465-2700

Senate Bill 320 will require employers to establish a written injury prevention program that will include the employer's system for identifying, evaluating, and correcting workplace hazards. The written injury prevention program will also include a training program for all employees on hazards in the workplace to ensure that all employees are informed about occupational safety and health matters. The bill will encourage employers to establish an employer-employee occupational safety and health committee as part of the injury prevention program.

Senate Bill 320 requires the Department of Labor to adopt regulations regarding the employer's responsibility for establishing, implementing, and monitoring the written injury prevention program. The bill also requires the department to: establish and maintain regional plans for scheduling occupational safety and health inspections; include an evaluation of the employer's injury prevention program in the occupational safety and health inspections; offer a full range of occupational safety and health services to include assistance in the development of injury prevention programs; and give an inspection/consultation priority to businesses with fewer than 25 employees in high hazard industries.

Senate Bill 320 provides protection against discharge or discrimination of employees who participate in an occupational safety and health committee; provides that penalties for serious, willful, or repeat violations that cause serious injury, illness, exposure, or death will not be reduced for a reason other than size of the business of the employer being charged; and allows revocation of an employer's certificate of self-insurance for a willful violation or for repeated, serious violations of the provisions of the bill.

Senate Bill 320 sets out in statute many of the provisions already required by administrative regulations or written departmental administrative policy. The General Safety Code, 01.0105, requires that

**POSITION PAPER/Department of Labor**

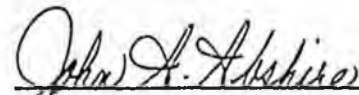
every employer start and maintain an accident prevention program and requires that employers make inspections of their worksites to identify and correct work-related hazards. The code does not require that the injury prevention program be written.

The Department also requires, by administrative policy, that its inspectors evaluate the employer's occupational safety and health program at all worksites inspected. Model written safety programs are available which can be distributed to employers. Employers can use such model safety programs to develop a written injury prevention program that is appropriate to their workplace.

The Department compiles injury and illness related data from workers' compensation files and the annual survey of occupational injury and illness to develop a list of high-hazard industries in the state. This data is used to schedule both its compliance inspections and its outreach program for its consultative and training services. Also, by agreement with the federal Occupational Safety and Health Administration, the department gives small businesses with fewer than 50 employees priority for its consultative and training resources.

In FY '91 the Department's Labor Standards and Safety Division's Consultation and Training Section conducted 258 inspections. Providing assistance to employers in developing a written program and including evaluation of the program during inspections would not impact the Department. An increase in willful, serious, or repeat violations that would impact the Department's Workers' Compensation Division is also not anticipated.

APPROVED:



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John A. Abshire, Acting Commissioner  
Department of Labor

# DIVISION OF LEGAL SERVICES

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### MEMORANDUM

January 31, 1992

**SUBJECT:** Sectional Summary of SB 320 (Occupational safety and health)

**TO:** Senator Virginia Collins

**FROM:** Teresa B. Cramer *TBC*  
Legislative Counsel

You have requested a sectional analysis of the above described bill. As a preliminary matter, note that a sectional analysis or summary of a bill should not be considered an authoritative interpretation of the bill and the bill itself is the best statement of its contents.

**Section 1** adds new provisions to the OSHA statutes.

Sec. 18.60.042 requires employers to establish written injury prevention programs. Subsection (a) sets out the requirements for the contents of the programs. Subsection (b) requires employers to correct unsafe and unhealthy conditions and work practices. Subsection (c) requires employers to provide training in injury prevention, and subsection (d) requires them to keep appropriate records. Under subsection (e), the Department of Labor is required to adopt regulations setting the standards for employers' duties under the injury prevention program. Subsections (f), (g), and (h) address the use of employer-employee occupational safety and health committees.

Sec. 18.60.043 requires the commissioner of labor to list the 100 highest hazard industries in the state. Under subsection (b), the department must establish regional plans for allocating the department's resources for enforcement activities. Subsection (c) requires coordination of services offered by the department.

Sec. 18.60.044 requires that when the department conducts inspections of employers, it include inspections of the injury prevention program in the inspection.

**Sec. 2** adds a requirement that the Department of Labor offer occupational safety and health consulting services, including injury prevention programs, to employers.

Senator Virginia Collins  
January 31, 1992  
Page 2

Sec. 3 gives employees who participate in an occupational health and safety committee certain job protections.

Sec. 4 limits the department's discretion to reduce a penalty if the penalty was imposed on an employer for a violation of the OSHA laws. If serious injury or death was caused by serious, wilful, or repeated violation or by a failure to correct a serious violation in a timely manner, then the department may reduce the penalty only because of the size of the employer's business.

Sec. 5 permits the Workers' Compensation Board to revoke an employer's certificate of self-insurance if the board finds that the employer has wilfully or repeatedly violated the injury prevention program standards enacted in sec. 1 of this Act.

If I may be of further assistance, please advise.

TC:pl  
92-062.plm

# Potential Hazards in Small Business—A Gap in OSHA Protection

Paul M. Tuskes<sup>a</sup> and Marcus M. Key<sup>b</sup>

<sup>a</sup>City of Houston, Department of Health and Human Services, Occupational Health, 1115 N. MacGregor, Houston, Texas 77030; <sup>b</sup>School of Public Health, Occupational Health Program, University of Texas Health Science Center at Houston, Texas 77025

The health and safety problems of the small business community for the most part have been overlooked by local, state, and federal governments. The occupational health program of the City of Houston Department of Health and Human Services has conducted several hundred consultative industrial hygiene surveys within the small business community. The results provide details of 350 surveys conducted among the following industries: auto body paint and repair shops, blue-line printers, dry cleaners, plastic extruders, and radiator repair shops. The average number of recommendations per industry ranged from 0 to 16. The absence of formal health and safety programs, exposures to solvents, toxic metal dusts/fumes, inadequate respiratory protection, and engineering controls were among the most common and serious problems found. Tuskes, P.M.; Key, M.M.: Potential Hazards in Small Business—A Gap in OSHA Protection. *Appl. Ind. Hyg.* 3:55-57; 1988.

## Introduction

The occupational health program within the City of Houston Department of Health and Human Services has been active since 1956. In addition to conducting consultative industrial hygiene surveys, the program investigates chemically related community health problems (e.g., lead, asbestos, formaldehyde, pesticides, etc.), provides information to the public and to professionals, and assists other city agencies. The scope of the Houston Occupational Health program has been summarized elsewhere.<sup>(1)</sup>

Since mid-1983, the program has concentrated its efforts on target industries that, based on experience, were expected to have ten or fewer employees. Examples of these types of businesses include auto body paint shops, battery rebuilders, blue-line printers, cultured marble, dry cleaners, electroplaters, furniture paint stripping, plastic extruders, and radiator repair shops. Surveys of these and other industries either have been completed or are in progress.

The small business community was targeted for various reasons. With the 1981 change in the Occupational Safety and Health Administration (OSHA) inspection policy,<sup>(2)</sup> most businesses with

ten or fewer employees are not inspected unless they are on the National Emphasis list, or there is an accident resulting in a fatality or catastrophe, or there is an employee complaint. This congressionally mandated change in OSHA's policy did nothing to help the employees of small businesses and may have left management with less incentive to correct problems. Employees of small businesses are less likely to complain to OSHA because they are usually nonunionized and have less job security and less anonymity. Because of their size, small businesses have fewer technical personnel and resources to draw upon. As a result, their awareness and ability to identify and deal with health and safety problems is often limited. In addition, little information is available on the health problems associated with the small business community.<sup>(3)</sup>

The goals of this paper are twofold: first, to present information on the nature of health and safety violations found in the small businesses surveyed and, secondly, to evaluate trends and to discuss ways of assisting the small business community in resolving their problems.

## Methods

All surveys were conducted on a voluntary and consultative basis during mid-1983 through early 1986. Industries were selected based on potential employee exposure to either metals, chemicals, or noise. Industries that were expected to have ten or fewer employees were given highest priority. Once a target industry was selected, the individual businesses offered assistance were selected at random. Following the initial inspection and exit conference, a letter was sent to management that listed the industrial hygienist's recommendations which were based on the Code of Federal Regulations (CFR), Title 29, Parts 1900-1910. Follow-up surveys in dry cleaners and auto body paint and repair shops were conducted two to ten months after the letter was mailed to management. Follow-up surveys allowed us to provide further assistance to the business community, to determine the effectiveness of the program, and to improve our techniques. Although surveys were conducted by industrial hygienists, attention was also given to obvious safety problems.

## Results

The results of 350 surveys conducted in five different industries are summarized in Table I. Only the more significant or persistent problems in each business type are discussed.

### Auto Body Paint Shops

One hundred thirty-one surveys were conducted, representing nearly 16.5 percent of the total number of shops in the city. The problems observed were divided into four areas: spray painting, spray booths and spray areas, first aid programs, and general safety. Spray painters were found to be poorly trained with regard to the use, care, and limitations of their respirators. Forty-four percent of the shops provided dust respirators to spray painters while in 13 percent no respirators were used. In 20 percent of the shops, the employees had to provide their own respirators. In shops with respirators, 78 percent of the employees had not received any training regarding the use of their equipment. Sixty-four percent of the shops had respirators that were improperly stored, and 63 percent of the respirators were not cleaned. For sanding operations, 72 percent of the employers provided non-approved disposable respirators, 20 percent did not provide respirators, and only 7 percent used approved dust masks. Ninety-seven percent of the managers indicated that they did not have a respiratory protection program.

Twenty-nine percent of the shops had a spray booth, 50 percent had a spray area, and 21 percent had no area designated for spray painting. Seventy-eight percent did not have explosion-proof lighting or the lighting was in need of repair to bring it up to standard. Ninety-four percent did not have sprinkler systems, and 70 percent lacked "No Smoking" signs in spray areas. Twenty-seven percent had no ventilation in the spray area/booth, and 32 percent had ventilation which was inadequate. Eighteen percent had obvious sources of ignition in or near the spray painting area. Twenty-nine percent had discharged fire extinguishers, and 4 percent had no extinguishers. Fifty-seven percent of the shops had improper storage of flammable liquids.

### Dry Cleaners

One hundred twenty-two surveys were conducted, which represented about 23 percent of the dry cleaners in the city. The surveys were divided into four general areas: cleaning and spotting solvents, first aid, fire protection, and general health and safety. Eight percent of the shops had spotters with dermatitis that was associated with the use of Stoddard solvent or perchloroethylene. While reaching into washers or dryers, operators have skin contact with chemicals and may be exposed to airborne perchloroethylene over the ceiling standard. Airborne perchloroethylene levels in the shops ranged from a few ppm to 250 ppm. Brief exposures exceed 600 ppm when clothing was removed from the washer. Elevated room levels are the result of drying equipment vented directly into the workroom, poor work practices, and poorly maintained equipment. No overexposure to Freon or Stoddard solvent was noted. Six percent of the shops had asbestos lagging that had deteriorated and was in need of repair. Twenty-eight percent had one or more discharged fire extinguishers, and 54 percent had unguarded equipment or fan blades.

### Blue-line Printers

Forty-six surveys were conducted, representing 93 percent of the total. Ammonia concentrations ranged from 1 ppm to 40 ppm. No employee exposures exceeded the permissible exposure unit

(PEL) of 50 ppm eight-hour time-weighted average (TWA). Numerous problems involving the use of ammonia cylinders were found; they included: 40 percent not vented, 17 percent without a safety relief valve, 9 percent in use without a regulator, and 64 percent of the tanks were not secured.

### Plastic Extruders

Thirty-three surveys were conducted, representing 52 percent of the total available. Potential health hazards included exposure to various organic vapors that were liberated when plastic was heated for extrusion or cut with a hot knife, but no overexposures were found. Noise exposures were significant. TWAs in excess of 96 dBA were found, and levels exceeded 85 dBA in 33 percent of the companies. Inadequate machine guarding represented the most significant safety problem.

### Radiator Repair Shops

Eighteen shops were surveyed, representing 22 percent of the total. The use of acids to clean radiators presents a potentially significant exposure to employees, since eye and hand protection was used in only 17 percent of the businesses surveyed. TWA for lead exposures ranged from 2.6  $\mu\text{g}/\text{m}^3$  to over 1200  $\mu\text{g}/\text{m}^3$ . Respiratory protection was not used by employees.

## Discussion

Based on the number of surveys and the diversity of businesses inspected, it was concluded that elements of the small business community have a significant number of health and safety problems. The number of recommendations per business type ranged from 6 to 16 (Table I), and over 3600 recommendations were made. Potentially serious health problems resulting from exposures to metals were found in radiator repair shops, while noise presented a problem among plastic extruders. Safety problems and/or solvents were most prevalent among dry cleaners,<sup>(4)</sup> auto body paint and repair shops,<sup>(5)</sup> and blue-line printers.

A number of health and safety trends were observed. On the negative side, emergency planning, employee health care, and in-house health and safety programs were almost nonexistent. Although minor first aid supplies and emergency phone numbers were available in 50 to 75 percent of the shops, supplies were

TABLE I. Occupational Health Trends Among Small Businesses in Houston, Texas

	Auto Body Paint Shops	Dry Cleaners	Blue-Line Printers	Plastic Extruders	Radiator Repair
Number of surveys completed	131	122	46	33	18
% Allowing survey	97	93	33	81	61
Average number of employees/shop	8	4	10	15	5
Average number of recommendations	16	5	4	7	3
% Correction first visit	37	35	—	—	—
% Correction second visit	51	53	—	—	—
% Pre-employment medical exams	5	1	4	26	16
% With routine medical exams	3	1	5	7	16
% With health & safety programs	2	1	1	0	0

frequently not accessible to employees when the owner or manager was not on the property. The lack of emergency planning results in unnecessary delays when services are required, as employees are often reluctant to seek medical assistance without guidance or permission from management.

Lack of incentives, interest, money, and time all contribute to the problems of management. With the exception of electroplaters and radiator repair shops, fewer than 3 percent of the businesses inspected have had experience with private industrial hygiene consultants or OSHA. Less than 0.5 percent of the employers had a copy of the OSHA regulations relevant to their industry. Most employers appear to rely on trade associations and trade journals to provide regulatory information. With this in mind, the Houston Occupational Health program has published a number of articles in trade journals that discuss relevant findings, corrective measures, and regulatory information.

On the positive side, greater than 93 percent of the businesses contacted accepted the services of our consultative program. The only exception were the radiator repair shops, which had been inspected three years earlier by the Texas State Health Department (TSHD). At that time, the TSHD found nearly 52 percent of the employees monitored for lead were over the PEL. The recent City survey, conducted nearly four years later, found 95 percent of the monitored employees were above the PEL of 50  $\mu\text{g}/\text{m}^3$ . Although not all of the same shops were surveyed, the reduction in the number of over-exposed employees may be attributed to the prior efforts of the TSHD.

Correction rates varied widely between industries. Higher abatement rates were achieved among dry cleaners than auto body paint shops (Table I). Two factors appeared to contribute to the difference. First, owners of auto body paint and repair shops have generally grown up in the business and tend to accept a higher level of personal risk. Second, the problems associated with the auto body paint shops were usually more complex and costly to correct, e.g., respiratory protection programs, spray paint booths, storage of flammables. Based on estimates of corrections made after the last follow-up survey, an overall abatement rate of 61 percent was projected with dry cleaners accounting for most improvement.

In addition to the consultative inspections and follow-up assistance, an effort was made to increase the overall awareness of management and employees with regard to health and safety issues. To accomplish this, industrial hygienists must be well trained technically and able to convincingly discuss the issues. The industrial hygienist also provides relevant EPA and NIOSH/OSHA references and copies of local ordinances and interprets their meaning and intent. A well-rounded program provides a valuable service to the community and leaves employees and employers with a positive feeling and willingness to call for additional assistance should the need arise.

In Texas, the compliance program is administered by federal OSHA, while the consultative services are contracted with the Texas State Health Department. OSHA's resources in eastern Texas are probably typical for much of the country. Eight federal industrial hygienists provide services to 23 east Texas counties which have industrialized, chemically oriented cities, such as Houston, Baytown, Beaumont, Channelview, Deer Park, Freeport, Texas City, Pasadena, Port Arthur, and dozens of smaller communities. To serve the consultative function, the Texas State Health Department provides one industrial hygienist for 24 east Texas counties.

Houston is the nation's fourth largest city and would probably require all of the OSHA and state resources assigned to east Texas if only 2 percent of its businesses needed attention annually. With such limited resources, it is easy to understand why small businesses are, for the most part, overlooked by OSHA. In addition to the lack of OSHA's resources, other political considerations probably contribute to the policy.

The development of OSHA in 1970 did little to bolster support for local governmental programs.<sup>(6)</sup> By passing the responsibility for workers' health and safety to the federal government, city and county programs could be eliminated or reduced. Some local governments may have viewed this as an opportunity to reduce their budget and remove themselves from an adversary position with the business community. Others viewed local programs as an unnecessary duplication of a federal program.

## Summary

Depending upon the nature of the company, employees of small businesses may have exposures to metals, minerals, chemicals, noise, and safety problems. The health and safety problems that these employees encounter are not inconsequential. Most businesses with ten or fewer employees are not subject to OSHA inspections except under conditions previously noted. If working conditions in Houston are typical of those elsewhere in the nation, local and state programs are needed to augment the federal program.

## Recommendations

Local occupational health programs should be established to assist the small business community. To be effective, programs must be adequately funded and with well trained industrial hygienists. Documentation of the program successes and failures are necessary in order to improve the program and service provided to the community. Cost per inspection can be reduced significantly by conducting aggressive targeted studies on a particular industry rather than random inspections.

## Acknowledgments

We wish to thank Dr. James Haughton, Director, City of Houston Department of Health and Human Services for his support of the Occupational Health program. We also thank the industrial hygienists who participated in field work: Peter Conroy, Debbie Ebeling, Amy Goebel, Reginald Greif, and Michael Tilton.

## References

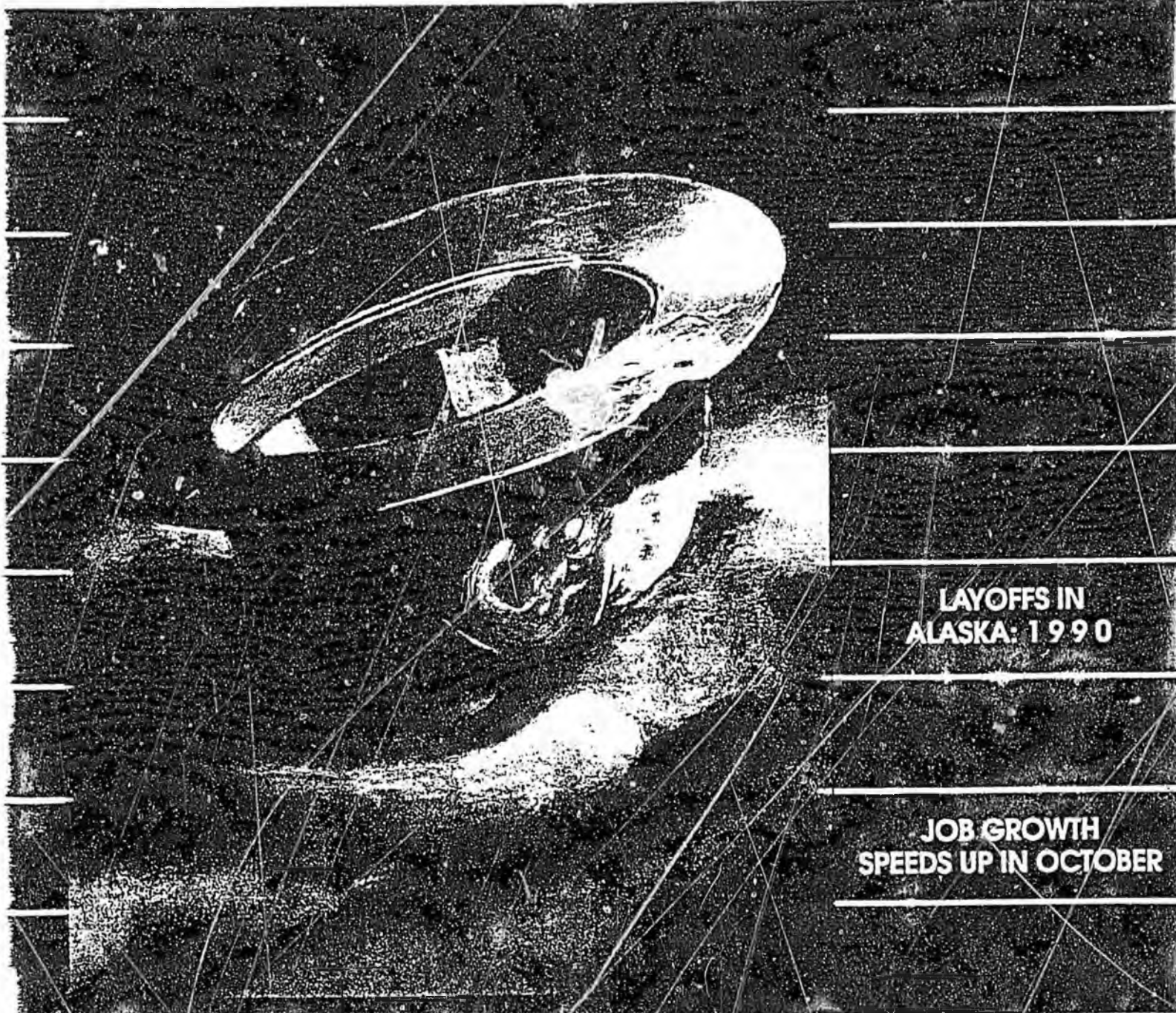
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3. Buchan, R.M.: Evaluating Health, Safety Services—Cost Effectiveness to Small Business. *Occup. Health Saf.*, pp. 31-34 (May 1984).
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Received 7/2/86; review/decision 9/4/86; revision 8/3/87; accepted 8/10/87

ALASKA ECONOMIC

# TRENDS

January 1992



LAYOFFS IN  
ALASKA: 1990

JOB GROWTH  
SPEEDS UP IN OCTOBER

ALASKA'S WORKER INJURY & ILLNESS  
RATE IMPROVING

ALASKA DEPARTMENT OF LABOR  
WALTER J. HICKEL, GOVERNOR

# Alaska's Worker Injury and Illness Rates Improving

by James Wilson

Jim Wilson is a labor economist with the Research & Analysis Section, Administrative Services Division, Alaska Department of Labor. He is based in Juneau.

**A**laska has one of the highest worker injury rates in the nation. The ratio of higher risk jobs in our work force make this a fact. The percentage of Alaskan workers in seafood processing, wood products, mining, and transportation is much greater than the national average. Although Alaska is among the states with high injury rates, there is some good news to be seen in the latest figures on Alaska's work injury and illness rates.

## Rates down in the goods producing industries

Alaska's mining industry is dominated by oil and gas extraction, which is composed of two parts: petroleum and gas production, and oil and gas field services. The "big oil" companies are the producers. Their subcontractors provide the field services such as drilling, exploration, and construction.

The production companies have an OSHA case rate consistently lower than most trade industries. The 1990 OSHA case rate for oil and gas production was 4.5 cases per 100 workers, less than half the all private industry average of 11.1. The time loss case rate for the producers, at 1.1 in 1990, is among the lowest of any industry. During the last ten years the field service companies have cut their OSHA case rate nearly in half, from 24.9 in 1981 to 13.9 in 1990. During this same period their time loss case rate has been cut by over half, from 11.7 to 5.4, and is now at a record low.

Construction's record low rates for all OSHA cases and time loss cases were set in 1988 during a period of declining employment. In 1989 both employment and the injury/illness rates rose. During 1990 construction employment grew 7%; but the OSHA case rate fell to its second lowest level of record, 14.7 cases per 100 workers. Although the time loss rates for 1989 and 1990 are above the 1988 low, it is encouraging that the average for the last three years, at 6.5, is below all years prior to 1988. Of all time loss cases in 1990, 9% were from

construction employees who account for 5% of all nonfederal workers.

Alaska's logging and seafood processing industries traditionally lead all others in the rate of OSHA recordable injuries and illnesses. The OSHA case rate in logging has shown continued improvement for the last four years. The 1990 rate of 40.1 cases per 100 workers is a marked change from the rate of 56.6 recorded in 1986. The time loss case rate for logging, at 21.9 per 100 workers in 1990, is the lowest in six years. The OSHA case rate in seafood processing has been fluctuating the last few years. The preliminary 1990 rate of 26.7 cases per 100 workers is the lowest recorded since 1984. Of more importance,

Figure • 1

## OSHA Industry Case Rates Alaska 1988-1990

Source: Alaska Department of Labor, Research and Analysis Section, Occupational Safety and Health Statistics.

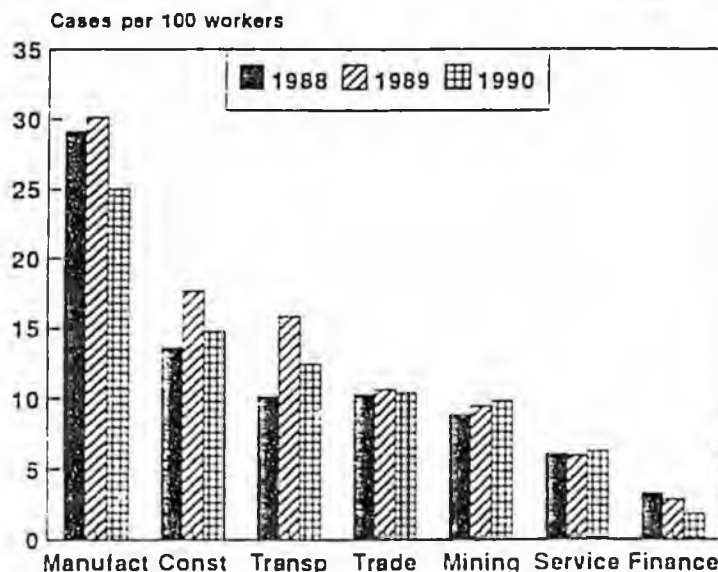


Table • 1

the time loss case rate, 13.3, is the lowest in five years.

**Fatality rate highest in nation**

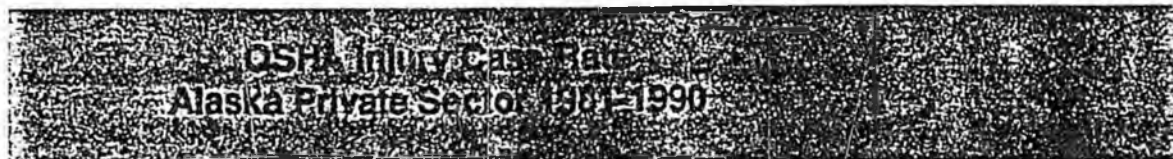
According to the National Institute of Occupational Safety and Health (NIOSH), Alaska has the highest worker fatality rate in the nation. Based on figures for the seven year period 1980 to 1986, Alaska has had a worker fatality rate of 34.2 cases per 100,000 workers. This is four times higher than the U.S. rate of 7.9.

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
TOTAL	10.0	10.3	10.6	10.3	10.7	10.2	10.9	10.8	12.3	11.1
Injury	9.8	10.1	10.3	10.1	10.4	10.0	10.6	10.5	11.8	10.7
Illness	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.3	0.5	0.3

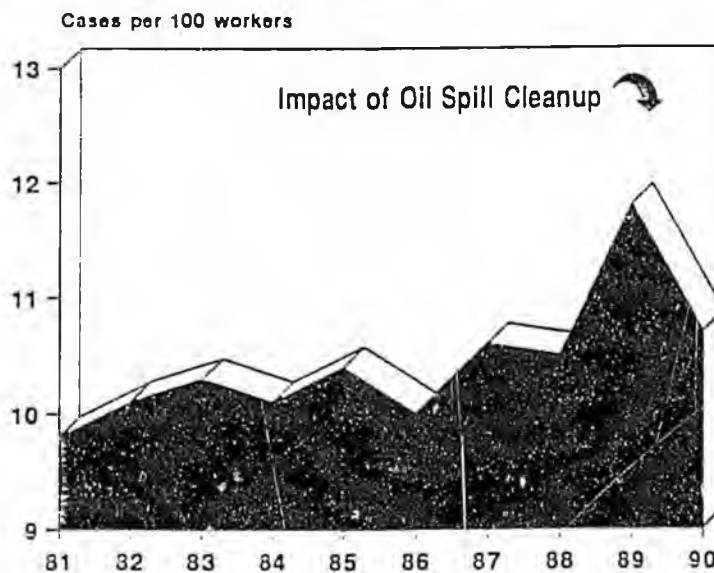
Source: Alaska Department of Labor, Research and Analysis Section. Occupational Safety and Health Statistics.

Figure • 2

More than 100 fatalities have been reported to the Alaska Division of Workers' Compensation during the last three years. Forty cases were reported for 1990. The leading cause of fatal injury for Alaskan workers is aircraft accidents. There were 9 such cases in both 1989 and 1990. The next leading cause of worker death in 1990 is falls, followed by motor vehicle accidents. For the first 10 months of 1991, there have been 34 reported fatalities.



Source: Alaska Department of Labor, Research and Analysis Section, Occupational Safety and Health Statistics.



The data collected by the Division of Workers' Compensation does not include commercial fishing. A 1988 study by the University of Alaska's Institute of Social and Economic Research, for the period 1981 to 1984, concluded that the death rate among commercial fishermen in Alaska was 20 times higher than the average for all other industries. Beginning in 1992, The Alaska Department of Labor

will begin a new program to obtain a more comprehensive count of work related fatalities using multiple data sources.

### Private sector rate

Alaska's 1990 rate for all OSHA injuries and illnesses is up slightly from prior years. The 1990 private sector rate of 11.1 represents a modest increase from the rates of 10.9 and 10.8 recorded in 1987 and 1988, respectively. The 1989 rate of 12.3 is unusual because it includes the impact of the Prince William Sound oil spill cleanup project. The 1990 private sector rate for time loss cases is also slightly above the 1987-88 levels. The 1990 time loss case rate for the private industry is 5.2 cases per 100 workers.

### Time loss cases

In 1990, time loss cases accounted for 47% of OSHA injuries and illnesses. The Alaska Division of Workers' Compensation received 12,103 time loss case claims for 1990. Only 15% of these claims were from workers employed in state or local government. The largest

share of the time loss cases were from manufacturing, 24%. Workers in trade and service industries submitted 18% and 14% respectively of the total claims.

In Alaska's private sector an average of 15 days of work is lost for each time loss case. For the past three years the average number of lost days has been lower than any time since 1976. Alaska's rates for injury and illness cases are always higher than the U.S. average. Interestingly, Alaska's average number of days lost is usually lower than the U.S. average. This seems to suggest that Alaska's time loss injuries are more frequent in occurrence but slightly less severe.

Women workers accounted for 23% of the private sector time loss cases in 1990. Although women make up nearly half of the total work force, the majority of women are employed in less hazardous occupations.

### Rates creeping up in lower hazard industries

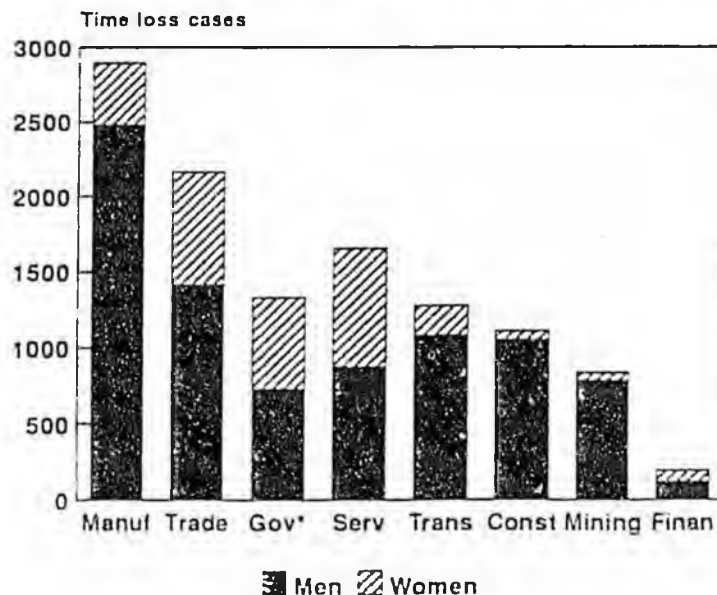
The industries which usually get the attention in articles such as this are the higher risk ones, such as manufacturing and construction. The private sector OSHA case rate is the sum of all industries. The lower rate industries do impact the private sector total because of their employment size. A look at the last few years' data shows that the injury and illness case rates in some lower risk industries have risen somewhat. In retail trade the total OSHA case rate has been above 10.0 for the last three years, whereas it was below that level for the prior seven years. Similarly, the rates in Services industries (6.2 in 1990) have been slightly higher in the last few years than in the early 1980s. Subtle changes in large lower rate industries are not a cause for alarm, but it is important to realize that they do impact the private sector total, which everyone watches closely.

Figure • 3

Time Loss Cases Alaska 1990  
by Sex and Industry

Note: \* Government here includes only state and local government.

Source: Alaska Department of Labor, Research and Analysis Section, Occupational Safety and Health Statistics.



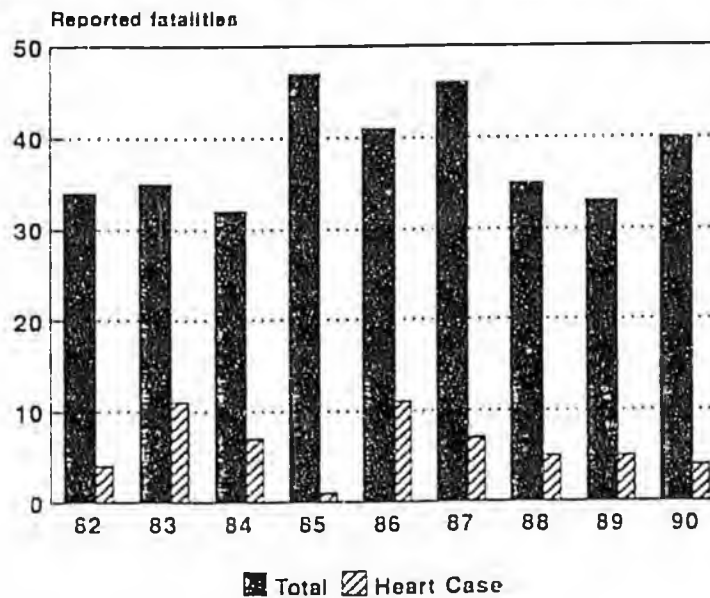
**Changes in Estimated OSHA Injuries and Employment  
Alaska 1989 and 1990**

	Injuries			Estimated Hours Worked (Millions)			Employment		
	1989	1990	% Change	1989	1990	% Change	1989	1990	% Change
Private Sector	15,681	15,922	1.5	265.7	287.5	8.2	156,467	165,035	5.5
Mining	1,061	1,329	25.3	23.2	27.2	17.2	10,247	11,475	12.0
Construction	1,443	1,480	2.6	16.6	20.1	21.1	9,798	10,503	7.2
Manufacturing	4,375	4,537	3.7	31.6	36.3	14.9	15,667	17,182	9.7
Transportation	2,855	2,167	-24.1	38.2	34.9	-8.6	21,169	20,622	-2.6
Trade	3,605	3,719	3.2	68.6	72.4	5.5	44,197	45,956	4.0
Finance	221	158	-28.5	15.9	17.3	8.8	9,244	9,165	-0.9
Services	1,974	2,399	21.5	69.8	77.5	11.0	45,899	49,819	8.5
State/Local Gov	2,982	2,939	-1.4	74.4	78.5	5.5	48,842	51,000	4.4

Source: Alaska Department of Labor, Research and Analysis Section, Occupational Safety and Health Statistics.

Figure • 4

**Reported Fatalities 1982-1990  
Alaska Workers' Compensation Division**



Source: Alaska Department of Labor, Research and Analysis Section, Occupational Safety and Health Statistics.

# Occupational Injury & Illness Information

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Alaska 1989

**State of Alaska • Walter J. Hickel, Governor**  
**Department of Labor • Nancy Bear Usera, Commissioner**

**Administrative Services Division • David Teal, Director**  
**Research and Analysis Section • Chuck Caldwell, Chief**

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# Executive Summary

Occupational Injury & Illness Information, Alaska 1989

The cleanup of the 1989 Exxon Valdez oil spill was the single largest economic event in Alaska in many years. During 1989 more than 11,000 employees worked approximately 21 million hours. There were 1,797 Workers' Compensation cases including two fatalities filed with the Department of Labor related to the oil spill clean up. There were an estimated 8.9 timeloss cases per 100 workers. The most frequent nature of injury were sprains and strains (28%), followed by respiratory illnesses (15%). The weather was listed as the source of most respiratory illnesses. Petroleum products were recorded as the source of injury in only 10 respiratory illness cases.

The private industry statewide timeloss case rate in 1989 was 5.9 cases per 100 workers, up from 5.0 in 1988. At the major industry level all industries except services experienced increases in their timeloss case rate. The transportation industry timeloss case rate increased from 5.1 in 1988 to 8.0 in 1989. Oil spill clean up activity was coded in this industry. The timeloss case rate for the construction industry rose from the all time low of 6.1 in 1988 to 6.6 in 1989. The timeloss case rate in the manufacturing industry continued its steady increase, reaching a new high of 16.8.

There were an estimated 109,600 lost workdays in Alaska in 1989, a 30% increase over 1988.

There were 33 work related fatalities in 1989. The most common cause was air crash fatalities.

# Chapter 1

## Occupational Injuries and Illnesses

### Injury and Illness Case Rates

The case rate represents the number of OSHA recordable occupational injuries and illnesses per 100 full time workers (see glossary for precise definition). The 1989 Alaska private industry rate was 12.3, up significantly from the prior year's rate of 10.8. The rate of 12.3 means that roughly one out of every eight Alaskan workers in private industry suffered a recordable injury or illness during their employment.

The single largest factor influencing the increase in the case rate in 1989 was the large scale cleanup project after the Exxon Valdez oil spill in Prince William Sound.

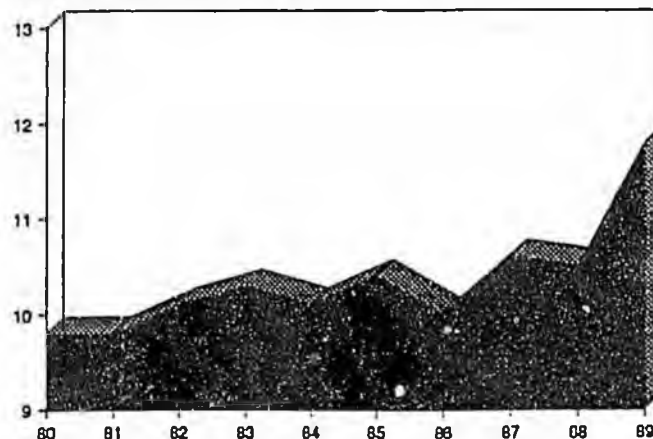
"Rate" as used in this report means the case rate of all work injuries and illnesses combined, unless otherwise specified. Separate rates are also discussed for injuries and illnesses. The case rate can also be broken down by severity of case, such as lost workday cases and cases that do not result in lost workdays. Hence, when discussing rates, both the type of case (total, injury, illness) and the severity (total, time loss, nontime loss) must be kept in mind.

### Work Injury Rate

The injury case rate for 1989 increased. (see Table 1-1). From 1988 to 1989 private sector average annual employment and estimated hours worked increased 6% and 7%, respectively. The number of estimated private sector injuries rose by 20% from the prior year. It is generally held that rates tend to rise as employment grows, especially in higher risk industries. Figure 1-1 illustrates the work injury rates in Alaska's private sector for 1980 through 1989.

**OSHA Injury Case Rate  
Alaska Private Sector 1980-1989**

Figure 1-1



Source: Alaska Department of Labor, Research and Analysis Section.

Table 1-1

**Case Rates per 100 Workers  
Private Sector, Alaska 1980-1989**

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
TOTAL	10.4	10.0	10.3	10.6	10.3	10.7	10.2	10.9	10.8	12.3
Injury	9.8	9.8	10.1	10.3	10.1	10.4	10.0	10.6	10.5	11.8
Illness	0.6	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.3	0.5

Source: Alaska Department of Labor, Research and Analysis Section.

Table 1-2

**Rates of Occupational Illnesses per 10,000 workers**

	1985	1986	1987	1988	1989
U.S.	18.0	19.2	26.4	32.2	37.1
Alaska	28.7	23.2	38.6	31.2	53.7

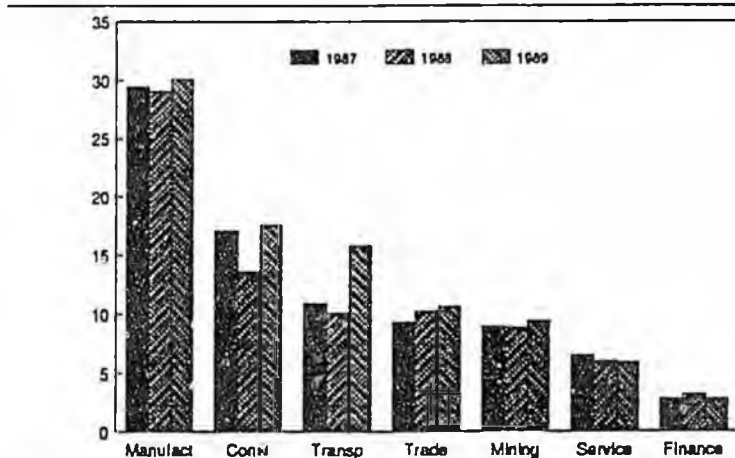
Source: Alaska Department of Labor, Research and Analysis Section.

**Work Illness Rate**

Using the standard base of 100 workers yields occupational illness rates so small that they begin to lose significance. Private sector illness rates for Alaska and the U.S. produced using an alternative base of 10,000 workers (Table 1-2) provide a better comparison.

Figure 1-2

**OSHA Industry Case Rates Alaska 1987-1989**



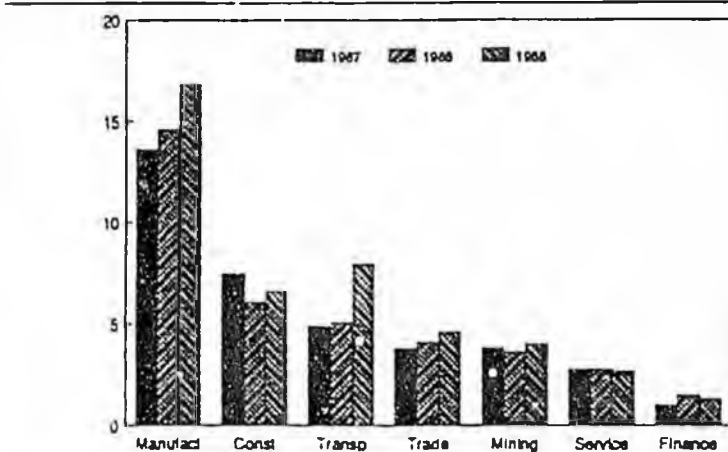
Source: Alaska Department of Labor, Research and Analysis Section.

**Industrial Injury/Illness Rates**

Rates for the industry divisions ranged from 2.8 in finance, insurance, and real estate, to 30.1 in manufacturing in 1989. Figure 1-2 compares industry division total case rates from 1987 to 1989. Manufacturing and construction had 1989 rates at or above the Alaska total. This was typical for these two industries. The transportation rate in 1989 was higher than normal because oil spill cleanup activity was included in this industry classification. The other major industries had rates below the private sector average.

Figure 1-3

**Industry Time Loss Case Rates Alaska 1987-1989**



Source: Alaska Department of Labor, Research and Analysis Section.

**Time Loss Case Rates**

The time loss case rate is a measure of the more severe work injuries and illnesses. The time loss case rate in the private sector during 1989 was 5.9 cases per 100 workers. This is somewhat above the 1988 rate of 5.0 but not unduly high. A time series comparison of time loss case rates for Alaska's industries appears in Table A-5.

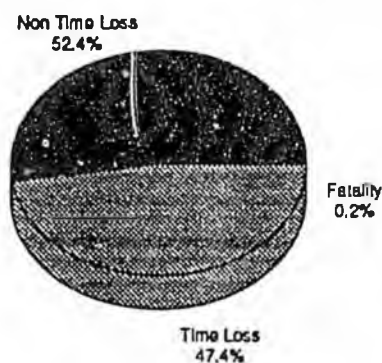
### Changes in Estimated OSHA Injuries and Employment Alaska 1988 and 1989

	Injuries			Estimated Hours Worked (Millions)			Employment		
	1988	1989	% Change	1988	1989	% Change	1988	1989	% Change
Private Sector	13,009	15,681	20.5	247.0	265.7	7.6	146,998	156,467	6.4
Mining	911	1,061	16.5	21.6	23.2	7.4	9,591	10,249	6.9
Construction	1,069	1,443	35.0	15.9	16.6	4.4	8,956	9,797	9.4
Manufacturing	3,977	4,375	10.0	28.7	31.6	10.1	15,205	15,658	3.0
Transportation	1,472	2,855	94.0	29.6	38.2	29.1	17,389	21,074	21.2
Trade	3,307	3,605	9.0	66.4	68.6	3.3	42,001	44,199	5.2
Finance	275	221	-19.6	17.8	15.9	-10.7	9,715	9,245	-4.8
Services	1,920	1,974	2.8	65.5	69.8	6.6	42,836	44,521	3.9
State/Local Gov	2,856	2,982	4.4	76.3	74.4	-2.5	47,098	47,153	0.1

Source: Alaska Department of Labor, Research and Analysis Section.

#### OSHA Cases, Alaska 1989 By Severity of Case

Figure 1-4



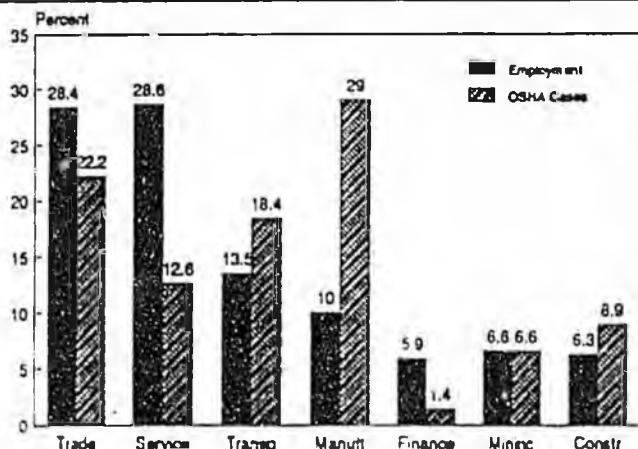
Source: Alaska Department of Labor, Research and Analysis Section.

#### Estimated OSHA Recordable Injuries

The estimated number of OSHA recordable injuries in Alaska's private sector totaled 15,681 in 1989. This represents an increase of 20% from the 1988 figure of 13,009. During 1989, annual average employment in the private sector rose 6%. Construction and manufacturing had employment changes of 9% and 3%, respectively. Employment in transportation was up 21% from 1988. The number of injuries in each industry varies with employment level and hours worked. Therefore, expect an increase in the number of injuries during economic growth, especially if growth occurs in higher risk industries. For the past few years, 45% of OSHA recordable cases have been time loss cases. In 1989 the ratio was 47.4% (Figure 1-4).

#### Private Employment & OSHA Cases Alaska 1989

Figure 1-5



Source: Alaska Department of Labor, Research and Analysis Section.

Table 1-4

### Average Lost Workdays per Lost Workday Case Alaska 1985-1989

	1985	1986	1987	1988	1989
Private Sector	17	17	17	14	14
Mining	27	40	30	24	22
Construction	19	22	24	16	17
Manufacturing	12	12	13	10	10
Transportation	21	21	20	17	19
Trade	15	14	14	13	12
Finance	11	16	16	8	20
Services	14	14	15	16	14
State & Local Govt.	15	12	12	12	13

Source: Alaska Department of Labor, Research and Analysis Section.

The proportionate share of total estimated injuries among major private sector industries changed from 1983. Most significantly, the share of total estimated injuries increased for transportation, due to the oil spill cleanup.

Table 1-5

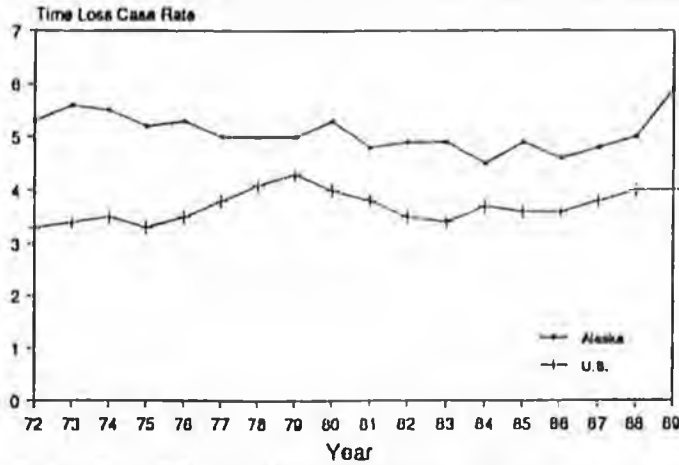
### Lost Workday Rates per 100 Workers Alaska 1987-1989

	Total Lost Workdays			Days Away from Work			Days of Restricted Work Activity		
	1987	1988	1989	1987	1988	1989	1987	1988	1989
Private Sector	80.1	68.4	82.5	73.4	60.7	74.4	6.7	7.7	8.1
Mining	115.7	87.6	88.4	173.9	84.9	84.8	8.3	2.7	3.6
Construction	181.6	96.7	111.5	163.3	86.6	105.1	7.7	10.2	6.3
Manufacturing	176.4	140.6	170.2	165.4	126.2	148.6	11.1	14.4	21.6
Transportation	95.1	85.3	155.2	90.9	77.7	143.9	4.1	7.6	11.2
Trade	56.0	54.1	52.8	46.6	47.5	47.9	9.4	6.6	5.9
Finance	15.9	11.4	26.2	12.1	9.7	24.3	3.7	1.6	1.9
Services	40.6	46.2	37.4	36.9	37.7	31.3	3.7	8.5	6.1
State & Local Government	47.3	38.3	47.7	40.3	34.6	42.2	7.0	3.7	5.5

Source: Alaska Department of Labor, Research and Analysis Section.

### Time Loss Case Rates Alaska and U.S. 1972-1989

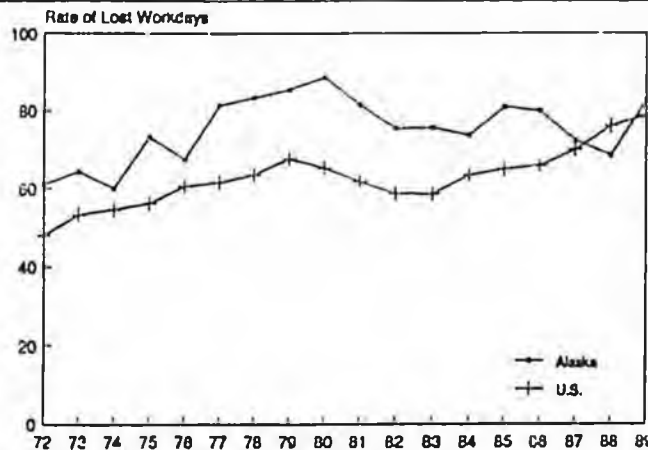
Figure 1-6a



Source: Alaska Department of Labor, Research and Analysis Section.

### Rates of Lost Workdays Alaska & U.S. 1972-1989

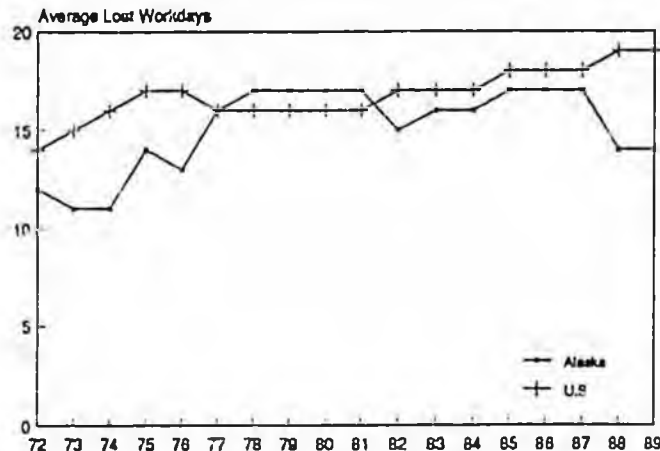
Figure 1-6b



Source: Alaska Department of Labor, Research and Analysis Section.

### Average Number Lost Workdays Alaska & U.S. 1972-1989

Figure 1-6c



Source: Alaska Department of Labor, Research and Analysis Section.

### Estimated Lost Work Time

Lost work time (OSHA definition) includes days the employee was absent from work because of a job related injury or illness. It also includes days on which an employee worked but could not perform all regularly assigned duties. The BLS annual survey shows there were over 109,600 lost workdays in Alaska's private sector during 1989 as a result of occupational injuries and illnesses. This is a 30% increase from the prior year.

Days away from work typically account for over 90% of the estimated lost workdays. The remainder are days of restricted activity. Total lost workdays in Alaska's private sector in 1989 amounted to the equivalent of a full year of work for 438 employees. The cost for this lost time, in salary, would equal nearly 13 million dollars. (Cost estimate based on average monthly earnings figures for 1989, from the Alaska Department of Labor's Statistical Quarterly, Fourth Quarter 1989.) Figure 1-6 illustrates time loss case data trends for Alaska and the U.S. since 1972. Table 1-4 shows that the average number of lost workdays per lost workday case in the private sector was 14 days, the same as in 1988. The rate for total lost workdays in the private sector was 20% higher than in 1988 (Table 1-5).

## Injuries and Illnesses by Industry

### Mining

Mining experienced an increase in the total case rate of injuries and illnesses from 8.8 to 9.4; a rate that was lower than all but one of the preceding 10 years (Table A-3). During 1989, mining employment rose 7% from 1988. The dominant industry in the mining division is oil and gas extraction, with 90% of mining employment. Two basic components

### Construction

During 1989 construction employment increased by 9%. This is quite a contrast to the 18% drop recorded the prior year, and is the first increase since 1983. In 1989 general building construction experienced a loss in employment and a drop in the case rate. Other areas of construction recorded rising employment and case rates. The major elements of construction (general building, heavy construction, and special trades) experienced employment changes of -3%, 25%, and 6% respectively. The total case rate for 1989 was 17.6, up from 13.6 in 1988.

Table 1-6

### Case Rate by Industries 1988 - 1989

	Total Cases		Time Loss Cases	
	1988	1989	1988	1989
Mining	8.8	9.4	3.6	4.0
Construction	13.6	17.6	6.1	6.6
Manufacturing	29.1	30.1	14.6	16.8
Transportation	10.1	15.8	5.1	8.0
Wholesale Trade	10.7	10.3	4.9	5.3
Retail Trade	10.1	10.7	3.9	4.4
Finance	3.2	2.8	1.5	1.3
Services	6.0	5.9	2.8	2.7

Source: Alaska Department of Labor, Research and Analysis Section.

Construction experienced a rise in the lost workday case rate of 6.6 from the record low of 6.1 set the prior year. The number of estimated lost workdays in construction increased 20% from 1988. This reverses the trend of the last five years. The rise in number of lost workdays is a result primarily of employment growth. Since 1986, construction has accounted for fewer time loss cases than retail trade.

### Manufacturing

make up Alaska's oil & gas industry: production and field services (which includes drilling and exploration). The current employment composition is 46% production and 54% services (Table A-6). The current year marks the first time since 1981 that employment in the services component was greater than production. The total case rate for production is relatively low at 4.7 in 1989, lower than most other industries. The total case rate for oil field services rose from 12.8, its lowest rate of record, to 14.1 (higher only than the 1988 rate).

Mining had a slight rise in its time loss case rate, from 3.6 to 4.0, in 1989, from its record low. The time loss case rate in oil & gas field services is at its second lowest level in ten years.

The manufacturing total case rate was basically stable (29.1 to 30.1) from 1988 (Table A-3). Manufacturing employment growth in 1989 was much smaller than the prior year. Growth occurred in both seafood processing and logging. In Alaska, manufacturing includes only a few industries: food processing (SIC 20), lumber and wood products (SIC 24), and pulp and related products (SIC 26). The first two are among the most hazardous in the state (Table 1-7). Food processing has a greater impact on the overall manufacturing rate because its employment is over three times larger than that of lumber and wood products. The total case rate for seafood processing rose slightly from 1988 and is at its highest level in ten years. The 1989 total case rate for lumber and wood products fell signifi-

cantly from 1988 and is the lowest in four years.

Manufacturing has always experienced the highest time loss case rate of all major industries. During 1981 and 1982 the time loss case rate was at record low levels. Except for 1987 the time loss case rate has been steadily rising since 1983.

Growth in employment does not automatically mean more injuries; but it is the generally expected result. The manufacturing industry had exhibited the opposite trend in past years. Since 1985, however, the general expectation has held true as employment and time loss cases both rose. Manufacturing, particularly seafood processing, employs large numbers of people for a short and intensive season. When employment rises, more people with less experience are hired. New employees are at highest risk of injury.

### Transportation

The total case rate for Transportation and Public Utilities rate in 1988 dipped to 10.8, its lowest level in ten years (Table A-3). The unusual activity of the Prince William Sound oil spill cleanup changed this dramatically. The total case rate in 1989 was 15.8. The case rate figures for 1989 are atypical and not truly comparable to other years. The 1989 figures do give us the impact of the oil spill cleanup activity, however. Most of the oil spill cleanup activity was included in industry SIC 49, Sanitary Services. The total case rate for this industry group went from 13.5 in 1988 to 25.6 in 1989. The time loss rate changed from 5.7 to 12.6. The total estimated OSHA cases in Sanitary Services went from 252 to 1,356.

### Wholesale Trade

During 1989 the total case rate in wholesale trade declined from 10.7 to 10.3. The time loss case rate

went from 4.9 to 5.3 cases per 100 workers. Employment in wholesale trade rose 6% from 1988. Except agriculture, wholesale trade has the smallest private sector industry employment.

### Retail Trade

For 1989 the retail trade total case rate was 10.7 cases per 100 workers, the highest in ten years. The time loss case rate of 4.4 for total retail trade was somewhat above its 1988 level. Industry employment increased 5% in 1989.

cases per 100 workers; not a significant change from the 6.0 rate recorded in 1988. The time loss case rate of 2.7 was not a notable change from the prior year's 2.8. Employment in services grew 4% over 1988 and the reported time loss cases increased by only 141 cases.

### State and Local Government

The total case rate increased in state government, and decreased in local government. The time loss case rate rose in both state

Table 1-7

## Public Sector OSH Survey Data Summary Alaska 1988-1989

	Public Sector		State Government		Local Government	
	1988	1989	1988	1989	1988	1989
Incidence Rate (per 100):						
Total Cases	7.7	8.2	5.8	7.3	9.4	9.1
Lost Workday Cases	3.1	3.6	2.2	3.0	3.9	4.1
NonTime Loss Cases	4.6	4.6	3.6	4.2	5.5	5.0
Estimated OSHA Cases:						
Total Cases	2,940	3,052	1,042	1,306	1,898	1,746
Lost Workday Cases	1,181	1,326	394	543	787	783
NonTime Loss Cases	1,759	1,722	648	760	1,111	962
Estimated Lost Workdays:						
Total Lost Workdays	14,624	17,729	5,036	6,727	9,588	11,002
Average - Lost Workdays per Lost Workday Case:						
	12	13	13	12	12	14

Source: Alaska Department of Labor, Research and Analysis Section.

### Finance

The finance, insurance, and real estate industry typically account for 7% of private sector employment. It is the least hazardous major industry group. It has a total case rate of 2.8 cases per 100 workers and a time loss case rate of 1.3. Only 2% of the private sector time loss cases occurred in this industry in 1989.

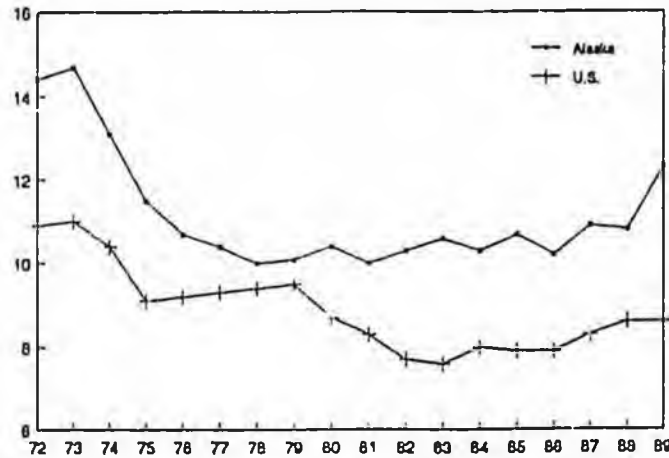
### Services

The total case rate in the services industry was relatively low at 5.9

government and local government. The total estimated lost workdays in the public sector amounted to the equivalent of 70 employee years. The cost for this lost work time in salary would amount to 3.2 million dollars; about \$922,000 for state government and \$2,277,000 for local government. Cost estimates are based on average monthly salary figures for 1989 which appear in the Alaska Department of Labor's Statistical Quarterly, Fourth Quarter, 1989. A summary of the public sector data is in Table 1-7.

Figure 1-7

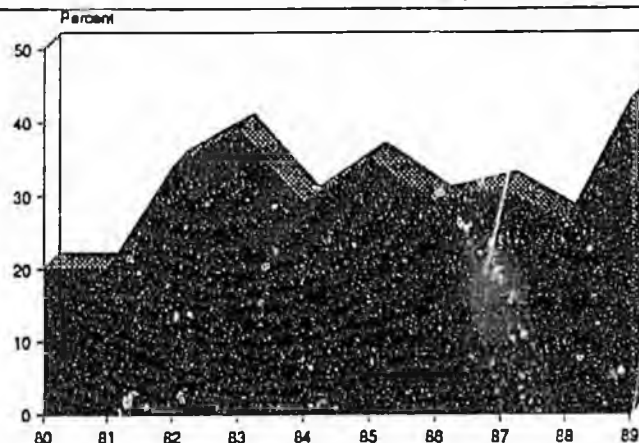
### OSHA Case Rate Alaska & U.S.



Source: Alaska Department of Labor, Research and Analysis Section.

Figure 1-8

### Alaska OSHA Case Rate Percent Above U.S. Rate



Source: Alaska Department of Labor, Research and Analysis Section.

Table 1-8

### OSHA Recordable Injuries and Illnesses Ten Highest Rate States

Rsnk	State	1987	1988	1989
1	Maine	13.7	14.4	14.5
2	Alaska	10.9	10.3	12.3
3	Hawaii	9.8	10.4	11.4
4	Washington	10.6	11.0	11.3
5	Nevada	9.4	10.2	10.9
6	Oregon	10.9	11.1	10.6
7	Rhode Island	10.8	11.0	10.4
8	Michigan	9.1	10.5	N/A
9	Indiana	9.0	10.1	N/A
10	Nebraska	9.1	10.0	N/A

Source: Alaska Department of Labor, Research and Analysis Section.

## Long Term Trends

### Case Rate Trends

According to the U.S. Bureau of Labor Statistics, case rates will tend to rise as employment increases. In Alaska the rates have not always behaved according to this expectation. Most of Alaska's industry rates have either declined or remained fairly stable as employment rose.

Figure 1-7 shows the private sector injury and illness rate changes since 1972 both nationally and in Alaska. Alaska has one of the highest rates in the nation (see Table A-11). Alaska's rate will continue to be one of the highest because of its high concentration of employment in higher risk industries. Figure 1-8 illustrates the percentage by which the Alaska rate exceeds the national rate for the last ten years.

### 1989 Industry Composition, Alaska and the United States

Figure 1-9a illustrates that mining, construction, and transportation make up a greater share of the private sector employment in Alaska than nationally. A greater share of these high risk (and higher case rate) industries means that Alaska will have a higher total private sector rate. Manufacturing accounts for nearly one fourth of private employment nationally while only 10% in Alaska. Manufacturing is the highest case rate industry both nationally and in Alaska.

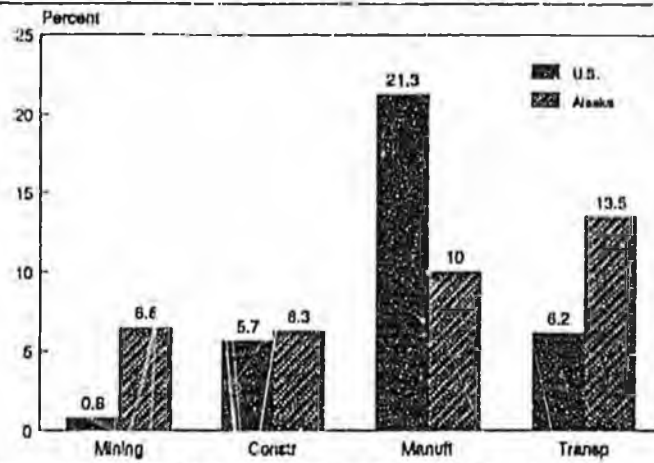
To understand manufacturing's impact in Alaska it helps to examine its composition. Figure 1-9b illustrates that food processing and

wood products compose 73% of Alaska's manufacturing industry. These same two industries amount to only 12% of U.S. manufacturing. Nationally and in Alaska, food processing and wood products are the highest case rate industries. Figure 1-9c compares the Alaska and U.S. rates for several selected industries. Because Alaska has a much greater share of high rate industries in its manufacturing component, Alaska's manufacturing rate will be higher than the U.S. manufacturing rate.

### OSHA Recordable Cases and Employment

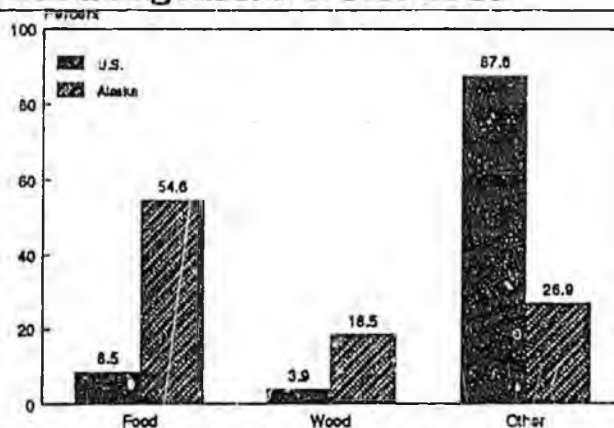
In Alaska there has not always been a one to one correlation between changes in employment level and in the number of worker injuries. Figure 1-10 illustrates the trends for two interrelated items: the estimated number of OSHA recordable cases and employment. In Alaska the number of OSHA recordable cases in 1989 was 17% higher than in 1984. Alaska's private sector employment in 1989 was 1% less than in 1984. The graphs in Figure 1-10 illustrate that the number of cases follows the activity in employment. If the private sector total case rate remained constant and the Alaska industry mix was stable, the number of cases would change in direct proportion to changes in employment. In reality, Alaska's total case incidence rates have varied and there have been shifts in the industry mix. In general, the number of cases in Alaska has risen as a result of increasing employment but not in direct proportion to total employment growth.

Percent Employed In Select Industries Alaska & U.S. 1989 Figure 1-9a



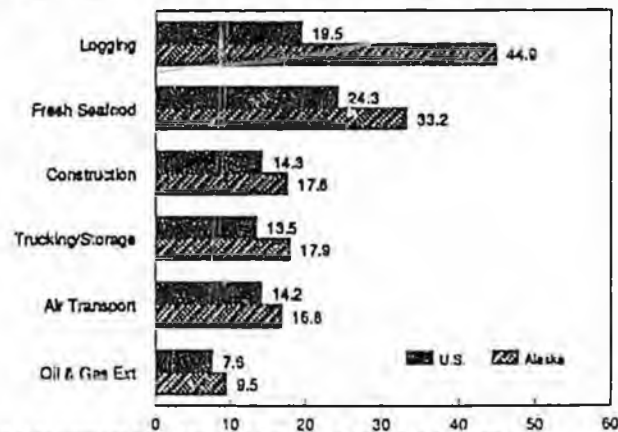
Source: Alaska Department of Labor, Research and Analysis Section.

Percent Employed In Manufacturing Alaska & U.S. 1989 Figure 1-9b



Source: Alaska Department of Labor, Research and Analysis Section.

OSHA Case Rates in Select Industries Alaska & U.S. 1989 Figure 1-9c



Source: Alaska Department of Labor, Research and Analysis Section.

The national data show that the number of estimated OSHA recordable cases was 21% higher in 1989 than in 1984 while employment increased 15% over the same period. During the last five years employment grew in both high risk and low risk industries.

## Time Loss Cases

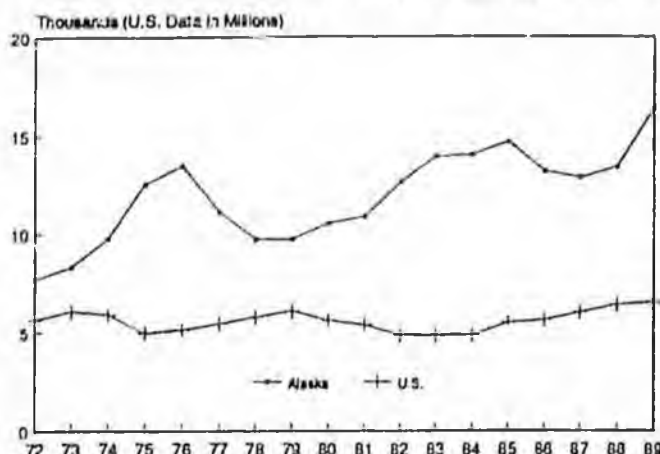
### Time Loss Claims Filed

Earlier, this report discussed lost workday case rates. The time loss case rate is the equivalent number of "OSHA recordable" time loss cases per 100 workers. It is calculated on hours worked. The following section talks about the numbers of time loss cases reported by employers. These reported cases may not all be "OSHA recordable."

In 1989 the Alaska Division of Workers' Compensation processed 12,215 claims for time loss work injury and illness cases. This represents a 24% increase from the 9,815 cases for 1988. Nonfederal employment rose by 4.9% from its 1988 level. Table 1-9 summarizes the time loss claim data for the last five years. Figure 1-12 illustrates the trends for claims and employment from 1985 to 1989.

Figure 1-10a

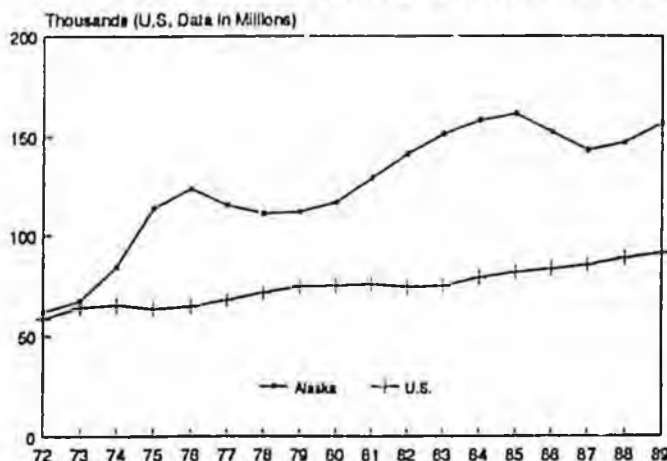
## Estimated OSHA Cases Alaska & U.S. 1972-1989



Source: Alaska Department of Labor, Research and Analysis Section.

Figure 1-10b

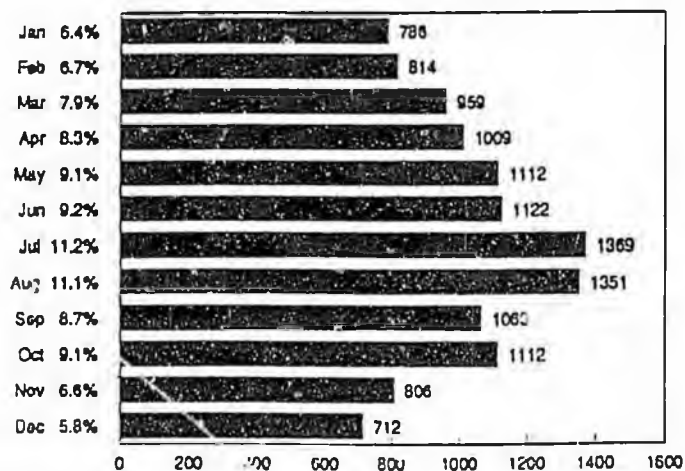
## Private Sector Employment Alaska & U.S. 1972-1989



Source: Alaska Department of Labor, Research and Analysis Section.

Figure 1-11

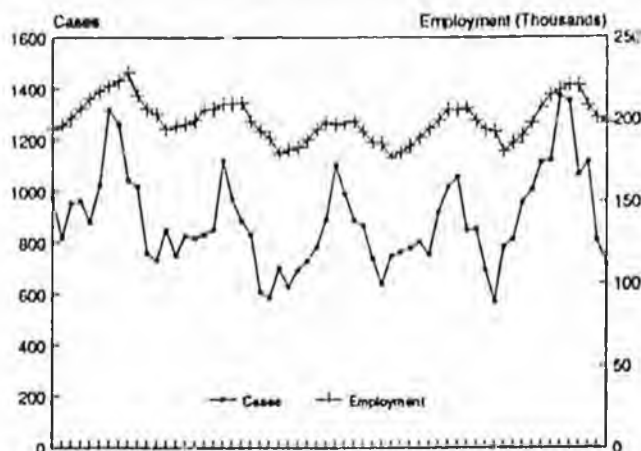
## Time Loss Cases by Month Alaska 1989



Source: Alaska Department of Labor, Research and Analysis Section.

## Employment & Time Loss Cases Alaska 1985-1989

Figure 1-12



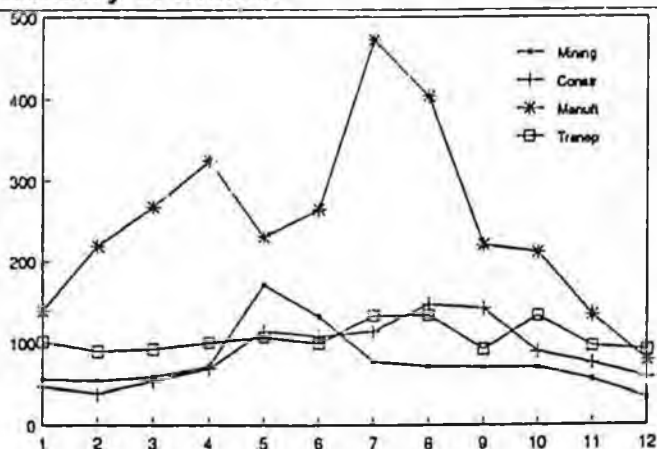
Source: Alaska Department of Labor, Research and Analysis Section.

The height of the claims activity always occurs near the end of summer and early fall. Time loss claims peaked in July in 1989 with only 18 cases more than August. The seasonal trend for claims follows the same seasonal trend in employment. The familiar seasonal pattern shown in Figure 1-11 is also seen in Figure 1-12 which contrasts nonfederal employment and time loss cases by month from 1984 through 1989. The seasonal trend for claims follows that for employment.

### Industry Composition: Employment and Claims

## Time Loss Cases Alaska 1989 by Industry & Month

Figure 1-13a

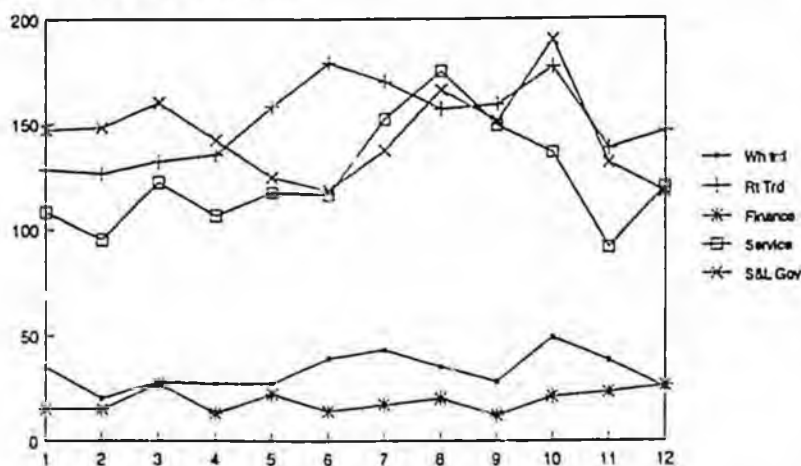


Source: Alaska Department of Labor, Research and Analysis Section.

Figure 1-13 illustrates the monthly occurrence of time loss cases for each major industry division in 1989. Manufacturing, construction, and transportation traditionally exhibit the greatest seasonal variation and also account for most of the total claims. The total number of claims is a result of the industry employment size and industry claims rates. Growth or decline of employment in higher risk industries will have a substantial impact on total claims. Construction, for example, accounted for 10% of employment

## Time Loss Cases Alaska 1989 by Industry & Month

Figure 1-13b



Source: Alaska Department of Labor, Research and Analysis Section.

and 24% of the time loss cases in 1984. Construction employment, following years of decline, is now 5% of nonfederal employment. Construction now accounts for only 8% of the time loss claims (Figure 1-14). Manufacturing employment has grown steadily since 1984 and is now 39% higher than in 1984. In 1984 manufacturing accounted for 12% of total time loss claims. Now it accounts for 24% of all reported cases. Figure 1-15 compares the number of time loss cases by industry.

### Female Workers

Women experienced 2,926 reported time loss injuries and illnesses in 1989, 24% of the total. Women make up over 40% of the work force. The greatest number of claims from female workers come from the trade and services industries. The highest proportion of claims by women typically come from the services and finance industries. Together with trade, this is where the highest percentage of female employees are concentrated. Figure 1-15 illustrates the comparative number of time loss cases for the major industry divisions in 1989. The number of claims by female workers in each industry is included.

Table 1-C

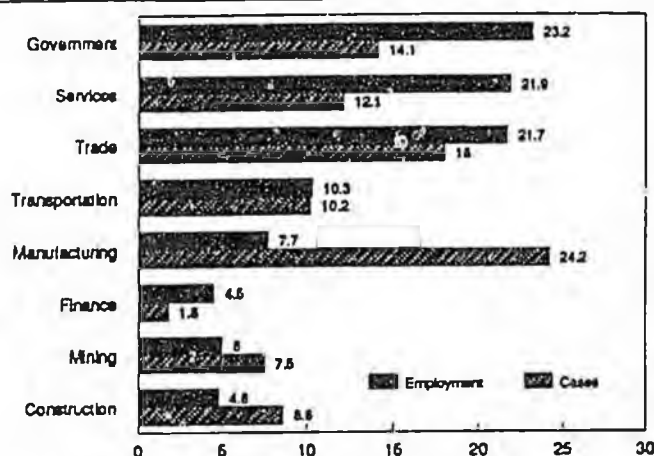
### Time Loss Claims Reported to Workers' Compensation Alaska 1985-1989

INDUSTRY	1985	1986	1987	1988	1989
Total	11,747	9,945	9,661	9,815	12,215
Mining	544	476	475	631	917
Construction	2,518	1,415	1,026	827	1,048
Manufacturing	1,626	1,823	2,155	2,386	2,958
Trans & Public Util	1,231	1,004	929	892	1,257
Wholesale Trade	513	424	366	371	391
Retail Trade	1,792	1,494	1,524	1,510	1,805
Finance, Ins & R.E.	212	233	182	212	273
Services	1,476	1,319	1,309	1,337	1,478
State & Local Govt	1,762	1,702	1,592	1,474	1,728

Source: Alaska Department of Labor, Research and Analysis Section.

Figure 1-14

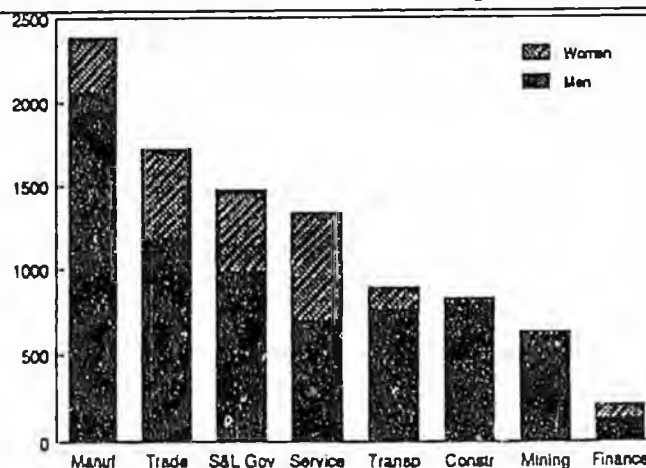
### Alaska 1989 Nonfed Employment and Time Loss Cases



Source: Alaska Department of Labor, Research and Analysis Section.

Figure 1-15

### Time Loss Cases Alaska 1989 by Sex & Industry



Source: Alaska Department of Labor, Research and Analysis Section.

7-LS1466D  
Cramer  
2/18/92

**CS FOR SENATE BILL NO. 320 ( )**  
**IN THE LEGISLATURE OF THE STATE OF ALASKA**  
**SEVENTEENTH LEGISLATURE - SECOND SESSION**

**BY**

**Offered:**  
**Referred:**

**Sponsor(s): SENATORS COLLINS, Pearce**

**A BILL**

**FOR AN ACT ENTITLED**

1 **"An Act relating to occupational safety and health; and providing for an effective date."**

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

3 **\* Section 1.** AS 18.60 is amended by adding new sections to read:

4           Sec. 18.60.042. INJURY PREVENTION PROGRAM. (a) An employer covered by this  
5 section shall establish a written injury prevention program. The program must include

6                   (1) identification of the individual or individuals responsible for implementing the  
7 program;

8                   (2) the employer's system for identifying and evaluating workplace hazards; the  
9 system must include scheduled, periodic inspections to identify unsafe conditions and work  
10 practices;

11                   (3) the employer's methods and procedures for correcting unsafe or unhealthy  
12 conditions and work practices in a timely manner;

13                   (4) an occupational health and safety training program designed to instruct  
14 employees in general safe and healthy work practices and to provide specific instruction with

1 respect to hazards specific to each employee's job assignment;

2 (5) the employer's system for communicating with employees on occupational  
3 health and safety matters, including provisions to encourage employees to inform the employer  
4 of hazards at the worksite without fear of reprisal;

5 (6) the employer's system for ensuring that employees comply with safe and  
6 healthy work practices; the system may include disciplinary action.

7 (b) An employer shall correct unsafe and unhealthy conditions and work practices within  
8 a reasonable time given the severity of the hazard.

9 (c) An employer shall provide training in injury prevention to

10 (1) all employees when the training program is first established;

11 (2) each new employee immediately after the employee is hired;

12 (3) each employee given a new job assignment; and

13 (4) all employees whenever new substances, processes, procedures, or equipment  
14 are introduced to the workplace and represent a new hazard and whenever the employer receives  
15 notification of a new or previously unrecognized hazard.

16 (d) The employer shall implement and maintain the employer's injury prevention program  
17 and keep appropriate records of steps taken to do so.

18 (e) The department shall adopt, by regulation, a standard setting out the employer's duties  
19 under this section. In adopting the standard, the department shall include substantial compliance  
20 criteria for use in evaluating an employer's injury prevention program. The department may  
21 adopt less stringent criteria for employers with fewer employees and for employers in industries  
22 with insignificant occupational safety or health hazards.

23 (f) The standard adopted under (e) of this section must specifically permit an employer  
24 covered by this section to establish an employer-employee occupational safety and health  
25 committee as part of the employer's injury prevention program. The department shall establish  
26 criteria for use of these committees. The criteria must include minimum powers and duties and  
27 must

28 (1) require the committee to review the employer's

29 (A) periodic, scheduled worksite inspections;

30 (B) investigations of causes of incidents resulting in injury, illness, or  
31 exposure to hazardous substances; and

1 (C) investigations of an alleged hazardous condition brought to the  
2 attention of a committee member;

3 (2) permit the committee to conduct its own inspections and investigations when  
4 determined necessary by the committee;

5 (3) require the committee, when requested by the department, to verify abatement  
6 action taken by the employer as specified in citations issued by the department.

7 (g) If an employer has established an occupational safety and health committee that meets  
8 the criteria established by the department under this section, the employer shall be rebuttably  
9 presumed to be in substantial compliance with the requirement to maintain a system of  
10 communication with employees under (a)(5) of this section.

11 (h) The department shall adopt regulations specifying the procedures for selecting  
12 employee representatives for employer-employee occupational health and safety committees when  
13 these procedures are not specified in an applicable collective bargaining agreement. An employee  
14 or employee organization may not be held liable for an act or omission in connection with a  
15 health and safety committee established under this section.

16 (i) An employer exempt under (j)(3) of this section from the requirements of (a) - (h) of  
17 this section shall establish and maintain an effective program of communicating with employees  
18 on occupational health and safety matters, including provisions to encourage employees to inform  
19 the employer of hazards at the worksite without fear of reprisal.

20 (j) This section does not apply to

21 (1) an employer regulated by 30 U.S.C. 801 - 962, as amended (federal Mine  
22 Safety and Health Act;

23 (2) an employer regulated by a state or federal agency that prescribes or enforces,  
24 under authority other than this section, standards or regulations affecting occupational health and  
25 safety;

26 (3) an employer with fewer than seven employees; however, the employer shall  
27 comply with (i) of this section.

28 Sec. 18.60.043. LIST OF HIGH HAZARD INDUSTRIES; REGIONAL  
29 ENFORCEMENT PLANS. (a) The commissioner shall establish a list of the 100 highest hazard  
30 industries in the state. To assess safety hazards and health hazards, the commissioner shall use  
31 data from the Bureau of Labor Statistics annual survey of occupational safety and health injuries

1 and illness, Alaska Workers' Compensation Board, and the division of labor standards and safety,  
2 and all other appropriate information available for determining which industries to include on the  
3 list because of safety hazards, health hazards, or both. The commissioner shall review the list  
4 every year.

5 (b) The department shall establish and maintain regional plans for allocating the  
6 department's resources for enforcement activities. In scheduling safety inspections and health  
7 inspections covered by the plan, as well as other inspections that the department determines are  
8 appropriate to the region, including the cleanup of hazardous waste sites, each regional plan must  
9 focus on industries selected from the commissioner's list of high hazard industries established  
10 under (a) of this section. The sizes of businesses with the greatest degree of hazards within an  
11 industry selected for inspection in the regional plan must be a major criterion in scheduling  
12 specific inspections under the plan.

13 (c) In order to maximize the effect of the regional plans, the department shall coordinate  
14 its education, training, and consulting services with the priorities established in the regional plans.

15 Sec. 18.60.044. INSPECTIONS. (a) Each inspection conducted by the department shall,  
16 if applicable, include an evaluation of the employer's injury prevention program under  
17 AS 18.60.042. The department shall evaluate injury prevention programs using the criteria for  
18 substantial compliance determined by the department. The evaluation shall include interviews  
19 with a sample of employees and the members of any employer-employee occupational safety and  
20 health committee. Before an inspection is concluded, the department shall notify the employer  
21 of the services available from the department to assist the employer to establish, maintain,  
22 improve, and evaluate the employer's injury prevention program.

23 (b) Inspections must also include an evaluation of the condition or conditions

24 (1) alleged in the complaint if the inspection is conducted under AS 18.60.088

25 (2) related to the asbestos health hazard abatement program under AS 18.31;

26 (3) related to significant safety or health hazards in the industries identified in the  
27 regional plans developed under AS 18.60.043; and

28 (4) involved in abatement of previous violations if the employer has been  
29 inspected and cited for related or the same violations in the past;

30 (c) The scope of an inspection may be expanded beyond the evaluations specified in (a)  
31 and (b) of this section whenever, in the opinion of the department, a more complete inspection

1 is warranted.

2 \* Sec. 2. AS 18.60.030 is amended by adding a new paragraph to read:

3 (15) offer a full range of occupational safety and health consulting services to  
4 employers including, for employers covered by AS 18.60.042, assisting in the development of  
5 injury prevention programs for employees and employers; the department shall give the highest  
6 priority for the consulting services to the development of programs for businesses with fewer than  
7 50 employees in industries identified in the plans developed under AS 18.60.043; consulting  
8 services may also include providing employers or employees with information, advice, and  
9 recommendations on maintaining safe employment or a safe place of employment and on  
10 applicable occupational safety and health standards, techniques, devices, methods, practices, or  
11 programs.

12 \* Sec. 3. AS 18.60.089(a) is amended to read:

13 (a) A person may not discharge or discriminate against an employee because the  
14 employee has

15 (1) filed a complaint or instituted or caused to be instituted a proceeding related  
16 to the enforcement of occupational safety and health standards;

17 (2) [, OR HAS] testified or is expected to testify in a proceeding relating to  
18 occupational safety and health;

19 (3) [OR BECAUSE AN EMPLOYEE HAS] exercised personally or on behalf of  
20 others a right afforded under AS 18.60.010 - 18.60.105; or

21 (4) participated in an occupational health and safety committee established  
22 under AS 18.60.042.

23 \* Sec. 4. AS 18.60.095 is amended by adding a new subsection to read:

24 (i) Notwithstanding (h) of this section, if serious injury, illness, exposure, or death is  
25 caused by a serious, wilful, or repeated violation, or by a failure to correct a serious violation  
26 within the time permitted for its correction, the penalty may not be reduced for a reason other  
27 than the size of the business of the employer being charged. Whenever the department issues  
28 a citation for a violation covered by this subsection, it shall notify the employer of its  
29 determination that serious injury, illness, exposure, or death was caused by the violation and  
30 shall, upon request, provide the employer with a copy of the inspection report.

31 \* Sec. 5. AS 23.30.090 is amended by adding a new subsection to read:

1                   (b) The board may, after a hearing, revoke an employer's certificate of self-insurance if  
2 the board finds that

3                   (1) the employer has been cited for a wilful violation or for repeated, serious  
4 violations of the standard adopted under AS 18.60.042; and

5                   (2) the citation has become final.