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**IOWA BUREAU OF LABOR
BIENNIAL REPORT
1977-1978**



IOWA BUREAU OF LABOR
BIENNIAL REPORT
1977 - 1978



Iowa
a place to grow

Robert D. Ray, Governor

Allen J. Meier, Labor Commissioner

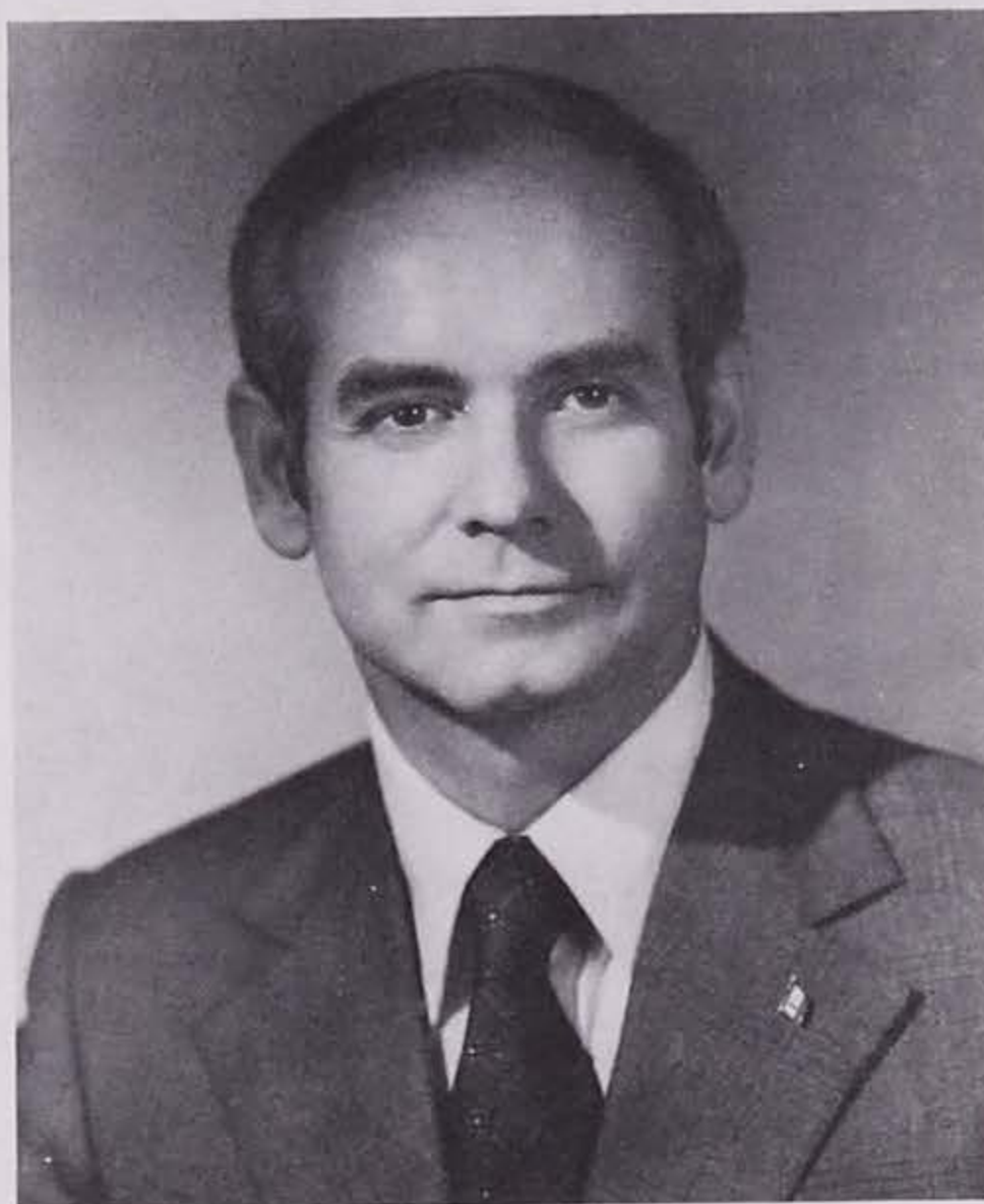
Compiled by the

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June, 1979

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ACKNOWLEDGEMENT



Robert D. Ray
Governor of Iowa

The Bureau of Labor wishes to acknowledge the support that Governor Robert D. Ray has given to the many programs administered by our Department. Governor Ray has always considered the health and safety and Iowa's workers and citizens to be of high priority. With new and existing programs competing for the limited public funding available, the Bureau of Labor could not have achieved the performance goals reflected in this report without the support of his office and staff.

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INTRODUCTION

The Bureau of Labor's Biennial Report for 1977 and 1978 contains descriptions and statistical summaries of its varied activities and services to the workers and employers of the State of Iowa. The following is a brief summary of the laws and programs administered by the Bureau of Labor. In addition to the specific activities outlined below, the Bureau of Labor offers educational programs in the area of occupational safety and health to both employers and employees. Also, the Bureau of Labor serves as an information or referral service to workers and employers for questions pertaining to conditions of employment or for problems arising out of and in the course of one's employment. If you have any questions relating to the activities or services of the Iowa Bureau of Labor, please contact our office.

Occupational Safety and Health

The purpose of the Iowa Occupational Safety and Health Act is to assure every working man and woman in this state safe and healthful working conditions and to preserve human resources. The Act authorizes the Labor Commissioner to set safety and health standards, provides for research in the safety and health areas, and sets up an inspection and enforcement program. The coverage of this Act extends to all employers in the state with one or more employees. Excluded are mining operations and Federal government installations. Safety and health coverage provided by the Bureau of Labor affects a total of 1,089,200 workers.

Wage Payment Collection

The purpose of the Iowa Wage Payment Collection Law is to insure that an employer pays all wages due its employees, less any lawful deductions, on regular paydays which are at consistent intervals from each other and which are designated in advance by the employer. It is the duty of the Labor Commissioner to administer and enforce the provisions of the Law, to investigate charges, and if necessary commence a civil action to recover any unpaid wages due the employee.

Child Labor

The Iowa Child Labor Law prescribes hours and conditions of work that are permissible for the employment of youth. Although persons over 16 years of age may be employed legally in most occupations, the Law sets an 18-year minimum for employment in certain particularly hazardous jobs in order to protect young workers from industrial injury. Under the Iowa Child Labor Law, employers are required to obtain work permits or certificates of age before they employ minors of certain ages. These permits show that the minor has met the minimum age and other requirements of the State law. It is the duty of the Labor Commissioner to enforce the provisions of the Law.

Boiler Inspection

It is the duty of the Labor Commissioner to inspect or cause to be inspected at least once every twelve months steam and hot water boilers used for heating and other such equipment covered by the Iowa Boiler Inspection Law in order to determine whether such equipment is in safe and satisfactory condition and properly constructed and maintained for the purpose for which the same is used.

Elevator Inspection

The purpose of the State Elevator Code is to provide for the public safety and to protect the public welfare of persons using any elevator, dumbwaiter, escalator, moving walk, or manlift subject to the Code. It is the function of the Bureau of Labor to adopt rules governing maintenance, construction, alteration, and installation of facilities, and the inspection and testing of new and existing installations.

Inspection of Amusement Parks/Rides

The purpose of the Iowa Amusement Ride Safety Inspection Law is to minimize in so far as possible injury or death that may result from the operation of amusement devices or carnivals. It is the function of the Bureau of Labor to determine if an amusement ride, amusement device, concession booth, or any related electrical equipment is in compliance with safety rules and will provide protection to the public using such ride, device, booth or related electrical equipment.

On-Site Consultation

The Iowa Bureau of Labor offers a free on-site safety and health consultation service to employers who request it. In providing this service, highest priority is given to smaller businesses and to workplaces where a high degree of hazard is known to exist. The consultation is used to inform the employer of conditions and practices in his establishment which may not be in compliance with the law, standards or rules and regulations. It is a means of explaining job safety and health regulations and informing the employer how to comply with them. The on-site consultation service is an integral part of the Bureau of Labor's occupational safety and health program and is available to both private sector and public sector employers.

Inspection of Temporary Labor Camps

The Iowa Bureau of Labor inspects temporary labor camps to insure that they are environmentally safe and that the site, shelter, water supply, toilet facilities, sewage disposal facilities, laundry, hand-washing and bathing facilities and lighting are adequate. Such temporary labor camps are occupied by migrant workers. The inspections are performed as a part of the Bureau of Labor's occupational safety and health program.

License for Employment Agencies

Employment agencies are required to obtain licenses from the Employment Agency License Commission before they conduct their business and to file a schedule of fees charged. The Labor Commissioner is a member of the Commission; it is his duty to administer the law relating to employment agencies and to investigate complaints under it. Fees chargeable by employment agencies may not exceed 25 percent of the first month's pay for employment paying less than \$250 per month and no charge for furnishing or procurement of employment shall exceed 8 percent of the annual gross earnings. However, if fees are charged solely to the employer there is no restriction on the amount that can be charged.

Railway Employees Sanitation and Shelter

The Iowa Railway Employees Sanitation and Shelter Act requires that railway companies within the State provide adequate sanitation and shelter for all railway employees. The Iowa Bureau of Labor has adopted regulations and conducts inspections to insure that the water supply, toilets, eating places and sleeping accommodations of railway workers are safe and meet required specifications.

Research and Statistics

The Iowa Occupational Safety and Health Act requires the Labor Commissioner to develop and maintain an effective program of collection, compilation and analysis of occupational safety and health statistics. The Research and Statistics Division has implemented and maintains statistical programs that are uniform with those of the U. S. Department of Labor and of other states. These programs provide reliable measures for evaluating the incidence, nature, and causes of injuries and illnesses in the work place in order to aid the Labor Commissioner in reducing occupational fatalities, injuries, and illnesses in Iowa. The statistical data are also made available to employers, employees, researchers, and safety and health professionals to create an awareness of the seriousness and the nature of unsafe and unhealthful working conditions. The data identify problem areas specific to the industries and safety priorities of Iowa and advance accident and illness prevention efforts.

LABOR COMMISSIONER



Allen J. Meier
Labor Commissioner



Marjorie Connors
Confidential
Secretary



Walter H. Johnson
Deputy Labor
Commissioner

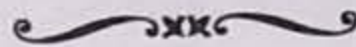


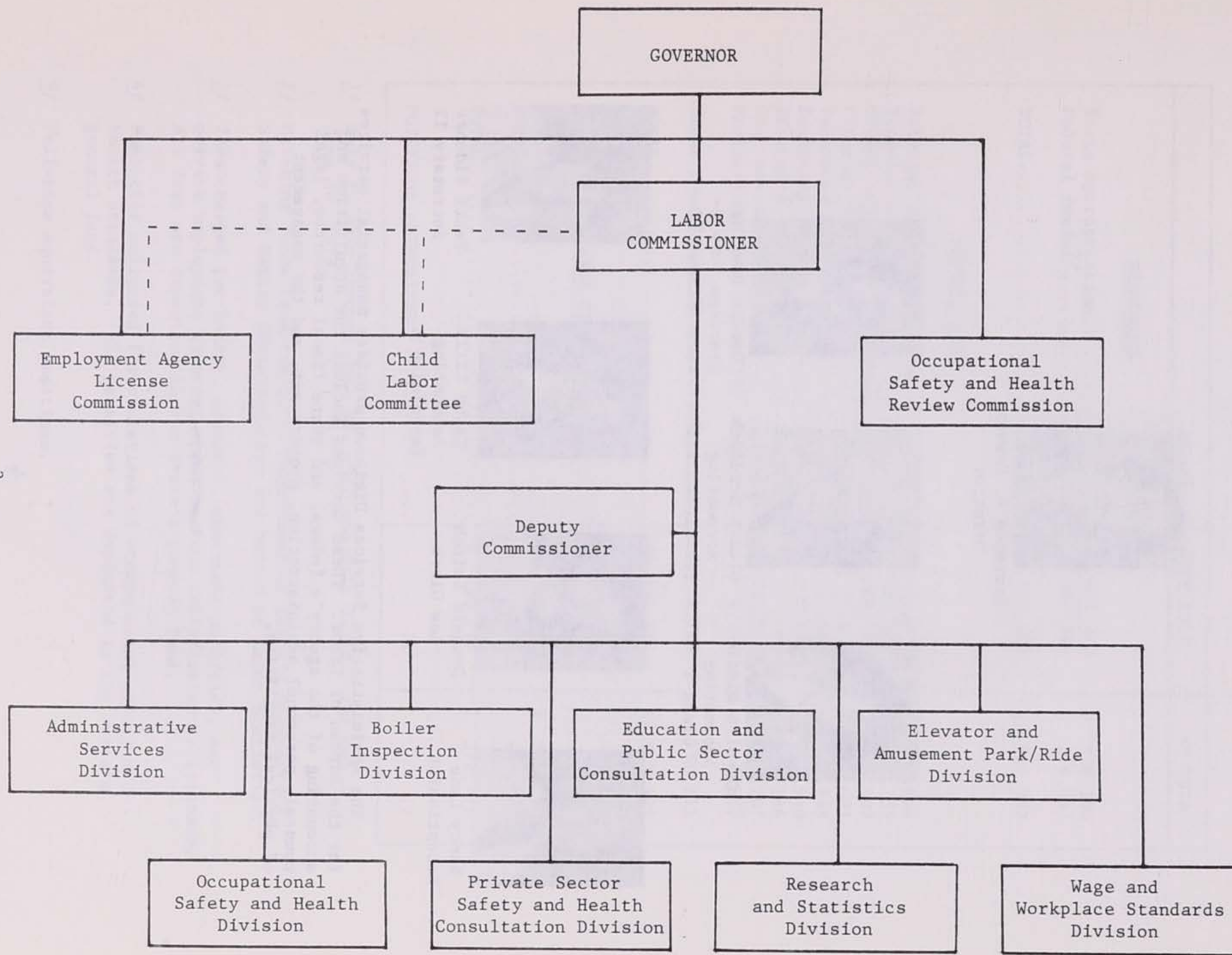
Richard Graeser
Health Advisor

The office of Labor Commissioner was created by the 20th Iowa General Assembly in 1884. The Bureau of Labor, under the control of the Commissioner, is responsible for the enforcement of laws relating to occupational safety and health, child labor, passenger and freight elevators, installation and inspection of fired and unfired pressure vessels, private employment agencies, reporting of work injuries and illnesses, the inspection and regulation of amusement rides, wage collection/payment, and railroad sanitation laws. Under the provisions of law, the Labor Commissioner is a member of the Employment Agency License Commission and chairman of the Committee on Child Labor.

The Employment Agency License Commission investigates and licenses all applicants for private employment agency licenses. The Commission has the authority to adopt regulations necessary for the proper enforcement and administration of Chapters 94 and 95 of the Code of Iowa. Commission members include Secretary of State Melvin D. Synhorst, Industrial Commissioner Robert C. Landess, and Labor Commissioner Allen J. Meier.

The Committee on Child Labor holds public hearings, formulates rules more specifically defining the occupations and equipment permitted or prohibited by Chapter 92 of the Code of Iowa, and issues general and special orders prohibiting or allowing the employment of persons under eighteen years of age in any place of employment hazardous to their health, safety and welfare. The Committee members are Giles J. Smith, representing the Superintendent of Public Instruction; John S. Spear, representing the Director of the Iowa Department of Job Service; Penny Binger and Earnest A. Comito, appointed by Governor Robert D. Ray as public representatives and Labor Commissioner Allen J. Meier.





ORGANIZATION OF THE
IOWA BUREAU OF LABOR

ADMINISTRATIVE SERVICES DIVISION



Lawrence A. Dawson
Director



Carolyn Biddle
Accounting
Clerk I



Gladys Braddock
Accounting
Technician III



Dennis Downing
Hearings Compliance
Officer II



Nancy Lane
Receptionist



Dougald Leitch
Law Clerk



Kathy Lilly
Accounting
Technician I



Patti Sidoner
Secretary II

The Administrative Services Division provides managerial services for the Bureau of Labor. These services include the acquisition and accounting of the agency's federal and state fiscal resources, legal counsel, personnel administration, procurement, and the management of physical facilities.

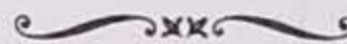


Table 1
IOWA BUREAU OF LABOR
BUDGET INFORMATION
FISCAL YEARS 1977-1978^{1/}

	FY 1977	FY 1978
<u>RESOURCES</u>		
State appropriation.....	\$ 921,343	\$ 966,306
Federal funds ^{2/}	584,241	576,091
TOTAL.....	\$1,505,584	\$1,542,397
<u>EXPENDITURES</u>		
Salaries and wages.....	\$1,020,080	\$1,104,864
Travel.....	119,700	140,755
Office supplies and expense.....	62,775	73,807
Printing and binding.....	16,234	14,081
Telephone and telegraph.....	24,408	20,743
Equipment.....	8,186	75,940
Insurance.....	85	166
Contractual services.....	248,518	80,297
Professional and scientific services..	1,370	1,533
Inter fund transfer and reversion.....	4,228	30,211
TOTAL.....	\$1,505,584	\$1,542,397
<u>REVENUE GENERATED</u>		
Fees ^{3/}	\$ 145,073	\$ 208,352
Penalties ^{4/}	113,222	164,427
TOTAL.....	\$ 258,295	\$ 372,779
POSITIONS AUTHORIZED ^{5/}	71	72

^{1/} July 1, 1976 through June 30, 1977 and July 1, 1977 through June 30, 1978.

^{2/} Matching funds from the U. S. Department of Labor's Occupational Safety and Health Administration and Bureau of Labor Statistics.

^{3/} Fees charged for boiler, elevator, amusement park/ride, and private employment agency inspections and certificates or licenses. All fees are deposited in the State's general fund.

^{4/} Penalties collected for violations of occupational safety and health standards. All penalties are deposited in the State's general fund.

^{5/} Full-time equivalent positions.

BOILER DIVISION



Waldo W. Larsen
Chief Boiler Inspector



Nadine Abbott
Clerk Typist II



Odella Daniels
Secretary I



William Brown
Boiler Inspector



Charles Harris
Boiler Inspector



Harold McLamb
Boiler Inspector

The Boiler Division maintains records of steam boilers and other equipment in the State subject to the Boiler Inspection Law, Chapter 89 of the Code of Iowa. Each record contains a full description of the equipment, including the name of the owner or user, its location, type, dimensions, age, condition, amount of pressure allowed, and the date last inspected. It is the function of the Chief Inspector and the three Deputy Inspectors from the Bureau of Labor, assisted by numerous Special Inspectors which work for insurance carriers but hold a commission from the Labor Commissioner, to determine whether such equipment is in safe and satisfactory condition and properly constructed and maintained for the purpose for which it is used.

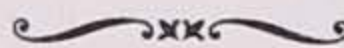


Table 1
STATE OF IOWA
REPORT OF BOILER INSPECTIONS
AND FEES COLLECTED
STATE AND INSURED BOILERS
FISCAL YEARS 1977-1978^{1/}

	FY 1977	FY 1978	Total FY 1977 & 1978
INSPECTIONS^{2/}			
State Scheduled.....	1,783	2,208	3,991
State Special ^{3/}	6	16	22
Insured.....	9,155	10,355	19,510
TOTAL.....	10,944	12,579	23,523
FEES COLLECTED^{4/}			
State Scheduled Inspections....	\$21,768.00	\$21,682.00	\$43,450.00
State Special Inspections.....	1,047.00	2,912.00	3,959.00
Insured Inspections.....	48,700.00	50,430.00	99,130.00
TOTAL.....	\$71,515.00	\$75,024.00	\$146,539.00

^{1/} July 1, 1976 through June 30, 1977 and July 1, 1977 through June 30, 1978.

^{2/} State inspections are made by the State Boiler Inspector and his deputies from the Bureau of Labor. Insured inspections are made by insurance company inspectors deputized by the Bureau of Labor.

^{3/} Shop surveys and special inspections conducted at the request or convenience of the owner.

^{4/} During Fiscal Years 1977 and 1978, a fee of \$5.00 was collected by the Bureau of Labor for the issuance of a certificate to insurance inspected equipment. Rates of charges for State inspected equipment are determined under Chapter 89.7, Code of Iowa. Expenses for travel and subsistence are charged to the owner as fees whenever special inspections are requested.

EDUCATION AND PUBLIC SECTOR CONSULTATION DIVISION



Hewitt Judkins
Director



Marita Baumhover
Clerk Typist II

Upon request of the employer, the Bureau of Labor offers a free on-site safety and health consultation service to the public sector, the same as is offered to private sector employers. The public sector consists of any governmental agency or political subdivision, such as cities, towns, counties, state agencies, schools, etc. In providing this service, highest priority is given to the smaller workplaces or a workplace that has a known high degree of existing hazards. The on-site consultation is used to inform the employer of conditions and practices in his establishment that may not be in compliance with the law, standards, or other rules and regulations. The consultation visit provides the means for explaining job safety and health regulations and informing the employer how to comply with these regulations.

Educational activities consist of providing pamphlets, films, slides, and training modules to employers and employees or holding seminars for and giving speeches to such groups. There is no charge for these services. A catalog listing all films, slides, and training modules available at the Bureau of Labor will be sent to employers and employees upon request. Presentations on the OSHA Act are available and any of two to forty-hour safety seminars on subjects and codes that pertain specifically to the industry or group requesting them may be arranged.

The Bureau of Labor will do its utmost to advise the public of all new developments, rules and regulations under the Occupational Safety and Health Act and how to comply with them.

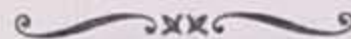


Table 1
STATE OF IOWA
ACTIVITIES CONDUCTED BY THE
SAFETY EDUCATION/CONSULTATION DIVISION
CALENDAR YEARS 1977-1978

Activity	1977	1978
Safety films distributed ^{1/}	74	147
Training and Educational Modules distributed ^{2/} .	52	55
Safety slide sets distributed.....	11	13
Educational seminars or speeches given.....	72	55
Number in attendance.....	5,698	4,011
Safety school sessions held.....	5	3
Students in attendance.....	148	91
Safety Consultations conducted on job sites ^{3/} ..	63	51

^{1/} For a complete listing of films currently available and a brief description of each, contact the Iowa Bureau of Labor.

^{2/} See Table 2 for a listing of the modules available.

^{3/} During the report period, private sector and public sector consultation activities were both combined with the educational functions into one Division. The figures shown, therefore, include consultative visits in both the private sector and in state and local government establishments.

Table 2
INSTRUCTIONAL MODULE PACKAGES
AVAILABLE FROM THE SAFETY EDUCATION/CONSULTATION
DIVISION OF THE IOWA BUREAU OF LABOR

The following comprehensive packages of instructional materials designed to create a better understanding of OSHA and IOSHA requirements are available for loan upon request from the Iowa Bureau of Labor at no charge.

<u>Module</u>	<u>Subject</u>
Industrial Modules	
O	Machinery and Machine Guarding.
N	Material Handling and Storage.
EL	Fire Protection and Egress.
D	Walking and Working Surfaces.
H	Hazardous Materials.
Q	Welding, Cutting and Brazing.
Construction Modules	
CP	Excavation, Trenching and Shoring.
CLM	Ladders and Scaffolding, Floor and Wall Openings, and Stairways.
CWO	Rollover Protection, Overhead Protection, Motor Vehicles and Mechanized Equipment.
CN	Cranes, Derricks, Hoists, Elevators and Conveyors.
CV	Power Transmission and Distribution.
CJ	Welding and Cutting.
Specific Occupations	
101	Equipment Repair Shops.
102.A	Meat Products Manufacturing (Employees).
102.B	Meat Products Manufacturing (Employers).
103	Carpentry.
103.A	Carpentry (Short Course).
105	Road Repair and Maintenance.
Industrial Hygiene	
G-0	Control of Industrial and Occupational Health Hazards.
G-93	Control of Occupational and Industrial Air Contaminants.
G-94	Industrial Ventilation.
G-95	Occupational Noise Exposure.
G-96/C-53	Ionizing Radiation.
G-I/E	Personal Protective Equipment.
G-Q/J	Health Practices for Welding, Cutting and Brazing.
G-05	Brucellosis - Meat Packing Industry.

ELEVATOR SAFETY AND AMUSEMENT PARK/RIDE DIVISION



Harold Holmgaard
Director



Marcia Bradford
Secretary I



Harold Angstrom
Field Safety
Technician



Charles R. Lyon
Field Safety
Technician



Richard Myers
Lead Elevator
Inspector



Malcolm Paine
Elevator
Inspector



Myron Spragg
Elevator
Inspector

The Amusement Park/Ride Section is responsible for the safety inspection of amusement rides, devices, concessions, and associated electrical wiring used at carnivals or fairs within the State. Two Field Safety Technicians and the Safety Inspection Supervisor inspect about 50 carnival operators and 70 fairs each year. Approximately 4,000,000 persons are exposed to potential hazards from 500 rides and 800 concessions annually. Amusement park/ride inspections, including preliminary, annual, and recheck inspections, are performed during a seven-month period. During the five-month winter season, the two Field Safety Technicians and the secretary are involved in elevator inspection activities.

The Elevator Safety Section is responsible for the safety inspections of elevators, dumbwaiters, escalators, and moving walks. The division is headed by the Safety Inspection Supervisor and is staffed by a lead elevator inspector, a secretary and three full time elevator inspectors.

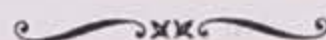


Table 1
STATE OF IOWA
REPORT OF ELEVATOR CERTIFICATES
ISSUED, INSPECTIONS AND
FEES COLLECTED
FISCAL YEARS 1977-1978^{1/}

	FY 1977	FY 1978	TOTAL FY 1977 & 1978
Number of Certificates Issued ^{2/}	616	1,471	2,087
<u>INSPECTIONS</u>			
New Installations/Alterations.....	163	139	302
Annual.....	460	1,402	1,862
Reinspections ^{3/}	911	1,363	2,274
TOTAL.....	1,534	2,904	4,438
<u>FEES COLLECTED</u>			
Annual Inspection Fees.....	\$30,195.00	\$67,268.00	\$ 97,463.00
Installation/Alteration Permit Fees..	13,128.76	12,930.50	26,059.26
TOTAL.....	\$43,323.76	\$80,198.50	\$123,522.26
Accidents Investigated.....	31	17	48

^{1/} July 1, 1976 through June 30, 1977 and July 1, 1977 through June 30, 1978.

^{2/} Certificates of Permission to Operate for elevators, escalators, moving walks or dumbwaiters.

^{3/} Reinspection is required to follow up on deficiencies discovered during an original inspection.

Table 2
STATE OF IOWA
REPORT OF AMUSEMENT PARK/RIDE
PERMITS ISSUED, INSPECTIONS
AND FEES COLLECTED
CALENDAR YEARS 1977-1978

	1977	1978	TOTAL 1977 & 1978
NUMBER OF PERMITS TO OPERATE ISSUED..	102	66	168
<u>INSPECTIONS</u>			
Electrical.....	73	877	950
Mechanical-Electrical.....	59	537	596
TOTAL.....	132	1,414	1,546
<u>FEES COLLECTED^{1/}</u>			
Permit Fees.....	\$ 1,080	\$ 870	\$ 1,950
Inspection Fees.....	35,010	34,200	69,210
TOTAL.....	\$36,090	\$35,070	\$71,160
Mechanical Failures Reported.....	0	1	1
Personal Injuries Reported.....	11	1	12

^{1/} The following fees were charged from January 1, 1977 to July 1, 1978: Permit Fee, \$10; Electrical Inspection Fee, \$15; and Mechanical-Electrical Inspection Fee, \$40. As a result of a change in the legislation, fees charged after July 1, 1978 were: Permit Fee for 1 through 10 rides, devices or concessions, \$10 and for 11 or more rides, devices or concessions, \$20; Mechanical-Electrical Inspection Fee for rides which are designed for 75 lbs. or less per passenger unit, \$50 for each inspection, for rides which are designed for more than 75 lbs. and for which the manufacturer's recommended assembly time is less than 40 work hours, \$75 for each inspection, and for rides for which the manufacturer's recommended assembly time is 40 work hours or more, \$100 for each inspection; and Electrical Inspection of concession booths and amusement devices, \$25 each.

OCCUPATIONAL SAFETY AND HEALTH DIVISION



Mary L. Bryant
IOSH Administrator



Robinson Colón
Labor Safety
Officer



Harry L. Debye
Labor Safety
Officer



Arthur C. Orduña
Labor Safety
Officer



Jerome M. Skeers
Labor Safety
Officer



Kathy Foster
Secretary I



Donna McConnell
Secretary I



Lisa Hill
Power Typist I



Marjorie Hines
Power Typist I



Donna Phillips
Power Typist I

The Iowa Occupational Safety and Health Act of 1972 was promulgated to assure, as far as possible, that every working man and woman in the State of Iowa is provided with safe and healthful working conditions and that no employee will suffer diminished health, functional capacity or shorter life expectancy due to his or her work experience. The Act

covers every employer who is engaged in a business, trade, commerce or industrial activity in the State who has one or more employees and also includes State and local governments.

The Iowa Occupational Safety and Health Division is responsible for enforcing compliance with the standards and regulations adopted under the Act. The Division is made up of the IOSH Administrator, five Labor Safety Officers, twenty Compliance Safety and Health Officers, seven Industrial Hygienists and five clerical support staff. The Compliance Safety and Health Officers are organized into groups which specialize in either construction, transportation and public utilities, and public sector enforcement or in general industry, retail trade, wholesale trade, and service industry enforcement.

Unannounced inspections are conducted by the Compliance Safety and Health Officer or Industrial Hygienist to determine compliance with the standards and regulations. In addition to general schedule inspections, fatalities and/or catastrophes and complaints are also investigated. The Labor Safety Officers are responsible for providing technical expertise to the Compliance Safety and Health Officers, Industrial Hygienists and to employers and employees in the State.

Industrial Hygienists



Paul Cramer



Robert Grimm



Charles Hooper



John Larson



Betty Meeker



Shashi Patel



David Trott

Compliance Safety and Health Officers



Donald Diskey



Janet Fenton



Richard Griffiths



Michael Heth



Robert Hild



Edward Hines



Phyllis Kelley



Robert Kinne



Ronald Knutson



Kenneth Kunert



Everett Loy



Dwain Lundeen



John Pitstick



Nick Rajcevich



Carl Robey



William Robinson



Lee Sample



Saverio Sirna



James Wetherbee

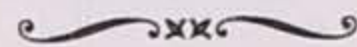


Table 1
STATE OF IOWA
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
STATE PERFORMANCE - FISCAL YEAR 1977^{1/}

	NUMBER	PERCENT OR AVERAGE
Total Inspections Conducted	2,895	
Safety Inspections	2,695	93.1%
Health Inspections	200	6.9%
Accident Inspections	58	2.0%
Complaint Inspections	265	9.2%
General Schedule Inspections	1,696	58.6%
Follow-up Inspections	876	30.2%
Contested	213	7.4%
Inspections in Compliance (Excluding Follow-up)	270	9.3%
Total Employees Covered by Inspections	164,240	Avg. = 57/Inspection
Employees Covered by Safety Inspections	148,234	Avg. = 55/Inspection
Employees Covered by Health Inspections	16,006	Avg. = 80/Inspection
Total Violations	8,756	
Serious Violations	307	3.5%
Non-Serious Violations	8,449	96.5%
Non-Serious Violations with Penalty ^{2/}	1,075	12.7%
Citable Hazards Identified	17,149	
Citable Hazards per 100 Employees		10
Total Penalties Proposed	\$193,431	
Serious Penalties Proposed	\$ 98,486	Avg. = \$321/Violation
Non-Serious Penalties Proposed	\$ 85,945	Avg. = \$ 10/Violation
Avg. Penalty per Non-Serious Violation with a Penalty Proposed		\$80
Consultation Visits	42	

^{1/} July 1, 1976 through June 30, 1977.

^{2/} Pursuant to the provisions of the Department of Labor's appropriations bill, after October 1, 1976, penalties for non-serious violations can not be proposed unless a total of 10 or more violations are identified during an inspection.

Table 2
STATE OF IOWA
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
STATE PERFORMANCE - FISCAL YEAR 1978^{1/}

	NUMBER	PERCENT OR AVERAGE
Total Inspections Conducted	2,510	
Safety Inspections	2,306	91.9%
Health Inspections	204	8.1%
Accident Inspections	118	4.7%
Complaint Inspections	522	20.8%
General Schedule Inspections	1,042	41.5%
Follow-up Inspections	828	33.0%
Contested	287	11.4%
Inspections in Compliance (Excluding Follow-up)	403	16.1%
Total Employees Covered by Inspections	166,698	Avg. = 66/Inspection
Employees Covered by Safety Inspections	143,873	Avg. = 62/Inspection
Employees Covered by Health Inspections	22,825	Avg. = 112/Inspection
Total Violations	5,030	
Serious Violations	1,135	22.6%
Non-Serious Violations	3,895	77.4%
Non-Serious Violations with Penalty ^{2/}	147	3.8%
Citable Hazards Identified	12,277	
Citable Hazards per 100 Employees		7
Total Penalties Proposed	\$238,595	
Serious Penalties Proposed	\$225,744	Avg. = \$199/Violation
Non-Serious Penalties Proposed	\$ 12,851	Avg. = \$ 3/Violation
Avg. Penalty per Non-Serious Violation with a Penalty Proposed		\$ 87
Consultation Visits	90	

^{1/} July 1, 1977, through June 30, 1978.

^{2/} Pursuant to the provisions of the Department of Labor's appropriations bill, after October 1, 1976, penalties for non-serious violations can not be proposed unless a total of 10 or more violations are identified during an inspection.

Table 3
STATE OF IOWA
NUMBER OF APPEALS AND
APPEAL RATE UNDER THE
IOWA OCCUPATIONAL SAFETY AND HEALTH ACT
1977-1978

Month	1977		1978	
	Number of Appeals ^{1/}	Appeal Rate ^{2/}	Number of Appeals ^{1/}	Appeal Rate ^{2/}
January	7	3.2	15	8.7
February	17	8.1	19	12.3
March	17	6.0	32	15.1
April	21	9.1	27	12.1
May	19	13.8	34	14.8
June	20	7.4	17	6.6
July	33	16.6	19	11.9
August	29	10.1	16	7.5
September	22	9.0	21	8.4
October	22	11.2	37	16.8
November	25	15.6	25	11.6
December	<u>14</u>	8.1	<u>20</u>	11.6
TOTAL	246		282	
Monthly Average	20.5	9.4	23.5	11.4

^{1/} Appeals of safety and health citations or of penalty amounts proposed, or both.

^{2/} The ratio of the number of appeals filed to the number of inspections conducted each month. Some distortion may exist since appeals may be filed in a month subsequent to when the particular inspection was conducted.

PRIVATE SECTOR SAFETY AND HEALTH CONSULTATION DIVISION



William B. Maddex
Director



Robert Chesher
Labor Safety
Officer



John Cunningham
Labor Safety and
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Philip Mercuris
Labor Safety and
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Donald Sutton
Labor Safety and
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Jay Johnson
Labor Safety
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Daniel Broghammer
Industrial
Hygienist



Mary Finn
Industrial
Hygienist



Margaret McMurray
Secretary I

The Iowa Job Safety and Health Consultation Program helps private sector employers, particularly those with smaller businesses, to maintain a safe workplace by assisting them in understanding and complying with occupational safety and health regulations. The goal of the program is to aid employers in identifying and correcting potential hazards through voluntary compliance with OSHA regulations before illnesses or injuries can occur. The program is cost-free and penalty-free to the employer. Upon receipt of a written request for this service, qualified consultants from the Bureau of Labor visit a business or work-site for the purpose of identifying safety and health hazards. Results of the on-site consultation visit are treated in strictest confidence, with the findings and any deviations from the standards being communicated to the employer in a written report.



RESEARCH AND STATISTICS DIVISION



John G. Patramanis
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Jeri T. Allden
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Barbara A. Smith
Statistical
Research Analyst I



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The ultimate goal of the Iowa Occupational Safety and Health Act is to reduce the incidence of injuries and illnesses in Iowa's workplaces. Statistics are needed to identify problem areas, as a basis for state and national decisionmaking, and to monitor program effectiveness.

The IOSH Act directs the Labor Commissioner to "develop and maintain an effective program of collection, compilation, and analysis of occupational safety and health statistics." The Research and Statistics Division, in cooperation with the U. S. Bureau of Labor Statistics, has the responsibility for collecting data to assist IOSHA and OSHA in setting standards and seeking compliance, and to provide a resource for education, research, and other prevention efforts. To these ends, the Research and Statistics Division has conducted an annual survey of establishment injury and illness experience every year since 1971. The annual survey provides estimates of the numbers and rates of incidence of occupational injuries and illnesses by industry. These indicators are used and recognized as reliable measures of occupational injuries and illnesses. A detailed report of the results of the survey is published annually and is available upon request from the Bureau of Labor.

Detailed information about the causes of work-related disabilities is compiled from work injury reports submitted by Iowa's employers. The Thirty-Fifth General Assembly of Iowa, appreciating the need for more accurate data on accidents, enacted the first work injury reporting law. That act required employers, as of July 4, 1913, to report to the

Labor Commissioner any accidents occurring to an employee, while at work for the employer, when such accidents resulted in death or disability of the employee. This same requirement was reiterated in the Iowa Occupational Safety and Health Act of 1972 and has now, therefore, been in effect continuously for 66 years.

There are three types of information collected, coded and tabulated from employers' first reports of injury by the Research and Statistics Division. The first identifies the employer and permits classification of the case by industry and geographic location. The second lists the employee's age, sex, salary, and occupation. A third type provides an analysis of the injury or illness, answering questions with regard to the employee's activity at the time of injury, listing any objects or substances involved, and providing a description of the accident and injury or illness.

Because such data supplement information gathered in the annual survey and also further define problem areas identified from the survey, the program of compilation and tabulation is known as the Supplementary Data System (SDS). SDS data help direct a broad range of activities to reduce the incidence of occupational injuries and illnesses. In high incidence rate industries, the SDS data identify the major sources of injuries and illnesses and the most frequent types of accidents or exposures that are producing them. The data also identify the occupations of workers most frequently associated with the injuries or illnesses. In addition, the listing of sources of injuries or illnesses may indicate that new or improved safety and health standards are needed. Knowledge about the kinds of accidents is useful in directing IOSHA and OSHA compliance efforts. And, specific information about the part of the body affected may identify the need for personal protective equipment or expose the inadequacy of existing equipment. Furthermore, the data is a basis for developing educational and training materials for IOSHA and OSHA, employers, and employees.

The information in the tables that follow is compiled from work injury reports submitted to the Iowa Bureau of Labor during the 1977-1978 biennium. The data are summarized at the industry division level. More detailed information about specific industries or injury or illness characteristics is available at the Bureau of Labor.



Occupational Injuries and Illnesses in Iowa

There were 38,944 disabling work injuries and illnesses reported to the Iowa Bureau of Labor during the 1977-1978 biennium. Of these, 18,510 were reported in 1977 and 20,434 in 1978. Disabling work injuries are those that result in two or more lost workdays beyond the day of injury. Also included are work-related fatalities.

The most common nature of injury or illness sustained in 1977 and 1978 was sprains or strains (see Tables 1 and 9). This category accounted for over 38 percent of the total cases reported. Cuts, lacerations, or punctures were the next most common injuries, representing about 16 percent of the total. Contusions, crushing injuries, or bruises accounted for 14 percent of the total and fractures were sustained in over 10 percent of all reported cases. These four types of injuries have remained the most prevalent in Iowa over the past 12-year period.

The part of the person's body most frequently affected was the trunk (see Tables 2 and 10), with over 35 percent of the cases reported involving the abdomen, back, chest, hips, or shoulders. Nearly 24 percent of the injuries sustained were to the back. This is a direct result of the large number of strains suffered by workers. The upper extremities, particularly the fingers, were the next most commonly affected body parts. Disabling injuries to the lower extremities were reported in 21 percent of the cases during the biennium.

Metal items were the most common source of the reported cases, accounting for over 16 percent of the injuries and illnesses for the two year period (see Tables 3 and 11). Working surfaces, those surfaces in use as support for people, were the source of the disability in over 14 percent of the reported instances. A significant number of the reported injuries were inflicted by boxes, barrels, and other containers (9.0 percent); bodily motion (8.3 percent); hand tools, powered and not powered (8.1 percent); machines (6.6 percent); and vehicles (5.9 percent).

Overexertion was the most frequent type of accident reported (see Tables 4 and 12). This directly relates to the high number of sprains and strains suffered, especially to the back. The next most common type of work accident was caused by being struck by an object. Falls, either from an elevation or on the same level, accounted for over 17 percent of the disabling cases in 1977 and 1978.

The time of day when most reported occupational injuries occurred was between 10 a.m. and 11 a.m. (see Table 5). The next most dangerous times of the day, based on frequency of injuries sustained, were from 11 a.m. to 12 noon, from 2 p.m. to 3 p.m., and from 9 a.m. to 10 a.m. The greatest number of injuries have been recorded during these same hours in Iowa since 1973.

During the 1977-1978 biennium, the average number of occupational injuries and illnesses reported to the Bureau of Labor per month was 1,623 (see Table 6). Four out of five disabling injuries and illnesses involved male employees (see Table 7). Cases involving women workers totalled 7,865 as compared with 31,079 cases involving men. The age group sustaining by far the greatest number of reported work injuries and illnesses for both men and women was that ranging from 20 to 29. This age group included over 39 percent of all cases involving male employees and about 32 percent involving female workers.

The great majority of the disabling work injuries and illnesses reported to the Bureau of Labor, over 98 percent, were of a temporary nature (see Table 8). Less than one percent of the total reported cases resulting in the death of the employee. (The section following on work-related deaths provides a more detailed analysis of the fatalities sustained in Iowa during 1977 and 1978.) Also, 536 injuries, or 1.4 percent of the total, resulted in permanent partial disability to the worker. A permanent partial disability is one which results in the loss, or complete loss of use, of any member or part of a member of the body, or in permanent impairment of function of the body or any of its parts.

Manufacturing workers suffered the greatest number of disabling work injuries and illnesses reported during the biennium (see Table 13). There were 20,311 reported cases in the manufacturing industries, 52.2 percent of the total. Manufacturing, however, represents only about 22 percent of the total employment in the State. The construction industries, with 5 percent of the total employment, reported 4,481 disabling occupational injuries and illnesses, or 11.5 percent of the total.

Table 1
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY INDUSTRY DIVISION AND NATURE OF INJURY OR ILLNESS
1977 - 1978

1977															
Industry Division	Amputations	Burns - Heat or Chemical	Contagious or Infectious Disease	Contusion, Crushing or Bruise	Cut, Laceration or Puncture	Dermatitis	Dislocation	Electric Shock, Electrocution	Fracture	Hernia	Inflammation or Irritation	Scratches or Abrasions	Sprains or Strains	Other	TOTAL
Agric., Forestry & Fishing.....	16	4	0	50	62	4	16	2	77	10	2	16	95	60	414
Mining.....	0	6	0	6	13	0	3	0	15	1	1	1	19	13	78
Construction.....	27	65	0	277	292	15	64	7	278	49	20	67	732	177	2,070
Manufacturing.....	152	366	23	1,520	1,822	148	125	8	806	129	299	259	3,507	434	9,598
Transportation & Pub. Utilities..	16	29	0	192	87	5	33	3	134	26	15	32	562	109	1,243
Wholesale Trade.....	22	24	1	163	151	2	43	2	155	34	18	29	387	105	1,136
Retail Trade.....	17	72	0	125	230	4	46	1	137	38	10	43	428	73	1,224
Finance, Ins. & Real Estate.....	1	1	0	7	8	2	9	0	8	2	2	0	27	13	80
Services.....	16	90	17	306	245	26	57	4	298	31	31	42	1,068	192	2,423
Public Administration.....	0	8	0	26	30	2	9	0	25	1	2	2	97	42	244
TOTAL.....	267	665	41	2,672	2,940	208	405	27	1,933	321	400	491	6,922	1,218	18,510

1978															
Agric., Forestry & Fishing.....	12	12	1	29	82	2	27	1	68	17	4	14	95	39	403
Mining.....	2	3	0	13	9	0	1	1	19	0	0	1	20	3	72
Construction.....	33	92	2	294	347	22	104	5	308	52	22	88	888	154	2,411
Manufacturing.....	166	400	13	1,582	1,955	148	169	8	950	171	363	284	4,055	449	10,713
Transportation & Pub. Utilities..	9	42	0	201	126	5	40	5	169	22	13	35	672	94	1,433
Wholesale Trade.....	24	33	0	150	147	7	41	1	172	23	7	24	444	81	1,154
Retail Trade.....	18	87	1	154	246	2	58	0	136	34	10	34	458	97	1,335
Finance, Ins. & Real Estate.....	1	1	0	16	8	1	2	1	19	1	0	0	35	14	99
Services.....	14	76	18	318	260	23	83	3	285	33	29	47	1,193	182	2,564
Public Administration.....	1	11	0	39	13	0	11	0	40	1	2	4	98	30	250
TOTAL.....	280	757	35	2,796	3,193	210	536	25	2,166	354	450	531	7,958	1,143	20,434

Table 2
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY INDUSTRY DIVISION AND PART OF BODY AFFECTED
1977 - 1978

Industry Division	1977														
	Head	(Eyes)	Neck	Upper extremities	(Arms)	(Fingers)	Trunk	(Back)	Lower extremities	(Legs)	(Feet)	Multiple parts	Body system	Body parts NEC	Unclassified
Agric., Forestry & Fishing.....	22	13	5	87	14	45	124	70	128	54	31	25	21	0	2
Mining.....	8	4	1	17	3	4	27	15	16	5	7	6	2	0	1
Construction.....	146	80	29	446	93	191	728	476	556	258	126	114	43	0	8
Manufacturing.....	497	280	100	3,675	619	1,854	3,192	2,112	1,758	713	471	240	116	0	20
Transportation & Pub. Utilities	73	33	36	206	53	73	513	336	308	143	67	78	26	0	3
Wholesale Trade.....	67	30	13	278	69	114	440	289	259	104	70	49	29	1	0
Retail Trade.....	93	43	15	353	61	164	433	271	263	119	51	51	14	0	2
Finance, Ins. & Real Estate....	8	1	4	10	4	3	28	16	21	12	1	6	3	0	0
Services.....	155	43	40	493	117	186	1,034	750	518	222	109	108	65	0	10
Public Administration.....	21	2	11	36	9	12	69	42	64	21	15	26	17	0	0
TOTAL.....	1,090	529	254	5,601	1,042	2,646	6,588	4,377	3,891	1,651	948	703	336	1	46

1978														
Agric., Forestry & Fishing.....	31	13	3	85	17	40	126	70	116	60	30	23	18	0
Mining.....	6	3	1	13	4	7	23	11	23	9	5	3	3	0
Construction.....	202	102	36	520	109	235	867	555	621	286	134	120	42	0
Manufacturing.....	567	317	126	3,974	702	2,007	3,642	2,439	1,973	751	519	302	118	0
Transportation & Pub. Utilities	100	43	27	232	68	88	557	372	394	173	73	92	28	0
Wholesale Trade.....	81	31	15	257	41	133	451	321	278	108	75	43	24	0
Retail Trade.....	70	39	11	415	83	198	453	322	285	133	54	57	37	0
Finance, Ins. & Real Estate....	5	1	2	14	5	3	30	18	32	12	4	9	5	0
Services.....	177	48	49	508	122	209	1,090	764	534	238	90	145	50	0
Public Administration.....	22	6	9	32	9	13	85	58	58	42	5	37	7	0
TOTAL.....	1,261	603	279	6,050	1,160	2,933	7,324	4,930	4,314	1,812	989	831	332	0

Table 3
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY INDUSTRY DIVISION AND SOURCE OF INJURY OR ILLNESS
1977 - 1978

Industry Division	1977														TOTAL
	Bodily Motion	Boxes, Barrels & Other Containers	Chemicals	Hand Tools - Not Powered	Hand Tools - Powered	Hoisting Apparatus	Ladders	Machines	Metal Items	Particles (Unidentified)	Vehicles	Wood Items	Working Surfaces	Other	
Agric., Forestry & Fishing.....	32	20	5	15	5	1	0	57	38	4	33	10	78	116	414
Mining.....	2	1	4	3	4	3	0	6	9	1	8	2	15	20	78
Construction.....	163	68	14	118	101	18	12	91	371	31	113	132	405	433	2,070
Manufacturing.....	715	794	89	784	165	67	19	739	2,271	107	433	241	992	2,182	9,598
Transportation & Pub. Utilities	117	121	9	47	13	12	6	28	145	13	166	31	269	266	1,243
Wholesale Trade.....	71	173	13	49	5	18	3	72	165	9	108	27	172	251	1,136
Retail Trade.....	93	189	10	84	5	14	2	59	111	15	63	30	223	326	1,224
Finance, Ins. & Real Estate....	8	4	0	3	1	1	0	3	5	0	15	0	22	18	80
Services.....	196	171	30	51	10	8	7	67	123	12	89	28	559	1,072	2,423
Public Administration.....	27	8	2	4	2	0	0	2	15	0	49	6	65	64	244
TOTAL.....	1,424	1,549	176	1,158	311	142	49	1,124	3,253	192	1,077	507	2,800	4,748	18,510

1978															
Agric., Forestry & Fishing.....	36	25	11	12	12	0	0	55	21	6	24	11	73	117	403
Mining.....	4	0	2	1	2	0	0	10	10	1	11	0	5	26	72
Construction.....	225	94	25	143	84	39	21	131	356	35	134	135	461	528	2,411
Manufacturing.....	871	1,078	124	900	198	87	16	944	2,260	107	487	270	991	2,380	10,713
Transportation & Pub. Utilities	207	181	18	57	14	7	0	24	120	15	194	29	263	304	1,433
Wholesale Trade.....	87	176	16	47	12	6	1	75	152	10	136	36	166	234	1,154
Retail Trade.....	93	209	7	87	10	9	1	99	83	11	88	34	237	367	1,335
Finance, Ins. & Real Estate....	14	5	1	4	1	0	1	9	1	0	14	1	25	23	99
Services.....	242	198	22	55	23	13	4	92	96	12	104	26	598	1,079	2,564
Public Administration.....	32	8	4	5	1	0	2	7	6	1	44	3	66	71	250
TOTAL.....	1,811	1,974	230	1,311	357	161	46	1,446	3,105	198	1,236	545	2,885	5,129	20,434

Table 4
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY INDUSTRY DIVISION AND TYPE OF ACCIDENT OR EXPOSURE
1977 - 1978

Industry Division	Struck Against	Struck By	Fall From Elevation	Fall on Same Level	Caught In, Under or Between	Rubbed or Abraded	Bodily Reaction	Overexertion	Contact With Electric Current	Contact with Temperature Extremes	Contact-radiation Caustics, etc.	Public Transportation Accidents	Motor Vehicle Accidents	Other	TOTAL
Agric., Forestry & Fishing.....	19	80	41	54	70	12	32	56	2	3	16	0	13	16	414
Mining.....	8	11	11	10	7	3	2	12	0	2	6	0	3	3	78
Construction.....	123	392	274	232	152	84	168	433	13	44	55	0	45	55	2,070
Manufacturing.....	820	1,806	355	884	1,125	433	743	2,517	25	285	313	1	30	261	9,598
Transportation & Pub. Utilities..	51	163	118	184	97	42	118	295	9	20	26	1	87	32	1,243
Wholesale Trade.....	59	219	88	128	122	38	71	294	4	16	23	0	40	34	1,136
Retail Trade.....	102	197	78	195	81	62	96	295	1	60	21	0	8	28	1,224
Finance, Ins. & Real Estate.....	3	6	10	14	4	2	8	13	0	2	3	0	12	3	80
Services.....	150	305	133	486	132	57	199	694	5	72	90	1	50	49	2,423
Public Administration.....	7	27	21	47	12	8	29	28	0	9	14	0	33	9	244
TOTAL.....	1,342	3,206	1,129	2,234	1,802	741	1,466	4,637	59	513	567	3	321	490	18,510

1978

Agric., Forestry & Fishing.....	20	71	40	49	61	14	36	60	1	8	18	0	10	15	403
Mining.....	3	21	3	5	13	1	4	8	1	1	2	0	6	4	72
Construction.....	156	431	324	238	178	100	224	521	13	61	65	0	44	56	2,411
Manufacturing.....	865	1,948	367	890	1,300	481	870	2,980	14	320	326	0	40	312	10,713
Transportation & Pub. Utilities..	69	201	132	183	76	40	207	340	13	24	33	0	86	29	1,433
Wholesale Trade.....	70	182	106	113	146	33	87	276	1	17	32	0	44	47	1,154
Retail Trade.....	129	219	103	178	83	45	93	320	0	84	33	0	17	31	1,335
Finance, Ins. & Real Estate.....	4	11	6	22	8	0	14	15	2	0	3	0	9	5	99
Services.....	132	326	164	522	148	47	242	738	3	60	76	0	42	64	2,564
Public Administration.....	9	33	19	61	13	2	32	32	0	12	7	0	25	5	250
TOTAL.....	1,457	3,443	1,264	2,261	2,026	763	1,809	5,290	48	587	595	0	323	568	20,434

Table 5
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY INDUSTRY DIVISION AND TIME OF DAY OF OCCURRENCE
1977 - 1978

Industry Division	1977												Not Listed	TOTAL
	7 - 8 A.M.	8 - 9 A.M.	9 - 10 A.M.	10 - 11 A.M.	11 - 12 Noon	12 - 1 P.M.	1 - 2 P.M.	2 - 3 P.M.	3 - 4 P.M.	4 - 5 P.M.	5 - 6 P.M.	6 P.M. - 7 A.M.		
Agric., Forestry & Fishing.....	7	12	28	38	46	26	14	38	42	28	36	28	71	414
Mining.....	3	10	6	6	3	3	6	9	3	7	3	6	13	78
Construction.....	20	95	182	255	258	132	100	205	217	176	68	64	298	2,070
Manufacturing.....	288	511	601	647	589	377	410	561	506	421	319	2,241	2,127	9,598
Transportation & Pub. Utilities...	30	80	106	136	126	68	79	81	98	65	43	204	127	1,243
Wholesale Trade.....	25	50	89	115	102	67	53	99	92	73	56	149	166	1,136
Retail Trade.....	19	46	70	118	92	66	48	110	101	92	60	229	173	1,224
Finance, Ins. & Real Estate.....	2	4	2	9	10	1	2	9	5	10	3	16	7	80
Services.....	80	116	163	219	212	142	140	154	150	134	86	497	330	2,423
Public Administration.....	3	15	14	18	20	12	12	14	15	18	14	50	39	244
TOTAL.....	477	939	1,261	1,561	1,458	894	864	1,280	1,229	1,024	688	3,484	3,351	18,510

Industry Division	1978												Not Listed	TOTAL
	7 - 8 A.M.	8 - 9 A.M.	9 - 10 A.M.	10 - 11 A.M.	11 - 12 Noon	12 - 1 P.M.	1 - 2 P.M.	2 - 3 P.M.	3 - 4 P.M.	4 - 5 P.M.	5 - 6 P.M.	6 P.M. - 7 A.M.		
Agric., Forestry & Fishing.....	7	22	30	38	35	30	7	29	28	32	18	34	93	403
Mining.....	2	5	7	12	7	4	2	6	6	2	0	4	15	72
Construction.....	34	114	215	299	274	134	104	226	264	185	76	75	411	2,411
Manufacturing.....	332	564	694	737	677	376	471	621	579	435	361	2,485	2,381	10,713
Transportation & Pub. Utilities...	36	84	114	123	122	74	58	118	89	84	71	282	178	1,433
Wholesale Trade.....	20	45	95	114	111	64	49	93	102	83	55	154	169	1,154
Retail Trade.....	9	49	75	120	113	83	75	116	109	88	70	233	195	1,335
Finance, Ins. & Real Estate.....	3	6	5	10	10	12	2	4	4	6	7	15	15	99
Services.....	86	141	171	237	229	131	127	197	156	137	89	477	386	2,564
Public Administration.....	4	19	13	18	17	13	11	13	17	9	15	78	23	250
TOTAL.....	533	1,049	1,419	1,708	1,595	921	906	1,423	1,354	1,061	762	3,837	3,866	20,434

Table 6
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY INDUSTRY DIVISION AND MONTH OF OCCURRENCE
1977 - 1978

1977													
Industry Division	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Agric., Forestry & Fishing.....	21	23	29	42	39	39	51	27	38	39	40	26	414
Mining.....	3	3	4	5	6	10	12	6	11	7	4	7	78
Construction.....	123	112	128	149	154	206	221	179	207	223	211	157	2,070
Manufacturing.....	767	803	936	782	811	800	671	887	813	871	799	658	9,598
Transportation & Pub. Utilities..	103	79	86	104	113	87	111	124	105	94	110	127	1,243
Wholesale Trade.....	96	77	100	86	97	92	110	105	93	104	93	83	1,136
Retail Trade.....	111	84	99	95	113	117	111	100	112	92	99	91	1,224
Finance, Ins. & Real Estate.....	12	3	4	7	9	7	10	3	3	10	4	8	80
Services.....	196	167	211	190	203	204	203	231	216	220	190	192	2,423
Public Administration.....	18	17	22	27	12	17	22	26	22	18	17	26	244
TOTAL.....	1,450	1,368	1,619	1,487	1,557	1,579	1,522	1,688	1,620	1,678	1,567	1,375	18,510

1978													
Agric., Forestry & Fishing.....	27	30	31	28	31	47	50	34	32	40	29	24	403
Mining.....	2	7	4	4	4	5	6	9	7	9	12	3	72
Construction.....	172	160	151	149	222	229	231	256	231	260	199	151	2,411
Manufacturing.....	884	820	886	833	954	943	816	984	920	1,082	823	768	10,713
Transportation & Pub. Utilities..	115	106	120	103	115	112	144	129	125	132	121	111	1,433
Wholesale Trade.....	98	67	84	85	98	97	114	110	97	120	98	86	1,154
Retail Trade.....	106	105	97	81	113	122	102	143	141	118	107	100	1,335
Finance, Ins. & Real Estate.....	11	5	12	4	10	8	4	9	9	8	10	9	99
Services.....	251	217	214	212	220	205	220	207	221	233	169	195	2,564
Public Administration.....	26	26	19	12	14	21	20	17	18	28	23	26	250
TOTAL.....	1,692	1,543	1,618	1,511	1,781	1,789	1,707	1,898	1,801	2,030	1,591	1,473	20,434

Table 7
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY INDUSTRY DIVISION AND AGE AND SEX OF THE EMPLOYEE
1977 - 1978

		1977																
		MALE							FEMALE									
Industry Division		Under 20	20 - 29	30 - 39	40 - 49	50 - 59	60 and over	Not Listed	TOTAL - MALE	Under 20	20 - 29	30 - 39	40 - 49	50 - 59	60 and over	Not Listed	TOTAL - FEMALE	TOTAL BOTH SEXES
13	Agric., Forestry & Fishing.	66	118	58	44	29	52	12	379	4	13	10	1	6	1	0	35	414
	Mining.....	4	24	13	15	6	7	8	77	0	0	1	0	0	0	0	1	78
	Construction.....	188	791	334	247	273	106	112	2,051	0	8	5	1	4	0	1	19	2,070
	Manufacturing.....	616	3,405	1,651	1,072	826	234	91	7,895	78	607	390	311	234	56	27	1,703	9,598
	Transportation & Pub. Util.	42	365	286	225	222	60	13	1,213	1	7	9	3	8	2	0	30	1,243
	Wholesale Trade.....	106	443	190	127	104	77	25	1,072	13	20	6	11	7	5	2	64	1,136
	Retail Trade.....	203	296	144	89	71	46	22	871	51	84	60	57	59	34	8	353	1,224
	Finance, Ins. & Real Est...	4	17	12	9	9	6	2	59	0	7	5	3	6	0	0	21	80
	Services.....	101	309	165	137	171	123	26	1,032	131	422	229	214	252	123	20	1,391	2,423
	Public Administration.....	12	45	52	37	22	14	7	189	1	23	9	5	12	4	1	55	244
TOTAL.....		1,342	5,813	2,905	2,002	1,733	725	318	14,838	279	1,191	724	606	588	225	59	3,672	18,510

		1978																
Agric., Forestry & Fishing.		75	113	54	38	33	41	18	372	6	11	2	5	3	3	1	31	403
Mining.....		9	16	12	11	16	2	6	72	0	0	0	0	0	0	0	0	72
Construction.....		207	921	431	305	290	108	128	2,390	3	13	2	0	1	1	1	21	2,411
Manufacturing.....		695	3,785	1,850	1,127	906	236	172	8,771	121	687	462	340	252	47	33	1,942	10,713
Transportation & Pub. Util.		61	440	348	211	217	60	25	1,362	2	33	14	8	10	3	1	71	1,433
Wholesale Trade.....		105	397	197	134	131	60	42	1,066	9	24	23	12	10	6	4	88	1,154
Retail Trade.....		198	329	143	85	75	41	27	898	68	115	60	62	78	36	18	437	1,335
Finance, Ins. & Real Est...		4	17	10	7	9	10	4	61	3	14	8	4	6	3	0	38	99
Services.....		100	315	169	148	189	112	20	1,053	109	402	277	254	284	159	26	1,511	2,564
Public Administration.....		3	58	57	42	25	8	3	196	1	11	9	6	16	11	0	54	250
TOTAL.....		1,457	6,391	3,271	2,108	1,891	678	445	16,241	322	1,310	857	691	660	269	84	4,193	20,434

Table 8
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY INDUSTRY DIVISION, SEVERITY, AND SEX OF THE EMPLOYEE
1977 - 1978

Industry Division	1977 MALE					FEMALE					TOTAL - BOTH SEXES
	Death	Permanent Total Disability	Permanent Partial Disability	Temporary Total Disability	TOTAL - MALE	Death	Permanent Total Disability	Permanent Partial Disability	Temporary Total Disability	TOTAL - FEMALE	
Agric., Forestry & Fishing.....	12	1	15	351	379	1	0	0	34	35	414
Mining.....	1	0	0	76	77	0	0	0	1	1	78
Construction.....	30	0	25	1,996	2,051	0	0	0	19	19	2,070
Manufacturing.....	17	0	121	7,757	7,895	1	0	30	1,672	1,703	9,598
Transportation & Pub. Utilities..	17	0	18	1,178	1,213	0	0	0	30	30	1,243
Wholesale Trade.....	15	0	22	1,035	1,072	1	0	0	63	64	1,136
Retail Trade.....	5	0	14	852	871	0	0	3	350	353	1,224
Finance, Ins. & Real Estate.....	2	0	1	56	59	0	0	0	21	21	80
Services.....	9	0	11	1,012	1,032	2	0	4	1,385	1,391	2,423
Public Administration.....	7	0	0	182	189	2	0	0	53	55	244
TOTAL.....	115	1	227	14,495	14,838	7	0	37	3,628	3,672	18,510

1978											
Agric., Forestry & Fishing.....	12	0	11	349	372	0	0	1	30	31	403
Mining.....	3	0	1	68	72	0	0	0	0	0	72
Construction.....	22	1	34	2,333	2,390	1	0	0	20	21	2,411
Manufacturing.....	13	0	122	8,636	8,771	0	0	37	1,905	1,942	10,713
Transportation & Pub. Util.....	10	0	9	1,343	1,362	0	0	0	71	71	1,433
Wholesale Trade.....	9	0	23	1,034	1,066	0	0	0	88	88	1,154
Retail Trade.....	8	1	12	877	898	6	0	5	426	437	1,335
Finance, Ins. & Real Estate.....	3	0	2	56	61	0	0	0	38	38	99
Services.....	4	0	13	1,036	1,053	2	0	1	1,508	1,511	2,564
Public Administration.....	3	0	1	192	196	0	0	0	54	54	250
TOTAL.....	87	2	228	15,924	16,241	9	0	44	4,140	4,193	20,434

Table 9
STATE OF IOWA
DISTRIBUTION OF REPORTED DISABLING INJURIES AND ILLNESSES
ALL INDUSTRIES - BY NATURE OF INJURY OR ILLNESS
1977 - 1978

	1977		1978	
	Number	Percent	Number	Percent
Amputation.....	267	1.4%	280	1.4%
Burns-heat & chemical.....	665	3.6	757	3.7
Contagious or infectious disease.....	41	.2	35	.2
Contusion, crushing or bruise.....	2,672	14.4	2,796	13.7
Cut, laceration or puncture.....	2,940	15.9	3,193	15.6
Dermatitis.....	208	1.1	210	1.0
Dislocation.....	405	2.2	536	2.6
Electric shock, electrocution.....	27	.2	25	.1
Fracture.....	1,933	10.4	2,166	10.6
Hernia.....	321	1.7	354	1.7
Inflammation or irritation.....	400	2.2	450	2.2
Scratches or abrasions.....	491	2.7	531	2.6
Sprains or strains.....	6,922	37.4	7,958	39.0
Other.....	1,218	6.6	1,143	5.6
TOTAL.....	18,510	100.0%	20,434	100.0%

Table 10
STATE OF IOWA
DISTRIBUTION OF REPORTED DISABLING INJURIES AND ILLNESSES
ALL INDUSTRIES - BY PART OF BODY AFFECTED
1977 - 1978

	1977		1978	
	Number	Percent	Number	Percent
Head.....	1,090	5.9%	1,261	6.2%
(Eyes).....	(529)	(2.9)	(603)	(3.0)
Neck.....	254	1.4	279	1.4
Upper Extremities.....	5,601	30.3	6,050	29.6
(Arms).....	(1,042)	(5.6)	(1,160)	(5.7)
(Fingers).....	(2,646)	(14.3)	(2,933)	(14.4)
Trunk.....	6,588	35.6	7,324	35.8
(Back).....	(4,377)	(23.6)	(4,930)	(24.1)
Lower Extremities.....	3,891	21.0	4,314	21.1
(Legs).....	(1,651)	(8.9)	(1,812)	(8.9)
(Feet).....	(948)	(5.1)	(989)	(4.8)
Multiple parts.....	703	3.8	831	4.1
Body system.....	336	1.8	332	1.6
Body parts, n.e.c. and unclassified...	47	.8	43	.2
TOTAL.....	18,510	100.0%	20,434	100.0%

Table 11
STATE OF IOWA
DISTRIBUTION OF REPORTED DISABLING INJURIES AND ILLNESSES
ALL INDUSTRIES - BY SOURCE OF INJURY OR ILLNESS
1977 - 1978

	1977		1978	
	Number	Percent	Number	Percent
Bodily motion.....	1,424	7.7%	1,811	8.9%
Boxes, barrels & other containers.....	1,549	8.4	1,974	9.7
Chemicals.....	176	.9	230	1.1
Hand tools--not powered.....	1,158	6.3	1,311	6.4
Hand tools--powered.....	311	1.7	357	1.7
Hoisting apparatus.....	142	.8	161	.8
Ladders.....	49	.3	46	.2
Machines.....	1,124	6.1	1,446	7.1
Metal items.....	3,253	17.6	3,105	15.2
Particles (unidentified).....	192	1.0	198	1.0
Vehicles.....	1,077	5.8	1,236	6.0
Wood items.....	507	2.7	545	2.7
Working surfaces.....	2,800	15.1	2,885	14.1
Other.....	4,748	25.6	5,129	25.1
TOTAL.....	18,510	100.0%	20,434	100.0%

Table 12
STATE OF IOWA
DISTRIBUTION OF REPORTED DISABLING INJURIES AND ILLNESSES
ALL INDUSTRIES - BY TYPE OF ACCIDENT OR EXPOSURE
1977 - 1978

	1977		1978	
	Number	Percent	Number	Percent
Struck against.....	1,342	7.3%	1,457	7.1%
Struck by.....	3,206	17.3	3,443	16.8
Fall from elevation.....	1,129	6.1	1,264	6.2
Fall on same level.....	2,234	12.1	2,261	11.1
Caught in, under or between.....	1,802	9.7	2,026	9.9
Rubbed or abraded.....	741	4.0	763	3.7
Bodily reaction.....	1,466	7.9	1,809	8.9
Overexertion.....	4,637	25.1	5,290	25.9
Contact with electric current.....	59	.3	48	.2
Contact with temperature extremes.....	513	2.8	587	2.9
Contact with radiations, caustics, etc...	567	3.1	595	2.9
Public transportation accidents.....	3	*	0	.0
Motor-vehicle accidents.....	321	1.7	323	1.6
Other.....	490	2.6	568	2.8
TOTAL.....	18,510	100.0%	20,434	100.0%

* Less than .05.

Table 13
STATE OF IOWA
DISTRIBUTION OF REPORTED DISABLING INJURIES AND ILLNESSES
AND EMPLOYMENT - BY INDUSTRY DIVISION
1977 - 1978

1977

Industry Division	Employment ^{1/}		Injuries & Illnesses	
	Number	Percent	Number	Percent
Agric., Forestry & Fishing.....	44,800	4.0%	414	2.2%
Mining.....	2,500	.2	78	.4
Construction.....	57,100	5.1	2,070	11.2
Manufacturing.....	245,600	21.9	9,598	51.9
Transportation & Public Utilities.....	55,000	4.9	1,243	6.7
Wholesale Trade.....	72,600	6.5	1,136	6.1
Retail Trade.....	202,800	18.1	1,224	6.6
Finance, Ins. & Real Estate.....	52,600	4.7	80	.5
Services.....	185,700	16.6	2,423	13.1
Public Administration.....	202,500	18.0	244	.3
TOTAL.....	1,121,200	100.0%	18,510	100.0%

1978

Industry Division	Employment ^{1/}		Injuries & Illnesses	
	Number	Percent	Number	Percent
Agric., Forestry & Fishing.....	41,800	3.7%	403	2.0%
Mining.....	2,300	.2	72	.4
Construction.....	57,600	5.0	2,411	11.8
Manufacturing.....	249,700	21.8	10,713	52.4
Transportation & Public Utilities.....	55,800	4.9	1,433	7.0
Wholesale Trade.....	72,500	6.3	1,154	5.6
Retail Trade.....	209,100	18.3	1,335	6.5
Finance, Ins. & Real Estate.....	55,200	4.8	99	.5
Services.....	192,500	16.8	2,564	12.6
Public Administration.....	207,600	18.2	250	1.2
TOTAL.....	1,144,100	100.0%	20,434	100.0%

^{1/} Annual average employment for nonfarm industries is based on the establishment survey conducted by the Iowa Department of Job Service in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics. Annual average employment for the agriculture, forestry and fishing division is a composite of estimates from the establishment survey and estimates provided by the U. S. Department of Agriculture.

Table 14
STATE OF IOWA
NUMBER OF REPORTED DISABLING INJURIES AND ILLNESSES
BY COUNTY OF OCCURRENCE
1977 - 1978

COUNTY	1977	1978
Adair.....	36	25
Adams.....	7	10
Allamakee.....	59	50
Appanoose.....	40	44
Audubon.....	24	24
Benton.....	117	109
Black Hawk.....	1,979	1,696
Boone.....	295	273
Bremer.....	62	62
Buchanan.....	72	59
Buena Vista.....	151	140
Butler.....	43	53
Calhoun.....	32	45
Carroll.....	72	114
Cass.....	57	60
Cedar.....	61	42
Cerro Gordo.....	317	392
Cherokee.....	342	339
Chickasaw.....	111	131
Clarke.....	39	50
Clay.....	175	128
Clayton.....	115	131
Clinton.....	234	233
Crawford.....	212	201
Dallas.....	171	146
Davis.....	21	22
Decatur.....	31	24
Delaware.....	195	188
Des Moines.....	220	235
Dickinson.....	90	68
Dubuque.....	683	818
Emmet.....	65	93
Fayette.....	121	99
Floyd.....	126	128
Franklin.....	112	81
Fremont.....	17	22
Greene.....	63	69
Grundy.....	42	62
Guthrie.....	31	54
Hamilton.....	136	108
Hancock.....	32	44
Hardin.....	126	133
Harrison.....	37	36
Henry.....	94	97
Howard.....	31	33
Humboldt.....	48	60
Ida.....	22	22
Iowa.....	117	99
Jackson.....	101	104
Jasper.....	151	219

COUNTY	1977	1978
Jefferson.....	95	132
Johnson.....	360	434
Jones.....	64	93
Keokuk.....	39	41
Kossuth.....	114	117
Lee.....	376	575
Linn.....	1,691	1,815
Louisa.....	62	29
Lucas.....	83	92
Lyon.....	22	24
Madison.....	27	29
Mahaska.....	172	173
Marion.....	123	186
Marshall.....	418	513
Mills.....	140	155
Mitchell.....	31	39
Monona.....	31	24
Monroe.....	61	68
Montgomery.....	28	44
Muscatine.....	398	390
O'Brien.....	44	43
Osceola.....	18	16
Page.....	58	70
Palo Alto.....	26	34
Plymouth.....	65	68
Pocahontas.....	42	45
Polk.....	2,720	3,475
Pottawattamie.....	279	460
Poweshiek.....	94	137
Ringgold.....	9	5
Sac.....	60	102
Scott.....	750	830
Shelby.....	34	25
Sioux.....	95	132
Story.....	349	381
Tama.....	59	68
Taylor.....	17	23
Union.....	39	49
Van Buren.....	24	18
Wapello.....	302	344
Warren.....	110	56
Washington.....	109	171
Wayne.....	13	20
Webster.....	466	492
Winnebago.....	153	138
Winneshiek.....	58	56
Woodbury.....	555	627
Worth.....	23	23
Wright.....	69	78
TOTAL.....	18,510	20,434

Technical Notes

Reporting Requirements

Regulations issued under the Iowa Occupational Safety and Health Act require employers to report to the Iowa Bureau of Labor all occupational injuries or occupational illnesses that result in two or more lost workdays. State of Iowa Form No. L-1/WC-1 is to be used, and is to be filed with the Bureau of Labor as early as practicable but no later than six working days after receiving information that an occupational injury or illness will result in two or more lost workdays. Copies of the Supplementary Record of Occupational Injuries and Illnesses are acceptable reports.

In addition, employers must report to the Iowa Commissioner of Labor within 48 hours each accident or health hazard that results in one or more fatalities or hospitalization of five or more employees.

Scope of the Data

The accompanying tables represent first report data for calendar years 1977 and 1978 for fatalities and those cases involving two or more lost workdays submitted to the Iowa Bureau of Labor by employers as required by the Iowa Occupational Safety and Health Act. The day of injury is not included in determining the number of lost workdays. The count of lost workdays includes all days (consecutive or not) on which, because of the injury or illness: 1) the employee would have worked, but could not, or 2) the employee was assigned to a temporary job, or 3) the employee worked at a permanent job less than full time, or 4) the employee worked at a permanently assigned job but could not perform all duties normally assigned to it.

All classes of employees (production, operating and related workers; construction workers; sales, service, delivery, technical, professional, office, administrative, clerical and all other personnel) are included. There are no limitations of coverage based on employment-size of the establishment nor on injury or illness types. Self-employed persons and partners of unincorporated firms, however, are not included. Government totals shown include occupational injuries and illnesses for State and local government workers. Federal employers are not required to report to the Iowa Bureau of Labor.

Industrial Classification

Industrial classification conforms to the definitions included in the Standard Industrial Classification Manual (SIC), 1972 Edition, prepared by the Statistical Policy Division of the Office of Management and Budget.

In the 1972 Edition of the SIC Manual, "government" was removed as an industry division and is treated as an ownership characteristic. Government establishments, therefore, are classified in the accompanying tables by their primary economic activity rather than by type of ownership.

Coding of Injury or Illness Characteristics

Occupational injuries and illnesses reported to the Iowa Bureau of Labor were coded for their characteristics according to the "American National Standard Method of Recording Basic Facts Relating to the Nature and Occurrence of Work Injuries", ANSI Z16.2-1962 (R 1969).

Federal-State Cooperation

Work injury and illness data are collected, coded, and tabulated by the Iowa Bureau of Labor in cooperation with the U. S. Department of Labor, Bureau of Labor Statistics as part of the Supplementary Data System. The Supplementary Data System is a means of securing information about the factors associated with accidents and exposures in the workplace. Such information is useful in helping direct measures to reduce the incidence of occupational injuries and illnesses.

Work-related Fatalities in Iowa

During the 1977-1978 biennium, 246 workers covered by the Iowa Occupational Safety and Health Act died as a result of job-related causes (see Table 15). Of these, 132 died in 1977 and 114 lost their lives in 1978. An average of 1 out of every 10,000 Iowa workers died as a result of work-related causes (see Tables 18 and 19). The majority of the fatalities involved male workers. However, 18 women died in the course of their employment, 7 in 1977 and 11 in 1978.

The average age of the workers that died in 1977 due to occupational injuries or illnesses was 40. The youngest Iowan who lost his life while on the job in 1977 was 15 and the oldest was 74. In 1978, the average age of the reported fatal cases was 41, with the ages of the deceased ranging from 14 to 76.

Only those fatalities that occur in the face of existing occupational safety and health standards and under conditions subject to inspection are considered controllable. There were 62 employee deaths of this type in 1977 and 59 in 1978 (see Table 16). Crushing injuries, electrocution, and suffocation caused two-thirds of the so-called controllable deaths in the 1977-1978 period. Nearly 85 percent of the employee fatalities that were considered not controllable were caused by vehicle accidents or heart attacks suffered while on the job.

By industry division, the greatest number of deaths during the 1977-1978 biennium, 48, occurred in construction (see Table 17). Forty-three persons employed in the transportation and public utilities division lost their lives during the report period. The manufacturing industries recorded 35 worker deaths while the agriculture, forestry, and fishing and the wholesale trade industry divisions each accounted for 26 of the employee fatalities. During the 1977-1978 biennium, just over 13 percent of the total number of reported deaths were sustained by government employees. Thirty-three State and local government workers died of work-related causes during the two years.

The Appendix contains a listing of each employee fatality that occurred in Iowa in 1977 and 1978. Included with each is a brief summary of the events leading to the death, the cause of death, the workers age and occupation, and the industry in which he or she was employed. The information is provided to illustrate the continued need for emphasis on job safety and health by both employers and employees.

Table 15
STATE OF IOWA
WORK RELATED EMPLOYEE DEATHS
BY INDUSTRY DIVISION
1977 - 1978

Industry Division	1977		1978		Total 1977-1978	
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Agriculture, Forestry & Fishing...	14	10.6%	12	10.5%	26	10.6%
Mining.....	1	.8	4	3.5	5	2.0
Construction.....	27	20.4	21	18.4	48	19.5
Manufacturing.....	19	14.4	16	14.0	35	14.2
Transportation & Public Utilities.	21	15.9	22	19.3	43	17.5
Wholesale Trade.....	17	12.9	9	7.9	26	10.6
Retail Trade.....	5	3.8	14	12.3	19	7.7
Finance, Ins. & Real Estate.....	2	1.5	2	1.8	4	1.6
Services.....	5	3.8	2	1.8	7	2.9
Government.....	21	15.9	12	10.5	33	13.4
TOTAL.....	132	100.0%	114	100.0%	246	100.0%

Table 16
STATE OF IOWA
WORK RELATED EMPLOYEE FATALITIES
BY CAUSE OF DEATH
1977 - 1978

Cause of Death	1977		1978		Total 1977-1978	
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Subject to IOSHA/OSHA control:						
Crushing injuries.....	24	18.2%	19	16.7%	43	17.5%
Electrocution.....	11	8.3	11	9.7	22	8.9
Suffocation.....	2	1.5	14	12.3	16	6.5
Falls.....	8	6.1	4	3.5	12	4.9
Struck by object.....	6	4.5	4	3.5	10	4.1
Caught in, under or between.....	4	3.0	3	2.6	7	2.8
Drowning.....	2	1.5	3	2.6	5	2.0
Poisoning.....	3	2.3	-	-	3	1.2
Burns.....	2	1.5	-	-	2	.8
Explosion.....	-	-	1	.9	1	.4
	62	(46.9)	59	(51.8)	121	(49.1)
Not controllable by IOSHA/OSHA:						
Vehicle accident.....	35	26.5	34	29.8	69	28.1
Heart attack.....	20	15.2	17	14.9	37	15.0
Gun shot.....	5	3.8	3	2.6	8	3.3
Air crash.....	8	6.1	-	-	8	3.3
Other medical & health cond.....	2	1.5	1	.9	3	1.2
	70	(53.1)	55	(48.2)	125	(50.9)
TOTAL.....	132	100.0%	114	100.0%	246	100.0%

Table 17
STATE OF IOWA
DISTRIBUTION OF WORK RELATED EMPLOYEE DEATHS
AND EMPLOYMENT - BY INDUSTRY DIVISION
1977 - 1978

1977

Industry Division	Employment ^{1/}		Deaths	
	Number	Percent	Number	Percent
Agric., Forestry & Fishing.....	44,800	4.0%	14	10.6%
Mining.....	2,500	.2	1	.8
Construction.....	57,100	5.1	27	20.4
Manufacturing.....	245,600	21.9	19	14.4
Transportation & Public Utilities.....	55,000	4.9	21	15.9
Wholesale Trade.....	72,600	6.5	17	12.9
Retail Trade.....	202,800	18.1	5	3.8
Finance, Ins. & Real Estate.....	52,600	4.7	2	1.5
Services.....	185,700	16.6	5	3.8
Government.....	202,500	18.0	21	15.9
TOTAL.....	1,121,200	100.0%	132	100.0%

1978

Industry Division	Employment ^{1/}		Deaths	
	Number	Percent	Number	Percent
Agric., Forestry & Fishing.....	41,800	3.7%	12	10.5%
Mining.....	2,300	.2	4	3.5
Construction.....	57,600	5.0	21	18.4
Manufacturing.....	249,700	21.8	16	14.0
Transportation & Public Utilities.....	55,800	4.9	22	19.3
Wholesale Trade.....	72,500	6.3	9	7.9
Retail Trade.....	209,100	18.3	14	12.3
Finance, Ins. & Real Estate.....	55,200	4.8	2	1.8
Services.....	192,500	16.8	2	1.8
Government.....	207,600	18.2	12	10.5
TOTAL.....	1,144,100	100.0%	114	100.0%

1977 - 1978

Industry Division	Employment ^{1/}		Deaths	
	Number	Percent	Number	Percent
Agric., Forestry & Fishing.....	43,300	3.8%	26	10.6%
Mining.....	2,400	.2	5	2.0
Construction.....	57,350	5.1	48	19.5
Manufacturing.....	247,650	21.9	35	14.2
Transportation & Public Utilities.....	55,400	4.9	43	17.5
Wholesale Trade.....	72,550	6.4	26	10.6
Retail Trade.....	205,950	18.2	19	7.7
Finance, Ins. & Real Estate.....	53,900	4.7	4	1.6
Services.....	189,100	16.7	7	2.9
Government.....	205,050	18.1	33	13.4
TOTAL.....	1,132,650	100.0%	246	100.0%

^{1/} Annual average employment for nonfarm industries is based on the establishment survey conducted by the Iowa Department of Job Service in cooperation with the U. S. Department of Labor, Bureau of Labor Statistics. Annual average employment for the agriculture, forestry and fishing division is a composite of estimates from the establishment survey and estimates provided by the U. S. Department of Agriculture.

Table 18
STATE OF IOWA
INDUSTRY RANKING BASED ON
REPORTED WORK RELATED DEATHS
1977

Industry	Rank ^{1/}	Number of Deaths	Deaths per 10,000 Employees
Bituminous coal and lignite mining.....	1	1	80.65
Water transportation.....	2	1	78.13
Petroleum and coal products-mfg.....	3	1	47.62
Transportation by air.....	4	3	28.09
Heavy construction contractors.....	5	13	14.12
Transportation services.....	6	1	11.11
Agricultural services.....	7	2	6.97
Local and interurban passenger transit.....	8	1	5.96
Insurance agents, brokers and service.....	9	2	4.47
Trucking and warehousing.....	10	8	4.22
Miscellaneous repair services.....	11	1	3.93
Special trade contractors.....	12	11	3.86
Railroad transportation.....	13	3	3.49
Electric, gas, and sanitary services.....	14	4	3.48
Agricultural production, crops.....	15	12	3.21
Stone, clay, and glass products-mfg.....	16	2	2.54
Wholesale trade, nondurable goods.....	17	9	2.38
Wholesale trade, durable goods.....	18	8	2.32
Transportation equipment-mfg.....	19	2	2.03
Lumber and wood products-mfg.....	20	1	1.86
General building contractors.....	21	3	1.61
State government.....	22	8	1.60
Food and kindred products-mfg.....	23	7	1.43
Primary metal industries-mfg.....	24	1	1.23
Membership organizations.....	25	1	1.09
Automotive dealers and service stations.....	26	3	.98
Local government.....	27	13	.97
Hotels and other lodging places.....	28	1	.96
Personal services.....	29	1	.95
Electric and electronic equipment-mfg.....	30	2	.80
Building materials and garden supplies-retail..	31	1	.74
Business services.....	32	1	.58
Miscellaneous retail stores.....	33	1	.53
Fabricated metal products-mfg.....	34	1	.50
Machinery, except electrical-mfg.....	35	2	.32
TOTAL - All industries.....	--	132	1.18

^{1/} Ranked by the number of deaths per 10,000 employees.

Note: A high rate of deaths per 10,000 employees where only a few fatalities are indicated results from a low employment level in the industry.

Table 19
STATE OF IOWA
INDUSTRY RANKING BASED ON
REPORTED WORK RELATED DEATHS
1978

Industry	Rank ^{1/}	Number of Deaths	Deaths per 10,000 Employees
Water transportation.....	1	1	78.13
Petroleum and coal products-mfg.....	2	1	47.62
Mining of nonmetallic minerals, except fuels...	3	4	17.86
Trucking and warehousing.....	4	14	7.39
Agricultural services.....	5	2	6.97
Heavy construction contractors.....	6	6	6.52
Paper and allied products-mfg.....	7	2	5.00
General building contractors.....	8	9	4.83
General merchandise stores.....	9	11	3.90
Instruments and related products-mfg.....	10	1	3.68
Railroad transportation.....	11	3	3.49
Electric, gas, and sanitary services.....	12	4	3.48
Agricultural production, crops.....	13	9	2.59
Apparel and other textile products-mfg.....	14	1	2.46
Agricultural production, livestock.....	15	1	2.33
Special trade contractors.....	16	6	2.11
Lumber and wood products-mfg.....	17	1	1.86
Wholesale trade, durable goods.....	18	6	1.74
Real estate.....	19	1	1.48
Miscellaneous services.....	20	1	1.37
Stone, clay, and glass products-mfg.....	21	1	1.27
Printing and publishing-mfg.....	22	2	1.23
Social services.....	23	1	.93
Food and kindred products-mfg.....	24	4	.82
Wholesale trade, nondurable goods.....	25	3	.79
Local government.....	26	10	.75
Banking.....	27	1	.60
Fabricated metal products-mfg.....	28	1	.50
State government.....	29	2	.40
Electric and electronic equipment-mfg.....	30	1	.39
Food stores.....	31	1	.34
Automotive dealers and service stations.....	32	1	.33
Machinery, except electrical-mfg.....	33	1	.16
Eating and drinking places.....	34	1	.15
TOTAL - All industries.....	--	114	1.00

^{1/} Ranked by the number of deaths per 10,000 employees.

Note: A high rate of deaths per 10,000 employees where only a few fatalities are indicated results from a low employment level in the industry.

Table 20
MATERIALS AVAILABLE FROM THE
RESEARCH AND STATISTICS DIVISION
OF THE IOWA BUREAU OF LABOR

The following recordkeeping and reporting forms and aids are available at no charge upon request from the Iowa Bureau of Labor.

<u>Items Available</u>	<u>Number Distributed 1977-1978</u>
Booklet, "Recordkeeping Requirements under the Occupational Safety and Health Act of 1970."	10,292
OSHA Form No. 100, "Log of Occupational Injuries and Illnesses." (Replaced by OSHA Form No. 200 as of January 1, 1978.)	14,347
Iowa Form No. L-1/WC-1 "Employers Work Injury Report." (Substitute for OSHA Form No. 101, Supplementary Record of Occupational Injuries and Illnesses.)	161,691
OSHA Form No. 102, "Summary, Occupational Injuries and Illnesses." (Replaced by OSHA Form No. 200 as of January 1, 1978.)	11,151
OSHA Form No. 200, "Log and Summary of Occupational Injuries and Illnesses." (Replaced OSHA Forms No. 100 and No. 102 as of January 1, 1978.)	21,429
IOSH Form 30, Poster, "Safety and Health Protection on the Job." (Available in English or Spanish.)	15,637
BLS Report 412, "What Every Employer Needs to Know about OSHA Recordkeeping."	757
Iowa "Recordkeeping, Reporting and Posting Requirement Handbook."	1,969
"A Guide to Evaluating Your Firm's Injury and Illness Experience." (Separate guides are available for the following industries: Construction; Manufacturing; Transportation and Public Utilities; Wholesale and Retail Trade; and Services.)	2,125

The staff of the Research and Statistics Division and the Education Division have made themselves available for conducting seminars on the recordkeeping and reporting requirements for both employer and employee groups. Requests for such sessions should be made in writing to the Iowa Bureau of Labor, allowing sufficient time for the scheduling of the meetings.

WAGE AND WORKPLACE STANDARDS DIVISION



Michael J. Burdette
Director



Olga Duran
Administrative
Assistant II



Gloria Gile
Clerk Typist II



Arlene Kockler
Secretary I

The Wage and Workplace Standards Division is responsible for administering and enforcing six laws affecting the employment conditions of individuals within the State. Under the provisions of the Iowa Wage Payment Collection Law, Chapter 91A, Code of Iowa, the Division investigates complaints for unpaid wages received from employees, and if a determination is made that the claim is enforceable, the Division attempts to settle the matter with the aggrieved employee and employer. If a settlement is not effected, suit is filed against the employer to effect collection and enforce the provisions of the statute.

Under the provisions of the Iowa Child Labor Law, Chapter 92, Code of Iowa, the Division investigates complaints and reported work-related injuries involving the employment of children under eighteen years of age. The Division also advises and assists child work permit issuing officers with the local schools and Job Service of Iowa offices in properly issuing work permits to children within the scope and limitations of the Child Labor Law.

Pursuant to Chapters 94 and 95, Code of Iowa, Iowa's Private Employment Agency Licensing Laws, the Division assists the State Employment Agency License Commission in licensing and regulating private employment agencies operating within the State of Iowa. The Division insures that each agency complies with the statutes and administrative rules, and investigates and resolves complaints from affected employees and employers against private employment agencies.

The Division is also responsible for inspecting temporary labor camps located within the state for compliance with the regulations adopted under the Iowa Occupational Safety and Health Act, Chapter 88, Code of Iowa. Each camp is inspected to insure that occupants are receiving adequate living and sanitary facilities.

Under Section 327F.37, Code of Iowa, the Division inspects the temporary living and sanitary facilities provided by railroads for their employees who must travel and work in the state.

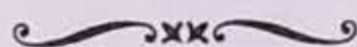


Table 1
STATE OF IOWA
REPORT OF LICENSES ISSUED
AND FEES COLLECTED
PRIVATE EMPLOYMENT AGENCIES
FISCAL YEARS 1977-1978^{1/}

	FY 1977	FY 1978	Total 1977 & 1978
Number of licenses issued	71	89	160
License fees collected ^{2/}	\$3,550.00	\$4,450.00	\$8,000.00

^{1/} July 1, 1976, through June 30, 1977, and July 1, 1977, through June 30, 1978.

^{2/} Annual license fee is \$50.00.

Table 2
STATE OF IOWA
WAGE COLLECTION CASES INITIATED
ON BEHALF OF CLIENTS
FISCAL YEAR 1977

Activity	July 1, 1976 - June 30, 1977	
	Number of Claims	Amount Claimed
Information Requests ^{1/}	1,555	
Invalid Claims ^{2/}	54	
Wage Claims Received and Docketed ^{3/}	760	\$329,858.05
Claims Denied ^{4/}	195	85,087.28
Uncollectable ^{5/}	42	7,255.65
Claims Settled Before Petition ^{6/}	250	47,137.40
Claims Settled After Petition ^{7/}	24	4,220.19
Court Actions		
Petitions Filed ^{8/}	170	70,121.91
Dismissals ^{9/}	8	2,376.68
Judgements ^{10/}	35	34,938.92
Satisfied ^{11/}	20	4,037.59
Unsatisfied ^{12/}	22	4,780.36
Total Collections ^{13/}	294	55,401.20
Active Cases ^{14/}	355	246,686.01

See footnotes following Table 3.

Table 3
STATE OF IOWA
WAGE COLLECTION CASES INITIATED
ON BEHALF OF CLIENTS
FISCAL YEAR 1978

Activity	July 1, 1977 - June 30, 1978	
	Number of Claims	Amount Claimed
Information Requests ^{1/}	1,521	
Invalid Claims ^{2/}	57	
Wage Claims Received and Docketed ^{3/}	808	\$357,469.36
Claims Denied ^{4/}	248	110,711.72
Uncollectable ^{5/}	39	18,432.49
Claims Settled Before Petition ^{6/}	330	79,994.78
Claims Settled After Petition ^{7/}	73	17,207.53
Court Actions		
Petitions Filed ^{8/}	145	65,743.80
Dismissals ^{9/}	8	1,694.00
Judgements ^{10/}	49	32,472.17
Satisfied ^{11/}	21	7,950.75
Unsatisfied ^{12/}	28	31,023.55
Total Collections ^{13/}	424	105,147.05
Active Cases ^{14/}	416	337,140.55

See footnotes following Table 3.

STATE OF IOWA
WAGE COLLECTION CASES INITIATED
ON BEHALF OF CLIENTS
FISCAL YEARS 1977 & 1978
FOOTNOTES
Tables 2 & 3

- 1/ Information Requests - Number of wage complaint forms given to potential complainants.
- 2/ Invalid Claims - Those complaints that are deficient on the face of the form.
- 3/ Wage Claims Received and Docketed - Complaints that appear to be valid. Therefore, an attempt to contact the employer is made to elicit a statement of the employer's position.
- 4/ Claims Denied - Encompasses all reasons for denying a complaint, except a failure to locate the employer, employer insolvency, or a dismissal of a suit.
- 5/ Uncollectable - Claims that are denied because of our inability to locate the employer or because of the insolvency of the employer.
- 6/ Claims Settled Before Petition - All complaints upon which payment is received prior to filing suit.
- 7/ Claims Settled After Petition - All complaints upon which payment is received subsequent to filing suit.
- 8/ Petitions Filed - Number of lawsuits filed.
- 9/ Dismissals - Lawsuits dismissed after hearing by the court.
- 10/ Judgements - Lawsuits won by default or after hearing.
- 11/ Satisfied - Judgements that are collected.
- 12/ Unsatisfied - Judgements that are not collected.
- 13/ Total collections represent all cases for which monies have been collected on behalf of the complainant.
- 14/ Cases unresolved as of the fiscal year shown.

Table 4
STATE OF IOWA
NUMBER OF CERTIFICATES OF AGE,
WORK PERMITS, STREET TRADES PERMITS,
AND MIGRANT WORK PERMITS
BY MONTH
1977

	Certificates of Age ^{1/}	Work Permits ^{2/}	Street Trades Permits ^{3/4/}	Migrant Work Permits ^{5/}	Total Permits & Certificates
January	252	167	271	-	690
February	178	245	292	-	716
March	249	280	284	-	713
April	259	386	276	-	921
May	520	485	317	-	1,322
June	2,011	2,488	466	-	4,975
July	715	565	315	17	2,130
August	401	556	437	23	1,417
September	763	415	400	24	1,602
October	345	359	295	0	999
November	235	391	317	7	950
December	154	140	188	0	482
TOTAL	6,082	6,477	3,858	71	16,917

^{1/} Ages 16 and above.

^{2/} Ages 14 and 15.

^{3/} Ages 10 to 16.

^{4/} Newscarriers.

^{5/} Migrant Laborers. Data not available prior to July 1, 1977.

Table 5
STATE OF IOWA
NUMBER OF CERTIFICATES OF AGE,
WORK PERMITS, STREET TRADES PERMITS,
AND MIGRANT WORK PERMITS
BY MONTH
1978

Month	Certificates of Age ^{1/}	Work Permits ^{2/}	Street Trades Permits ^{3/4/}	Migrant Work Permits ^{5/}	Total Permits & Certificates
January	182	151	255	0	588
February	345	359	295	0	999
March	402	391	383	0	1,176
April	469	410	454	0	1,333
May	306	351	295	0	952
June	2,137	2,407	592	5	5,141
July	238	250	153	0	641
August	883	1,244	490	18	2,635
September	615	322	315	0	1,252
October	569	353	357	0	1,279
November	418	326	268	0	1,012
December	167	184	188	0	539
TOTAL	6,731	6,748	4,045	23	17,547

^{1/} Age 16 and above.

^{2/} Ages 14 and 15.

^{3/} Ages 10 to 16.

^{4/} Newscarriers.

^{5/} Migrant Laborers.

Table 1
STATE OF IOWA
NUMBER OF ADOPTIONS OF THE
WOMEN'S SUFFRAGE CONSTITUTIONAL
AMENDMENT, 1901-1902
COUNTY, MONTH, AND YEAR
1901-1902

Month	Adoption	Rejection	Total
January	102	101	203
February	141	239	380
March	401	397	798
April	149	410	559
May	108	141	249
June	111	1,407	1,518
July	210	170	380
August	283	1,144	1,427
September	215	121	336
October	269	211	480
November	419	318	737
December	187	198	385
Total	1,141	4,047	5,188

1. Adm. 12 and 13.
2. Adm. 14 and 15.
3. Adm. 16 and 17.
4. Adm. 18 and 19.
5. Adm. 20 and 21.
6. Adm. 22 and 23.
7. Adm. 24 and 25.
8. Adm. 26 and 27.
9. Adm. 28 and 29.
10. Adm. 30 and 31.

APPENDIX

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS

1977 and 1978

APPENDIX

STATE OF IOWA SUMMARY OF WORK RELATED DEATHS 1977

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
1.	1- 5-77	Trucking & Warehousing	Courier Guard	47	Vehicle Accident
The employee's vehicle crossed the center line on the road and struck a truck.					
2.	1-13-77	Transportation Services	Laborer	34	Poisoning
The employee was overcome by sulphur fumes while cleaning the inside of a railroad tank car.					
3.	1-14-77	State Government	Hwy. Eng. Trainee	23	Vehicle Accident
4.	1-14-77	State Government	Hwy. Eng. Trainee	23	Vehicle Accident
The front wheel of the employee's vehicle hit the shoulder of the highway causing the car to spin around facing the opposite direction in the other lane. The car was then struck by another car killing both the driver and the passenger.					
5.	1-14-77	Wholesale Trade-Nondurables	Truck Driver	62	Heart Attack
The employee was waiting to pick up a load of feed when he became ill. He was taken to a hospital where he died three days later.					
6.	1-20-77	Heavy Construction Contr.	Owner	60	Crushed
The victim was putting new cleats on a trencher when he became entangled in the chain (digger part) of the machine.					
7.	1-21-77	Local Government	Volunteer Fireman	51	Heart Attack
The employee was at the fire station answering a fire call when he collapsed and died.					
8.	1-24-77	Local/Interurban Pass. Transp.	School Bus Driver	22	Vehicle Accident
The employee's bus was struck by another vehicle that had failed to yield the right of way.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
9.	2- 4-77	Food & Kindred Prod.	Ham Marker	41	Surg. Complic.
The employee developed a hernia on 11-8-76. He underwent surgery to repair the hernia in January of 1977. He died 2-4-77 as a result of complications from the surgery.					
10.	2- 8-77	Food & Kindred Prod.	Depot Serviceman	42	Crushed
The employee was outside his truck and was in the process of unloading feed. The customer backed up his pickup truck and crushed the employee between the two trucks.					
11.	2-10-77	Special Trade Contr.	Apprentice Elect.	NR	Fall
The employee apparently fell off a permanently affixed ladder while doing electrical installation. The accident occurred on 1-4-77 and he died on 2-10-77 of head injuries.					
12.	2-17-77	Food & Kindred Prod.	Manager	64	Air Crash
The employee was a passenger in a private plane which crashed while landing after striking electrical lines.					
13.	2-21-77	General Building Contr.	Millwright Worker	23	Fall
The employee was working on a scaffold when a scaffold support broke causing him to fall 60 feet to a concrete floor.					
14.	2-22-77	Agricultural Prod.-Crops	Laborer	50	Crushed
The employee was operating a tractor which overturned on him. He was injured on 2-14-77 and died on 2-22-77.					
15.	3- 2-77	Transportation Equipment	President	42	Crushed
The employee was working on a dump truck when the box fell pinning him between the box and the cab of the truck.					

NR = Not Reported

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
16.	3- 7-77	Auto. Dealers & Svc. Stations	Oil Jobber	40	Vehicle Accident
The employee was delivering fuel oil when he lost control of his truck causing it to go into a ditch and overturn.					
17.	3-10-77	Food & Kindred Prod.	Truck Driver	28	Vehicle Accident
The employee was delivering a load of feed when his truck collided with another truck at an intersection.					
18.	3-15-77	Agricultural Prod.-Crops	Farm Employee	26	Vehicle Accident
The employee was making a left turn when his truck was struck by another vehicle which was passing in the intersection. The accident occurred on 3-14-77 and he died on 3-15-77.					
19.	3-16-77	Trucking & Warehousing	Owner-Operator	46	Vehicle Accident
The employee's truck went off the roadway, into a ditch, over a gravel roadway, and into another ditch. The employee was pinned under a portion of the tractor unit.					
20.	3-17-77	Food & Kindred Prod.	Laborer	54	Vehicle Accident
The employee was returning from the county landfill when he was involved in a vehicle accident. He was injured on 3-14-77 and died on 3-17-77.					
21.	3-19-77	Machinery, Exc. Electrical	Lead App. Engineer	27	Air Crash
22.	3-19-77	Transportation by Air	Chief Flight Instr.	32	Air Crash
23.	3-19-77	Business Services	Salesman	34	Air Crash
The pilot and both passengers were killed when their aircraft crashed.					
24.	3-22-77	Food & Kindred Prod.	Drier Operator	49	Burns
On 2-27-77 a dust explosion occurred in a building triggering two more explosions in the starch drier area where the employee was working. He suffered burns over 85% of his body. He died on 3-22-77.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
25.	3-30-77	State Government	Reprod. Equip. Opr.	61	Heart Attack
The employee suffered a heart attack while walking down a hallway on his way to lunch.					
26.	4-12-77	Miscellaneous Retail	Labor	16	Crushed
The employee was pulling a tank behind a pickup truck. After the tank jack-knifed, the employee disconnected it in an attempt to straighten it out. The tank rolled into a ditch, carrying the employee with it and flipped over onto the employee, crushing him.					
27.	4-13-77	Local Government	Night Watchman	67	Heart Attack
The employee died of a heart attack while on duty.					
28.	4-13-77	Trucking & Warehousing	Truck Driver	55	Fall
The employee fell from his truck striking his head on the pavement.					
29.	4-18-77	Special Trade Contr.	Labor	28	Crushed
The employee was preparing to construct manure pits by setting up forms in a two story barn. A support beam broke loose causing the hay loft and baled hay to collapse on the employee.					
30.	4-20-77	Wholesale Trade-Nondurables	Dist. Sales Mgr.	35	Vehicle Accident
The employee's car was struck head-on by another vehicle.					
31.	4-21-77	Local Government	Sr. Police Officer	25	Gun Shot
The employee was shot while trying to arrest a suspect.					
32.	4-22-77	Building Mtrls. & Garden Sup.	Yardman-Truck Drvr.	20	Crushed
The employee was servicing a forklift with the boom elevated. As he got out of the cab, he bumped the "down" lever. He was caught by the scissor boom and crushed.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
33.	4-26-77	Trucking & Warehousing	Transport Driver	48	Vehicle Accident
The employee's truck struck a school bus that had pulled out in front of him, causing his truck to roll and burn.					
34.	5- 5-77	Railroad Transportation	Section Foreman	47	Electrocution
The employee was cleaning up after a storm when he came in contact with a downed power line.					
35.	5- 9-77	Petroleum & Coal Prod.	Plant Man	31	Burns
The employee was heating asphalt lines when a storage tank exploded and he was burned.					
36.	5-10-77	Local Government	Parks & Rec. Dir.	40	Gun Shot
The employee was working in his office when he was shot by another employee.					
37.	5-16-77	State Government	Electrician	30	Electrocution
The employee was taking scotch lock of the end of a wire with his hands to determine which circuit he had turned off. He came in contact with the wire and received an electrical shock from the 277 volt line.					
38.	5-16-77	Wholesale Trade-Nondurables	Bookkeeper	66	Poisoning
A delivery truck backed into an anhydrous ammonia tank, rupturing a pipe. The employee left the office to move her car. She returned to the office and fell unconscious. Death was due to inhalation of ammonia fumes.					
39.	5-24-77	Trucking & Warehousing	Truck Driver	30	Vehicle Accident
The truck the employee was driving went off the road and overturned.					
40.	6- 4-77	Local Government	Deputy Sheriff	30	Vehicle Accident
The employee was on routine patrol when his vehicle was struck head-on by another vehicle.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
41.	6- 7-77	Heavy Construction Contr.	Asst. Foreman	56	Caught In
The employee slipped into a gravel hopper, was covered over by the gravel and came out the bottom of the hopper onto the conveyor belt. He suffered multiple fractures of the torso and skull.					
42.	6-10-77	Agricultural Prod.-Crops	Farm Hand	60	Crushed
The employee had been mowing hay. When he was later found, he had been run over by the tractor.					
43.	6-11-77	Water Transportation	Laborer	23	Drowning
The employee slipped off a barge on which he was working and drowned.					
44.	6-13-77	Agricultural Prod.-Crops	Farm Laborer	17	Electrocution
The employee had been drilling holes and received an electrical shock when he got up and leaned against a steel post.					
45.	6-20-77	Special Trade Contr.	Painter	21	Electrocution
The employee was painting a water tank. The aluminum extension handle he was using touched a 440 volt power line and he was electrocuted.					
46.	6-21-77	Agricultural Prod.-Crops	Hired Hand	15	Vehicle Accident
The employee lost control of the pickup truck he was driving and it overturned.					
47.	6-23-77	Wholesale Trade-Nondurables	Truck Driver	23	Vehicle Accident
The employee's vehicle went off the roadway and overturned.					
48.	6-25-77	Stone, Clay & Glass Prod.	Driver & Yardman	41	Crushed
The employee walked behind an endloader that was backing up and was run over by the machine.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
49.	6-27-77	Railroad Transportation	Conductor	60	Crushed
The employee was crushed when the caboose he was riding in fell on its side.					
50.	6-30-77	Fabricated Metal Prod.	Shot Blstr-Fndry.	37	Crushed
The employee was adjusting a chain on a counterweight (22,000 lb.). The counterweight started moving and pinned him between it and a flask.					
51.	7- 1-77	State Government	Hwy. Main. Opr.	42	Crushed
The employee was picking up tar paper when a steel roller backed over him.					
52.	7- 5-77	Heavy Construction Contr.	Welder	43	Crushed
The employee was using a payloador to position a sheet of steel. He was pinned under the bucket of the payloador while working with the controls.					
53.	7- 6-77	Agricultural Services	Ag. Pilot	32	Air Crash
The employee was spraying a corn field when his plane struck a tree.					
54.	7- 7-77	Auto. Dealers & Svc. Stations	Parts Manager	52	Electrocution
The employee was found lying next to an electric overhead door. He had been electrocuted.					
55.	7- 8-77	General Building Contr.	Asst. Foreman	21	Fall
The employee lost his balance and fell off of a roof while he was hoisting up materials. He was injured on 7-7-77 and died on 7-8-77.					
56.	7-11-77	Wholesale Trade-Durables	Mechanic	61	Heart Attack
The employee suffered a heart attack while stooping over.					
57.	7-15-77	Local Government	Maintenance Wkr.	32	Fall
The employee was loading bales of straw on a trailer. While securing the load, a corner gave way causing him to fall to the ground striking his head. He was injured on 7-6-77 and died on 7-15-77.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
58.	7-15-77	State Government	Equip. Operator	48	Vehicle Accident
The employee was driving a tractor with a tailblade filling edge ruts on the highway. His tractor was struck from behind by a semi-trailer truck. He was injured on 7-14-77 and died on 7-15-77.					
59.	7-16-77	Transportation Equipment	Util. Worker	50	Heart Attack
The employee suffered a heart attack on 4-5-77 while at work. He died as a result of the heart attack on 7-16-77.					
60.	7-18-77	Ins. Agents, Brokers & Svc.	Resident Adjuster	31	Fall
The employee was checking an air conditioner on the roof of the building. A masonry cornice gave way causing him to fall to the ground.					
61.	7-19-77	Wholesale Trade-Durables	Warehouse Manager	54	Heart Attack
The employee suffered a heart attack while moving merchandise.					
62.	7-22-77	Auto. Dealers & Svc. Stations	Security Watchman	NR	Gun Shot
The employee was struck with a pipe and shot with a shotgun while on patrol.					
63.	7-27-77	Misc. Repair Services	Painter	28	Electrocution
The employee was on the ground moving a paint hose when it came into contact with a power line. The hose burst and the aluminum paint erupted into flame. The employee died of electrocution.					
64.	7-27-77	Machinery, Exc. Elect.	Spot Welder	36	Heart Attack
The employee suffered a heart attack while in the locker room prior to the start of his shift.					
65.	7-29-77	Heavy Construction Equip.	Carpenter	61	Heart Attack
The employee suffered a heart attack while stripping slab forms.					

NR = Not Reported

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

No.	Date	Industry	Occupation	Age	Cause of Death
66.	8- 1-77	Agricultural Prod.-Crops	Farm Labor	25	Crushed
The employee was cutting hay when the tractor he was operating tipped and fell on him.					
67.	8- 8-77	Electric, Gas & Sanitary Svcs.	Small Crew Foreman	36	Electrocution
The employee was disconnecting a primary wire on a pole when he came in contact with an energized line.					
68.	8- 9-77	Bit. Coal & Lignite Mining	Laborer	18	Crushed
The employee was loading a shuttle car with coal when his head became pinned between the sideboard the the top of the car.					
69.	8-19-77	Heavy Construction Contr.	Roller Operator	24	Crushed
The employee was operating a roller which went into a ditch and rolled on top of him.					
70.	8-22-77	Electric, Gas & Sanitary Svcs.	Lineman	38	Electrocution
The employee was stringing new wire when he came into contact with a high voltage wire.					
71.	8-27-77	Railroad Transportation	Conductor	61	Caught Under
The employee fell under a moving box car.					
72.	8-27-77	Wholesale Trade-Durables	Shop Foreman	53	Heart Attack
The employee suffered a heart attack while sitting at his desk.					
73.	8-28-77	Local Government	Policeman	30	Gun Shot
The employee was investigating a possible shooting. He was shot while he was still in the police van.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
74.	8-31-77	Heavy Construction Contr.	Laborer	30	Fall
The employee had climbed leads to start a diesel pile hammer when he fell to the ground.					
75.	9- 2-77	Special Trade Contr.	Laborer	29	Caught Under
The employee was killed when the roof of a house he was demolishing fell on him.					
76.	9- 6-77	Agricultural Services	Veterinarian	26	Vehicle Accident
The employee was returning from a call when her vehicle collided with a train.					
77.	9-11-77	Special Trade Contr.	Roofer	48	Fall
The employee fell from the roof of a house on which he was working on 10-17-75. He died on 9-11-77 of injuries resulting from that accident.					
78.	9-12-77	Wholesale Trade-Nondurables	Warehouseman	49	Electrocution
The employee was cleaning fertilizer cups in the blender building. His clothes and shoes were wet and he was electrocuted when he came in contact with a drop cord.					
79.	9-15-77	Special Trade Contr.	Painter	21	Electrocution
The employee was on a platform doing touchup painting using a 16-foot aluminum pole with a brush on the end. The pole came in contact with a high voltage line and the employee was electrocuted.					
80.	9-16-77	Electric, Gas & Sanitary Svcs.	Truck Driver	57	Crushed
The employee was out of the truck collecting trash when the truck started to roll. The employee then ran after it and jumped up on the running board. The truck then bumped a curb throwing the victim under the dual wheels.					
81.	9-20-77	Heavy Construction Contr.	Laborer	35	Struck By
A bundle of floor grating was being hoisted to the second level of the structural steel. A grating came out of the bundle and fell striking the employee.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
82.	9-20-77	General Building Contr.	Laborer	59	Heart Attack
The employee was working on a door casing when he suffered a heart attack.					
83.	9-21-77	Agricultural Prod.-Crops	Farmhand	64	Caught In
The employee was oiling chains on a grain elevator when his sleeve became entangled in the power take-off and his arm was amputated.					
84.	9-28-77	Special Trade Contr.	Plumber	32	Crushed
The employee was connecting sewer and water hookups. The clay walls of the 10 foot deep trench caved in burying him up to his shoulders.					
85.	9-29-77	Heavy Construction Contr.	President	36	Vehicle Accident
The employee's pickup truck ran off the road and rolled down an embankment.					
86.	9-29-77	Wholesale Trade-Durables	Dist. Sales Mgr.	29	Vehicle Accident
The employee was killed when the car he was driving collided with another vehicle.					
87.	9-30-77	Special Trade Contr.	Laborer	19	Drowning
The employee was working with a float line while dredging a lake. The boat he was in tipped over and he drowned.					
88.	9-30-77	Special Trade Contr.	Electrician	29	Electrocution
The employee was making a splice in a cable he thought had been de-energized. A high voltage cable fell against his hand and he was unable to get loose.					
89.	10- 4-77	Heavy Construction Contr.	Dragline Operator	27	Crushed
The employee was extending the dragline boom. He removed the boom pins and the boom fell on top of him.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
90.	10- 4-77	State Government	Dietary Consultant	53	Vehicle Accident
The employee's vehicle was struck head-on by a vehicle which had crossed over the highway center dividing line.					
91.	10- 5-77	Trucking & Warehousing	Truck Driver	24	Crushed
A large trash container slipped off the back of a truck pinning the employee against a separate trash compactor.					
92.	10- 7-77	Membership Organization	NR	NR	Heart Attack
The employee suffered a heart attack while driving a pickup truck.					
93.	10- 9-77	Electric, Gas & Sanitary Svcs.	NR	58	Heart Attack
The employee suffered a heart attack while at work.					
94.	10-10-77	Special Trade Contr.	Plumber-fitter	58	Heart Attack
The employee suffered a cerebral hemorrhage while installing an oil line.					
95.	10-15-77	Heavy Construction Contr.	Machine Operator	19	Strangulation
The employee was boring under the highway when his jacket became entangled in the boring and he was strangled.					
96.	10-20-77	Agricultural Prod.-Crops	Farm Laborer	62	Heart Attack
The employee suffered a heart attack while driving a truck.					
97.	10-20-77	Primary Metal Industries	Sales Manager	53	Vehicle Accident
The employee was involved in a two car accident while on his way to see a customer.					

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STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
98.	10-20-77	Wholesale Trade-Nondurables	Manager & Salesman	64	Vehicle Accident
The employee was driving to the office after making a sales call. His car went off the road and hit an embankment.					
99.	10-29-77	Wholesale Trade-Durables	Truck Driver	31	Vehicle Accident
A car made a left turn in front of the employee's tractor-trailer unit. In trying to avoid an accident the employee lost control of his truck and went into a ditch.					
100.	10-31-77	Food & Kindred Prod.	Drier Operator	55	Poisoning
The employee inhaled chlorine fumes while operating driers on 10-28-77. He died on 10-31-77.					
101.	11- 2-77	Wholesale Trade-Durables	Treasurer	63	Vehicle Accident
The employee was driving a company car home after a meeting when he was involved in an automobile accident.					
102.	11- 3-77	Personal Services	Delivery Driver	74	Vehicle Accident
The truck being driven by the employee struck a crane parked on the roadway.					
103.	11- 5-77	Heavy Construction Contr.	Truck Driver	50	Vehicle Accident
The truck being driven by the employee struck a train.					
104.	11- 6-77	Local Government	Police Chief	19	Vehicle Accident
The employee's vehicle struck a horse while driving in the fog.					
105.	11- 7-77	Agricultural Prod.-Crops	Agri. Laborer	50	Heart Attack
The employee suffered a heart attack while walking to his tractor.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
106.	11- 8-77	Wholesale Trade-Durables	Driver	27	Vehicle Accident
The employee lost control of the truck he was driving and went into a ditch.					
107.	11-10-77	Local Government	Motor Grader	35	Heart Attack
The employee had been called to the scene of a fire at a county shop. He was standing and watching the fire when he suffered a heart attack.					
108.	11-11-77	Wholesale Trade-Durables	Truck Driver	25	Vehicle Accident
The semi-truck being driven by the employee struck a bridge.					
109.	11-13-77	Agricultural Prod.-Crops	Farm Laborer	57	Heart Attack
The employee had been throwing straw bales from the hayloft to the ground. He was later found dead in the hayloft.					
110.	11-14-77	Electric & Electronic Equip.	Prod. Operator	26	Struck By
A steel rod was thrown by a winding machine. It struck the employee in the head causing a puncture wound.					
111.	11-18-77	Wholesale Trade-Nondurables	Fert. Plant Mgr.	32	Crushed
The employee lost control of the payload he was operating and it overturned in a ditch.					
112.	11-18-77	Wholesale Trade-Nondurables	Manager	46	Suffocation
The employee noticed a crack in a silo. He was attempting to empty the grain when the entire structure collapsed. The employee was buried in the grain and debris.					
113.	11-18-77	Agricultural Prod.-Crops	Farm Labor	59	Crushed
The employee was opening a gate when a tractor rolled forward pinning him against the fence.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
114.	11-29-77	Local Government	Custodian	31	Heart Attack
The employee suffered a heart attack while at work.					
115.	11-29-77	Heavy Construction Contr.	Dozer Operator	34	Struck By
The employee was running stop lights when he was struck by a truck.					
116.	12- 1-77	Local Government	Outreach Aid	54	Vehicle Accident
The employee's vehicle was involved in a head-on collision with a truck.					
117.	12- 2-77	Lumber & Wood Prod.	Truck Driver	35	Vehicle Accident
The employee's truck jack-knifed and went down a 30 foot embankment.					
118.	12- 3-77	Local Government	Police Officer	25	Vehicle Accident
The employee was involved in a vehicle accident while on duty.					
119.	12- 5-77	Wholesale Trade-Nondurables	Warehouse Mgr.	62	Heart Attack
The employee suffered a heart attack after shoveling snow while on the job.					
120.	12- 5-77	Local Government	Operations	29	Spontaneous Lac.
The employee was found lying face down and bleeding from the mouth after he had come in from shoveling snow. Death was attributed to spontaneous laceration of the tracheal bifurcation.					
121.	12- 6-77	Trucking & Warehousing	Truck Driver	27	Vehicle Accident
The employee was involved in a truck accident.					
122.	12-12-77	Trucking & Warehousing	Truck Driver	25	Vehicle Accident
The employee lost control of his truck while going around a downgrade curve.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
123.	12-14-77	Special Trade Contr.	Teamster	46	Struck By
The employee was helping unload a truck when a 4 x 6 piece of lumber fell from the fifth floor of a building striking him in the head. He was injured on 11-14-77 and died on 12-14-77.					
124.	12-14-77	Stone, Clay & Glass Prod.	Laborer	17	Crushed
The employee was helping load a concrete beam onto a truck and had climbed down from the truck bed. The travellift operator did not see him as he backed up. The employee was struck by the rear wheel of the travellift and run over.					
125.	12-14-77	Transportation by Air	Pilot	23	Air Crash
126.	12-14-77	Transportation by Air	Operations Mgr.	24	Air Crash
The employee were involved in an aircraft crash.					
127.	12-16-77	State Government	Diag. Pres. Teacher	25	Vehicle Accident
The car in which the employee was a passenger hit a patch of ice and spun into the path of a semi-truck.					
128.	12-16-77	Ins. Agents, Brokers & Svc.	Personnel Manager	43	Air Crash
The aircraft being flown by the employee crashed.					
129.	12-17-77	Hotels & Other Lodging Places	Coffee Shop Mgr.	51	Stabbing
The employee was stabbed by a customer.					
130.	12-21-77	Electric & Electronic Equip.	Main. Mechanic	22	Struck By
The employee was trying to free a jammed overhead door. The door fell striking him in the head.					
131.	12-28-77	Agricultural Prod.-Crops	Farm Labor	63	Crushed
The employee was assisting in freeing a truck that was stuck. The tailgate on the truck became unfastened and he went between the vehicles to fasten it. While he was between the vehicles, the truck rolled back, crushing him between the tractor and the truck.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1977 - Concluded

No.	Date	Industry	Occupation	Age	Cause of Death
132.	12-30-77	Heavy Construction Contr.	Carpenter	58	Struck By

The employee was preparing to get into a pickup when he was struck by a car.
The car dragged him 150 feet.



STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
1.	1- 1-78	Local Government	Laborer	NR	Heart Attack
The employee was putting away equipment when he suffered a heart attack.					
2.	1-14-78	State Government	Child Dev. Worker	45	Hepatitis
The employee fed a resident ill with hepatitis. She later contracted the disease and died.					
3.	1-16-78	Wholesale Trade-Durables	Truck Driver	65	Heart Attack
The employee suffered a heart attack while in the employer's parking lot.					
4.	1-23-78	Electric, Gas & Sanitary Svcs.	Electrician Spec.	62	Vehicle Accident
The employee's vehicle struck a highway maintainer snowplow after skidding out of control on frosty blacktop paving.					
5.	1-23-78	Special Trade Contr.	Operator	54	Crushed
The employee was crushed when the bulldozer he was operating slid down an embankment and rolled into a frozen creek bed. The employee was pinned beneath the machine.					
6.	1-28-78	Trucking & Warehousing	Truck Driver	27	Strangulation
The employee died of strangulation when his coat was caught in a power take-off unit.					
7.	2- 2-78	Agricultural Prod.-Crops	Farm Worker	68	Heart Attack
The employee suffered a heart attack while doing chores.					
8.	2- 6-78	Agricultural Prod.-Crops	Farm Labor	56	Suffocation
The employee had been feeding cattle. He apparently tried to push some silage into the self feeder and slipped into the silage bin.					

NR = Not Reported

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
9.	2-13-78	Food & Kindred Prod.	Meat Processor	60	Caught In
The employee was cleaning meat off the mixer paddles when he slipped and his hand hit the control switch. He was pulled into the mixer to his waist causing his right arm to be severed and his right chest area to be crushed. The accident occurred on 12-28-77 and he died on 2-13-78.					
10.	2-16-78	Nonmetal. Min., Exc. Fuels	Plant Manager	57	Heart Attack
The employee suffered a heart attack after loading propane tanks into a pickup.					
11.	2-19-78	General Building Contr.	Labor	15	Gunshot
12.	2-19-78	General Building Contr.	Labor	14	Gunshot
13.	2-19-78	General Building Contr.	Labor	14	Gunshot
All three employees were each shot in the head while cleaning up debris in a building being remodeled.					
14.	2-27-78	Printing & Publishing	Adv. Acct. Exec.	54	Vehicle Accident
The employee was calling on an account when he was struck by a turning auto as he cross a street.					
15.	2-27-78	Food & Kindred Prod.	Truck Driver	49	Electrocution
An auger the employee was using to unload feed touched a power line.					
16.	3- 1-78	Food Stores	Store Manager	57	Vehicle Accident
The employee was traveling to a meeting when another vehicle failed to stop at a stop sign and struck the vehicle occupied by the employer.					
17.	3- 1-78	Nonmetal. Min., Exc. Fuels	Laborer	58	Caught In
The employee died of a broken neck after becoming entangled in a conveyor belt.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
18.	3- 8-78	Electric, Gas & Sanitary Svc.	Elect. Foreman	40	Electrocution
The employee put his pliers into an energized elbow on an underground transformer he was working on.					
19.	3-13-78	Wholesale Trade-Durables	Delivery-Warehouse	66	Heart Attack
The employee suffered a heart attack while delivering merchandise.					
20.	3-14-78	Trucking & Warehousing	Truck Driver	38	Electrocution
The employee was unloading feed when the auger boom on his feed truck came into contact with a high voltage line.					
21.	3-16-78	Trucking & Warehousing	Truck Driver	NR	Vehicle Accident
Another truck pulled onto the interstate into the path of the employee's truck.					
22.	3-21-78	Trucking & Warehousing	Truck Driver	20	Vehicle Accident
The employee was killed when the truck he was driving went off the road.					
23.	4- 5-78	Electric, Gas & Sanitary Svc.	President	64	Vehicle Accident
The employee lost control of his vehicle.					
24.	4-13-78	Special Trade Contr.	Laborer	26	Fall
The employee fell 40 feet from the deck of a roof.					
25.	4-18-78	Auto. Dealers & Svc. Stations	Lot Man	17	Vehicle Accident
The employee was involved in a vehicle accident while driving to a gas station.					
26.	4-22-78	Banking	Asst. Cashier	32	Vehicle Accident
The employee was traveling on business when he was involved in a three car accident.					

NR = Not Reported

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
27.	4-23-78	General Merchandise Stores	Part-time Prep.	71	Heart Attack
The employee suffered a heart attack after coming inside from the shubbery area.					
28.	4-27-78	General Building Contr.	Construction Labor	54	Crushed
An endloader bumped a wall causing it to fall over on the employee who was shoveling sand.					
29.	5- 3-78	State Government	Main. Rprs. Spvr.	23	Crushed
The employee was operating a bulldozer which overturned on him.					
30.	5- 6-78	Eating & Drinking Places	Manager	47	Heart Attack
The employee suffered a heart attack while escorting an unruly patron from the business establishment.					
31.	5- 6-78	Agricultural Prod.-Livestock	Laborer	53	Heart Attack
The employee suffered a heart attack while feeding cattle.					
32.	5- 6-78	Food & Kindred Prod.	Prod. Supervisor	31	Vehicle Accident
The employee struck an embankment after losing control of his vehicle. He died when he was thrown out and pinned under the vehicle.					
33.	5- 6-78	Printing & Publishing	Pressman	20	Vehicle Accident
The employee was driving a semi-tractor which went out of control, left the roadway and overturned.					
34.	5-18-78	General Building Contr.	Laborer	45	Fall
The employee suffered a fractured skull caused from falling three stories.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
35.	5-18-78	Agricultural Prod.-Crops	Farm Labor	63	Crushed
The employee was assisting his employer in starting a tractor when the tractor started to move. The employee fell in front of the tractor and was run over.					
36.	5-19-78	Heavy Construction Contr.	Driver	31	Electrocution
The employee was unloading a trailer full of plastic ditch pipes when his head made contact with an electric line.					
37.	5-19-78	Local Government	Sexton-Cemetary	63	Vehicle Accident
The employee was involved in a vehicle accident at an uncontrolled intersection.					
38.	5-19-78	Wholesale Trade-Durables	Truck Driver	36	Vehicle Accident
The employee's vehicle went off the road and overturned.					
39.	5-22-78	Stone, Clay & Glass Prod.	Dredge Operator	53	Crushed
The employee was operating a front endloader leveling dirt on a 16 foot wide dike. He was killed when the loader overturned pinning him under the cab.					
40.	5-25-78	Local Government	Farm Hand	56	Heart Attack
The employee suffered a heart attack while working in the barn.					
41.	5-25-78	Trucking & Warehousing	Truck Driver	57	Vehicle Accident
The employee was killed when the fuel truck he was driving went out of control and overturned.					
42.	5-31-78	Local Government	Inspector	56	Crushed
The employee stepped in front of a parked truck loading asphalt and stood too close to the bumper for the driver to see her. When the truck started forward the employee was run over.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
43.	6-13-78	Lumber & Wood Prod.	Truck Driver	39	Vehicle Accident
The employee was driving a company truck and missed a curve.					
44.	6-14-78	Trucking & Warehousing	Truck Driver	44	Vehicle Accident
The truck in which the employee was riding was involved in a collision with another truck.					
45.	6-16-78	Food & Kindred Prod.	Depot Driver	57	Vehicle Accident
The employee was pulling onto the highway from a county gravel road and was hit by an oncoming semi-truck.					
46.	6-17-78	Trucking & Warehousing	Truck Driver	21	Vehicle Accident
The employee lost control of the truck she was driving.					
47.	6-24-78	Railroad Transportation	Switchman/brakeman	46	Struck By
The employee was apparently struck by a train which collided with another train. Authorities said he was either trapped between the two vehicles when they collided or was struck by one of them as he attempted to get out of the way.					
48.	6-25-78	Local Government	Deputy Sheriff	30	Vehicle Accident
49.	6-25-78	Local Government	Deputy Sheriff	24	Vehicle Accident
An oncoming car crossed the center line and struck the sheriff's department car head-on. Both driver and passenger in the car were killed.					
50.	6-28-78	Heavy Construction Contr.	Heavy Equip. Opr.	18	Crushed
The employee was run over by an earthmover.					
51.	6-29-78	Nonmetal Min. Exc. Fuels	Pit Truck Driver	22	Electrocution
The employee had dumped a load and was driving away from the wash plant with the truck box in a raised position. The box came into contact with an electric line and the employee was electrocuted when he stopped the truck and stepped out.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
52.	7- 1-78	Fabricated Metal Prod.	Maintenance	29	Electrocution
The employee was found dead where he had been using an electric arc welder. Autopsy findings were consistent with death due to electric shock.					
53.	7- 8-78	Special Trade Contr.	Siding Applicator	21	Fall
The employee suffered an electrical shock while on a roof causing him to fall 20 feet to the ground.					
54.	7-11-78	Railroad Transportation	Tie Gang Leader	33	Struck By
The employee was operating a motorized handcar which was struck by a train.					
55.	7-11-78	Agricultural Prod.-Crops	Dist. Sales Mgr.	49	Vehicle Accident
While making a U-turn, the employee's vehicle was struck by a truck.					
56.	7-14-78	Instruments & Related Prod.	Handyman	76	Heart Attack
The employee suffered a heart attack as he was leaving work.					
57.	7-14-78	Heavy Construction Contr.	Laborer	21	Suffocation
The employee was laying pipe when the sides of the ditch caved in completely covering him with dirt.					
58.	7-19-78	Miscellaneous Services	Asst. Accountant	22	Vehicle Accident
The employee was on his way to an audit assignment when he fell asleep and his vehicle veered across the center line. He crashed head-on into an oncoming car.					
59.	7-20-78	Agricultural Prod.-Crops	Farm Laborer	60	Heart Attack
The employee became ill after unloading hay on 7-17-78. He died three days later on 7-20-78.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
60.	7-20-78	General Building Contr.	Carpenter App.	21	Crushed
The employee was helping unload a truck. When the foreman heard the truck box come down he looked around and saw the employee's feet hanging out of the box. The injury occurred on 6-23-78 and the employee died on 7-20-78 of a crushed chest.					
61.	7-26-78	Special Trade Contr.	Laborer	34	Suffocation
The employee died when the ditch he was working in collapsed.					
62.	7-31-78	Heavy Construction Contr.	Laborer	49	Heart Attack
The employee collapsed and died while driving a trencher.					
63.	7-31-78	Agricultural Services	Tree Climber	19	Electrocution
The employee was working in a tree when he came into contact with an 8,000 volt power line.					
64.	8- 1-78	Local Government	Street Main.	23	Crushed
The employee was driving a tractor pulling a street compaction roller. She drove too close to the edge of the road and the shoulder collapsed. The machine overturned on top of the victim.					
65.	8- 3-78	Wholesale Trade-Nondurables	Laborer	25	Drowning
The employee was loading a barge when he fell into the water and drowned.					
66.	8- 4-78	Paper & Allied Prod.	Tester	19	Caught In
The employee caught his arm between a press roller and a cylinder on a paper machine.					
67.	8- 8-78	General Building Contr.	Carpenter	18	Fall
The employee was standing on a barrel putting in wind braces on top of the elevator. The barrel tipped causing him to fall through the doorway and down 75 feet to the ground.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
68.	8-10-78	Social Services	Director	29	Vehicle Accident
The employee was on his way home from a meeting. He fell asleep causing his vehicle to go off the road striking an embankment.					
69.	8-13-78	Trucking & Warehousing	Truck Driver	53	Vehicle Accident
The employee struck a bridge while driving in heavy fog.					
70.	8-14-78	General Building Contr.	Ironworker	19	Electrocution
The employee backed the crane up about 30 feet and raised the boom into a power line. After jumping from the crane, he returned to shut off the motor and was electrocuted.					
71.	8-15-78	Special Trade Contr.	Machine Operator	61	Crushed
The employee had been using a skid loader to dig a basement. He was caught between the bucket and the front of the loader.					
72.	8-17-78	Electric, Gas & Sanitary Svc.	Lineman	54	Electrocution
The employee was on a pole repairing a fuse on a transformer when he came into contact with a 2400 volt line.					
73.	8-25-78	Special Trade Contr.	Mason Tender	36	Crushed
A concrete bucket fell 40 feet from a crane striking the employee on the head.					
74.	9- 1-78	Agricultural Services	Truck Driver	NR	Heart Attack
The employee suffered a heart attack while putting a tarp on a truck.					
75.	9- 5-78	Trucking & Warehousing	Truck Driver	25	Vehicle Accident
The employee was driving a semi which collided with another vehicle.					

NR = Not Reported

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
76.	9-12-78	General Building Contr.	Driver	47	Vehicle Accident
The employee's truck a tractor that turned in front of him.					
77.	9-13-78	Machinery, Exc. Electrical	Warehouse Man	21	Crushed
A standing piece of steel fell, striking the employee and pinning him against another piece of steel.					
78.	9-27-78	Agricultural Prod.-Crops	Farm Worker	75	Crushed
The employee had driven the tractor to the top of a sileage pit. The tractor rolled over the edge crushing the employee.					
79.	9-28-78	Heavy Construction Contr.	Common Laborer	19	Struck By
The employee had hooked a chain up to a form which was being lifted by a crane with a bucket. A cable broke and the bucket fell striking the employee's head and shoulder.					
80.	9-28-78	Petroleum & Coal Prod.	Plant Operator	29	Drowning
The employee fell into an emulsion mixing vat.					
81.	10- 2-78	Wholesale Trade-Nondurables	Barge Loader	33	Drowning
The employee fell off a barge he was loading.					
82.	10- 9-78	Wholesale Trade-Durables	Service Man	35	Vehicle Accident
The employee's vehicle was involved in a head-on collision.					
83.	10-10-78	Electric & Electronic Equip.	Janitor	52	Heart Attack
The employee suffered a heart attack while at work.					
84.	10-14-78	Nonmetal. Min. Exc. Fuels	Truck Driver	23	Crushed
The employee was run over by an endloader while walking in the quarry.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

No.	Date	Industry	Occupation	Age	Cause of Death
85.	10-17-78	Local Government	Main. Operator	37	Crushed
The employee was operating a dragline. As he swung a clam bucket filled with dirt to the side, the dragline overturned crushing him.					
86.	10-18-78	Agricultural Prod.-Crops	Farm Hand	48	Vehicle Accident
The employee's vehicle went off the roadway and into a field causing the load on the truck to come through the cab. The employee died of crushing injuries.					
87.	10-21-78	Trucking & Warehousing	Truck Driver	36	Vehicle Accident
The employee was involved in a vehicle accident on 10-13-78. He died of injuries incurred in the accident on 10-21-78.					
88.	10-22-78	Apparel & Other Textile Prod.	Truck Driver	28	Vehicle Accident
The employee's vehicle struck another vehicle as he was trying to pass it.					
89.	10-25-78	Trucking & Warehousing	Truck Driver	24	Vehicle Accident
The employee's vehicle struck a train.					
90.	10-26-78	Trucking & Warehousing	Truck Driver	37	Vehicle Accident
The employee's truck went over an embankment into a creek.					
91.	11- 5-78	General Merchandise Stores	Payroll-Personnel	28	Suffocation
92.	11- 5-78	General Merchandise Stores	General Office	51	Suffocation
93.	11- 5-78	General Merchandise Stores	Electrician	28	Suffocation
94.	11- 5-78	General Merchandise Stores	Cash Counter	60	Suffocation
95.	11- 5-78	General Merchandise Stores	Maintenance	62	Suffocation
96.	11- 5-78	General Merchandise Stores	Cash Counter	69	Suffocation
97.	11- 5-78	General Merchandise Stores	Electrician	42	Suffocation
98.	11- 5-78	General Merchandise Stores	Maintenance	67	Suffocation
99.	11- 5-78	General Merchandise Stores	Payroll-Personnel	28	Suffocation
100.	11- 5-78	General Merchandise Stores	Auditing	67	Suffocation

Ten employees were overcome by smoke when a fire broke out in the store where they worked.

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Continued

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
101.	11- 8-78	Real Estate	Manager	29	Electrocution
The employee was moving paint scaffolding when it came into contact with an overhead power line.					
102.	11-10-78	Trucking & Warehousing	Truck Driver	46	Vehicle Accident
The employee's semi went out of control, ran down a bluff and overturned.					
103.	11-10-78	Wholesale Trade-Durables	Truck Driver	42	Vehicle Accident
A tire blew out causing the employee to lose control of his truck and it overturned.					
104.	11-15-78	Water Transportation	Engineer	49	Crushed
The employee was crushed between a barge and the wall of a lock.					
105.	11-15-78	Agricultural Prod.-Crops	Farm Employee	39	Crushed
The employee was pulling fence posts with an endloader when the machine rolled over on him.					
106.	11-15-78	Heavy Construction Contr.	Laborer	20	Electrocution
The employee was guiding a pipe into place. The boom of the dragline became energized and the electricity traveled through a cable the employee was touching.					
107.	11-16-78	Paper & Allied Prod.	Maintenance	28	Explosion
The employee was injured on 11-2-78 when a steam condensation tank he was repairing exploded. He died of severe head injuries on 11-16-78.					
108.	11-29-78	Railroad Transportation	Carman	52	Crushed
The employee was operating a crane at the site of a derailment. The crane, which was mounted on a railroad flatcar, overturned pinning him inside. He was injured on 11-28-78 and died on 11-29-78.					

STATE OF IOWA
SUMMARY OF WORK RELATED DEATHS
1978 - Concluded

<u>No.</u>	<u>Date</u>	<u>Industry</u>	<u>Occupation</u>	<u>Age</u>	<u>Cause of Death</u>
109.	12- 1-78	Local Government	Truck Driver	38	Crushed

The employee had pulled a truck out of the ditch. As he was unhooking the chain, one of the trucks started to roll. As he attempted to get out of the way, the truck ran over him.

110.	12- 6-78	Wholesale Trade-Durables	Asst. Whse. Spvr.	41	Heart Attack
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The employee suffered a heart attack while delivering merchandise

111.	12-11-78	Local Government	Custodian	63	Heart Attack
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The employee suffered a heart attack while chipping ice on the sidewalk.

112.	12-12-78	Wholesale Trade-Nondurables	Petro Delivery	62	Heart Attack
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The employee suffered a heart attack while loading a truck.

113.	12-15-78	Trucking & Warehousing	Truck Driver	21	Vehicle Accident
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The employee's truck was struck by a train.

114.	12-28-78	Agricultural Prod.-Crops	Farm Assistant	26	Struck By
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The employee was checking a payloader bucket which was propped up on the pole. The pole gave way and the bucket fell on the employee breaking his neck.



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