

Present Status of Japanese Industrial Safety and Health

2004 Edition



Japan Industrial Safety and Health Association

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I. Explanatory Notes

(1) Accident Data Sources

Statistics on occupational accidents in Japan are compiled and maintained by the Ministry of Health, Labour and Welfare (MHLW).

MHLW's sources include (1) Data from the Workmen's Accident Compensation Insurance Benefits (in Japan, workmen's accident compensation insurance is managed by MHLW), (2) Report of Workers Casualties, and (3) results of sample surveys conducted when necessary by MHLW of workplaces of a specified size and type.

The data included in this booklet comes mainly from Data from the Workmen's Accident Compensation Insurance Benefits mentioned above. Since 1999, we have included some data from the Report of Workers Casualties, also mentioned above. Please be aware that there is some discrete data caused by this change in statistical method.

(2) Definition of Terms

The meanings of the major terms used in this booklet are as follows.

Occupational accident

Death, injury or disease suffered by a worker due to causes attributable to buildings, equipment, raw materials, gases, vapors, dust and other phenomenon related to work or as a result of a worker's conduct while he/she is at work. Accidents while commuting to and from work are not included.

Serious accident

An accident that results in three or more deaths or injuries.

Annual accident rate per 1,000 workers = $\frac{\text{Total number of casualties in one year}}{\text{Average number of workers in one year}} \times 1,000$

Occupational diseases per 1,000 workers

See p. 28.

Frequency rate and severity rate

See p.15.

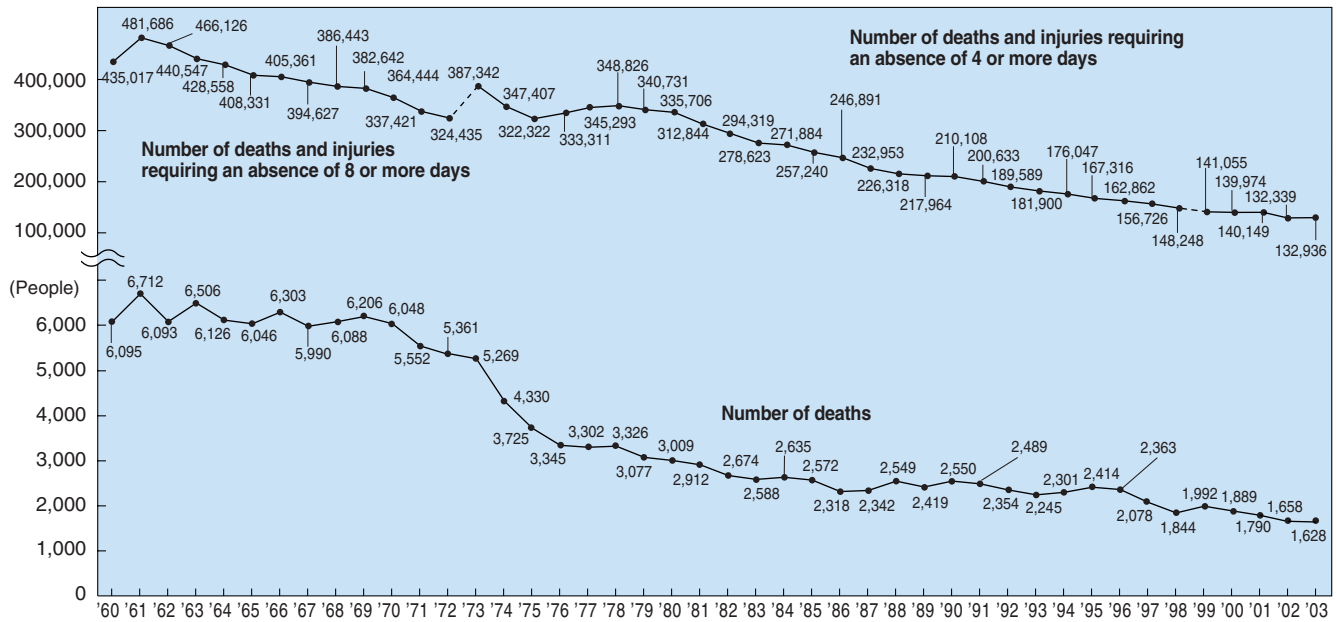
II. Data on Occupational Accidents and Diseases

1. Trends in Occupational Accidents

The number of deaths and injuries due to occupational accidents has declined since reaching a peak in 1961. In the three years from 1976, the number began to rise again, but then headed downward again in 1979.

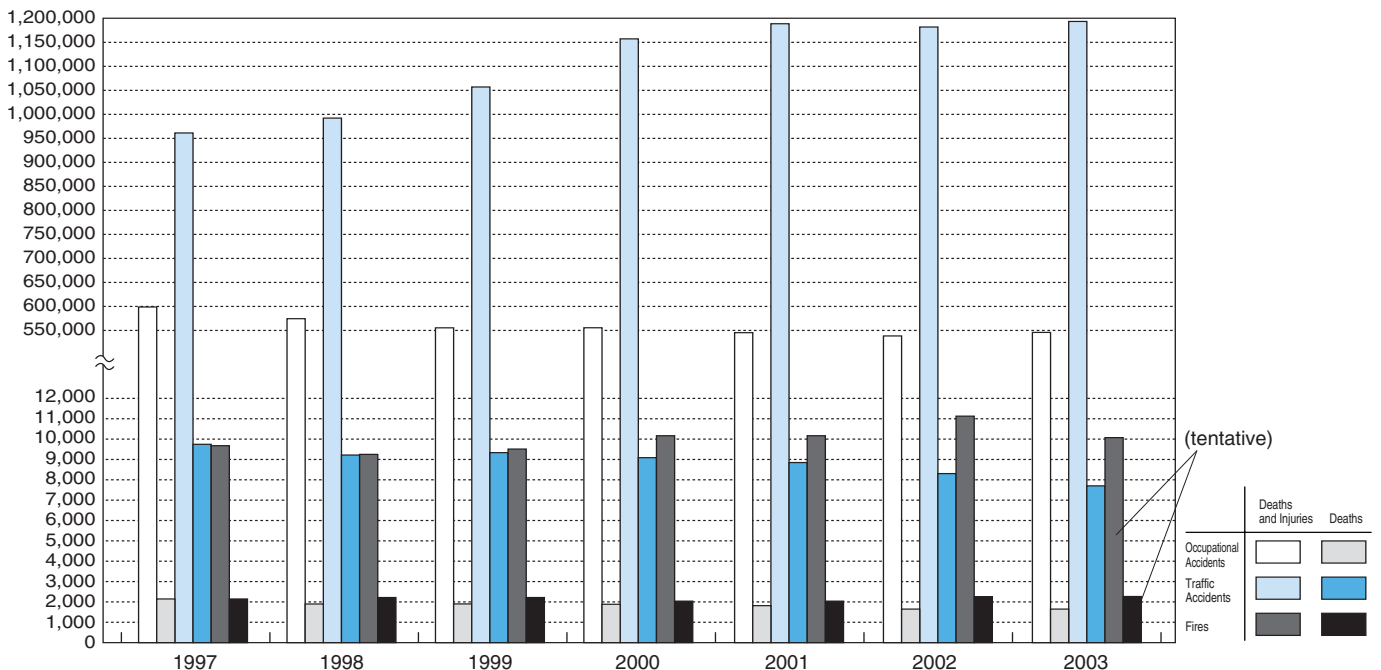
The number of deaths in 2003 stood at 1,628, less than 2,000 for the sixth consecutive year. This was 30 fewer deaths than the year before.

While the number continues to drop, the situation is such that about 1,600 workers a year die as a result of occupational accidents. The total number of victims of occupational accidents (the number of workers newly receiving workmen's accident compensation insurance benefits) is still about 540,000 annually. This indicates that the social and economic losses caused by occupational accidents are colossal.



Source: Figures for 1998 and before are extracted from Data from the Worker Accident Compensation Insurance Benefits; those for 1999 and later are from the Report of Workers Casualties.

Fig. 1 Changes in the Number of Deaths and Injuries for All Industries



Notes:

1. "Deaths and Injuries" from occupational accidents: New recipients of workmen's accident compensation insurance benefits.
2. "Deaths" from occupational accidents: based on the Report of Fatal Accidents.
3. "Traffic accidents": based on National Police Agency data.
4. Deaths and injuries from occupational accidents excludes those incurred while commuting.

Fig. 2 Deaths and Injuries Caused by Occupational and Traffic Accidents, and Fires

Annual accident rate per 1,000 workers and frequency rate

Severity rate

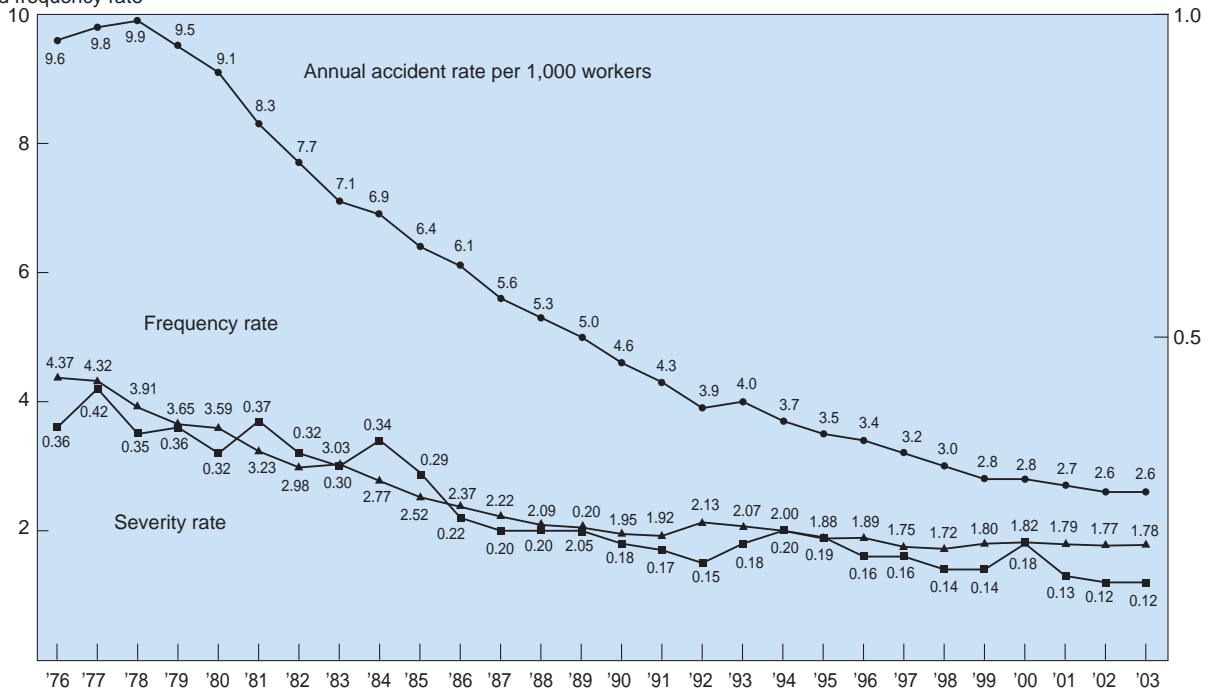


Fig. 3 Changes in Frequency Rate, Severity Rate and Annual Accident Rate per 1,000 Workers for All Industries

Source: Figures for frequency rates and severity rates are from the Survey on Industrial Accidents, and those for the annual accident rates per 1,000 workers are from Data from the Workmen's Accident Compensation Insurance Benefits.

Compared with the preceding year, the frequency rate for all industries increased by 0.01, and the severity rate was unchanged in 2003. The annual accident rate for 1,000 workers increased over last year in mining, forestry, road freight transportation and manufacturing, while it decreased in stevedoring at ports and harbors and construction.

Annual accident rate per 1,000 workers

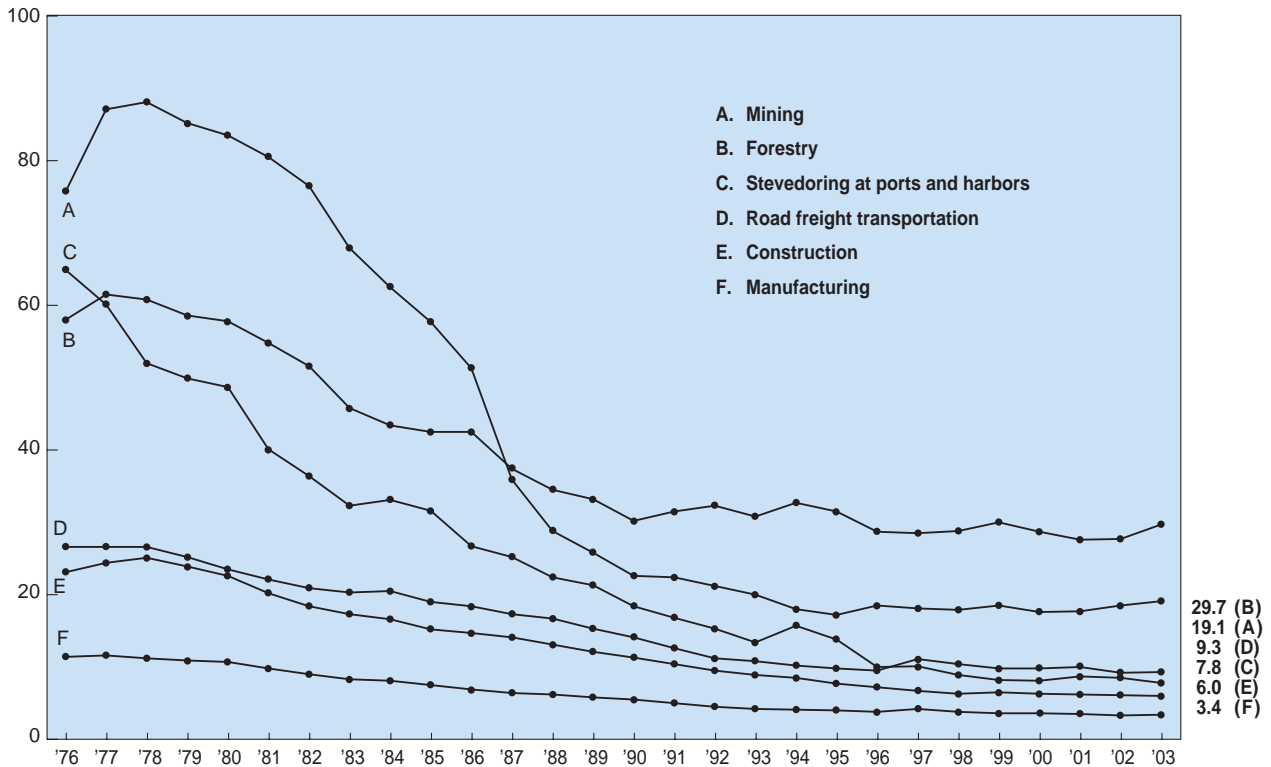


Fig. 4 Changes in Annual Accident Rate per 1,000 Workers by Industry

Source: Data from the Workmen's Accident Compensation Insurance Benefits.

2. Breakdown of Occupational Accidents

(1) Deaths by Industry

The number of deaths resulting from occupational accidents decreased by 30, or 1.8%, compared with the preceding year. By industry, the number of deaths increased by 18 (6.5%) in manufacturing and by 7 (3.0%) for overland cargo transportation. However, the number dropped by 59 (9.7%) in construction.

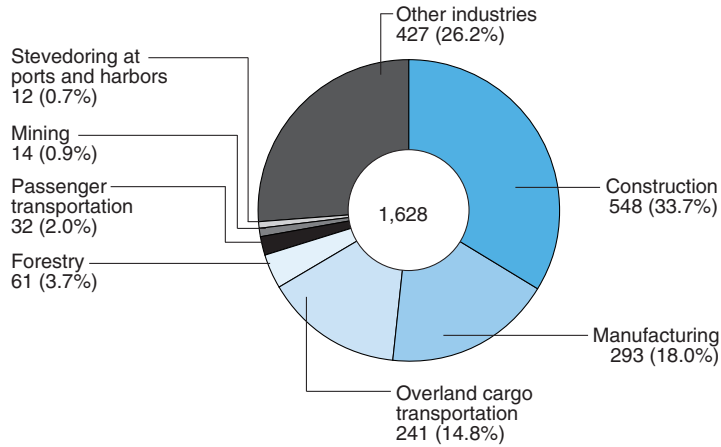


Fig. 5 Breakdown of Deaths by Industry (2003)

Source: Data from the Safety Division, Industrial Safety and Health Department, MHLW.

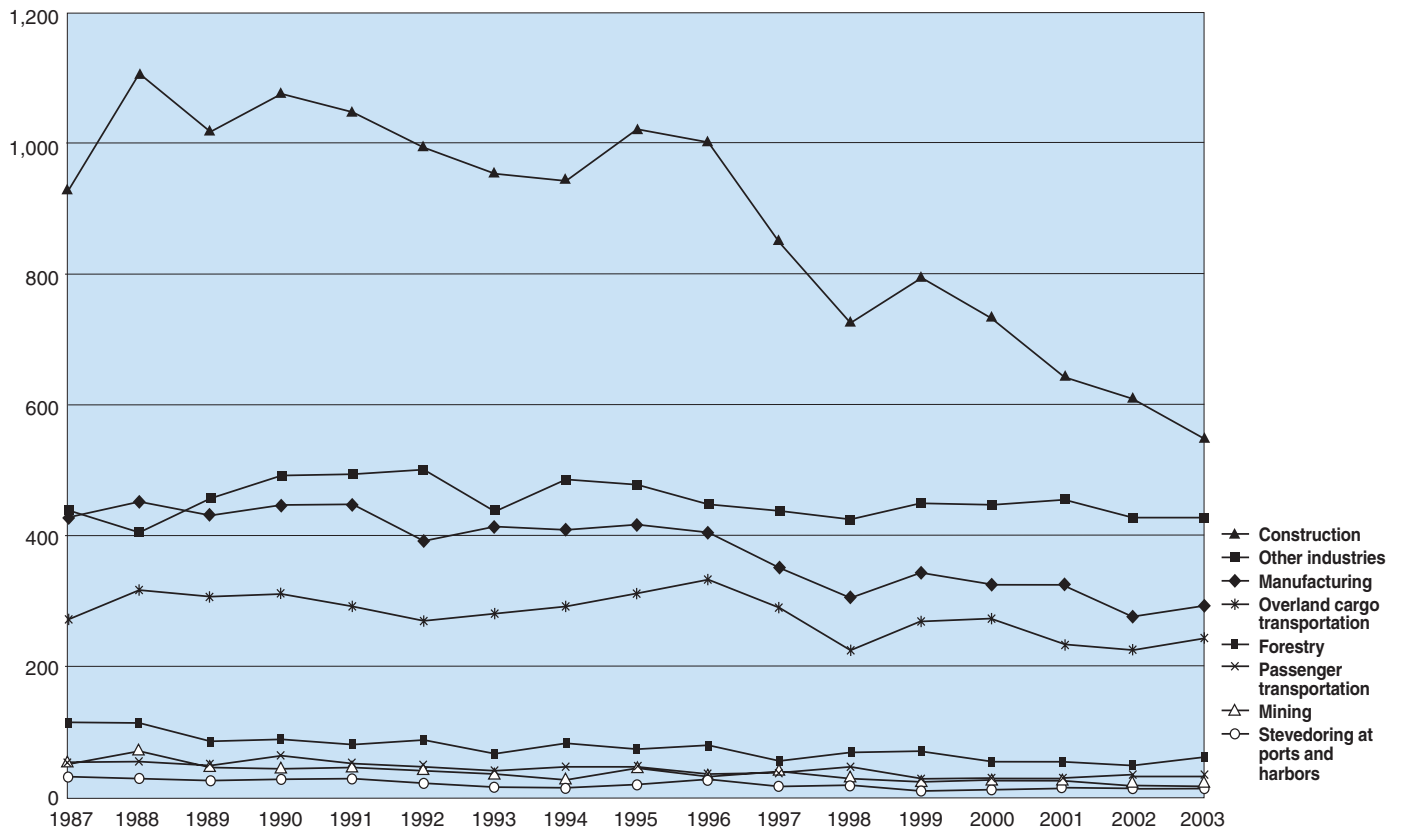


Fig. 6 Trends in the Number of Deaths by Industry (2003)

(2) Deaths and Injuries by Industry

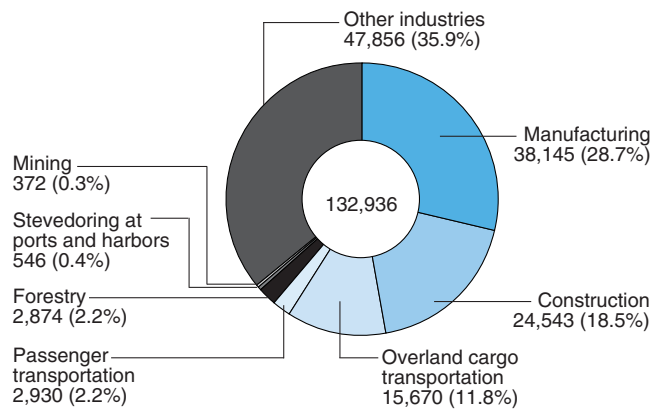


Fig. 7 Breakdown of Deaths and Injuries Requiring an Absence of 4 Days or More by Industry (2003)

Source: Report of Workers Casualties.

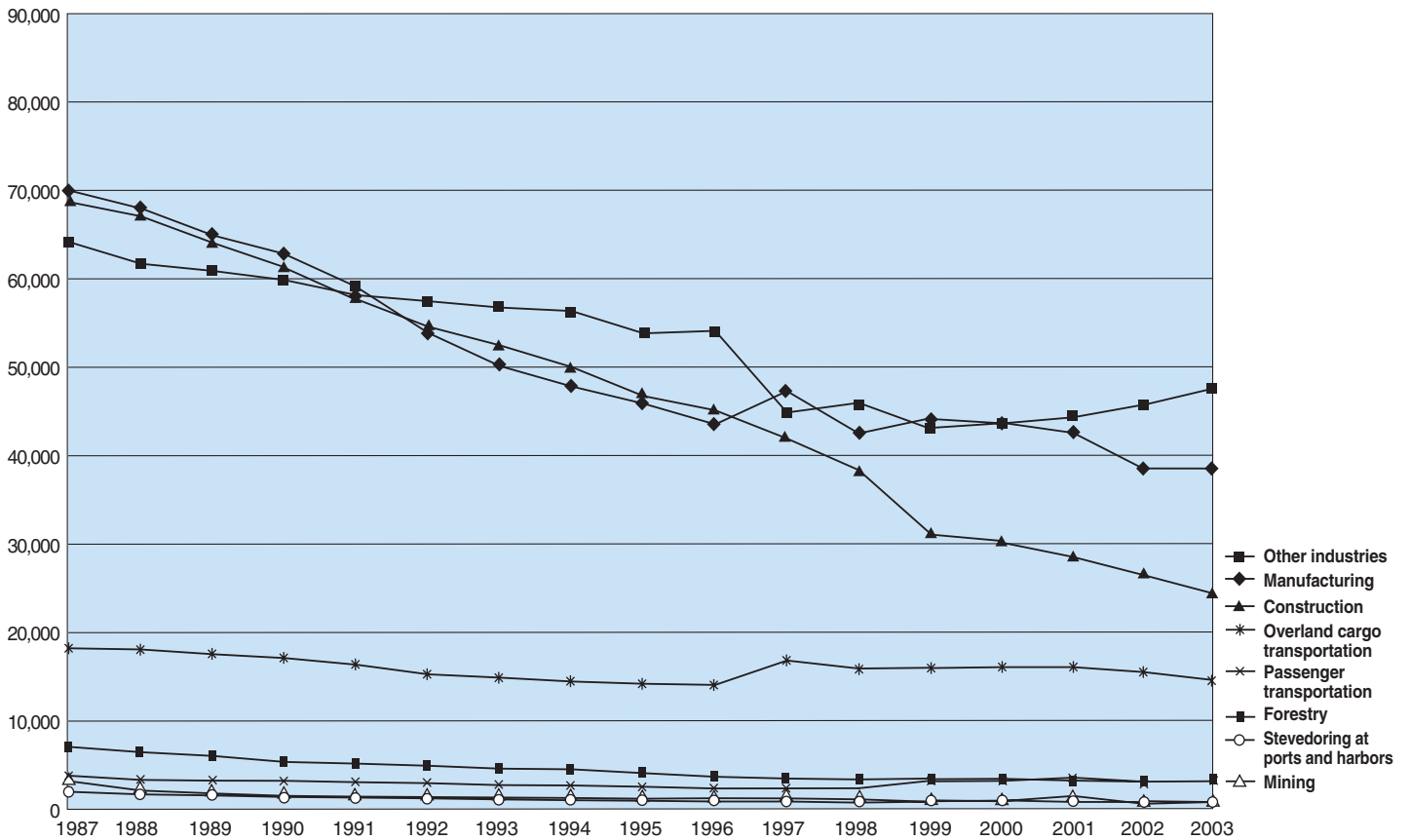


Fig. 8 Trends in the Number of Deaths and Injuries Requiring an Absence of 4 Days or More by Industry (2003)

(3) Deaths and Injuries by Scale of Workplace

Workplaces with less than 100 workers account for about 83% of all occupational deaths and injuries requiring an absence for 4 days or more.

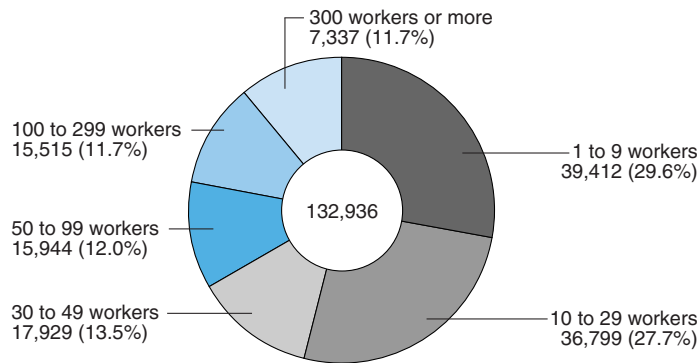


Fig. 9 Deaths and Injuries by Scale of Workplace (2003)

Source: Report of Workers Casualties.

(4) Annual Accident Rate per 1,000 Workers by Scale of Workplace

The annual accident rate per 1,000 workers by scale of workplace in manufacturing industries taken separately and for all industries in general show that the smaller the workplace, the higher the rate. This trend is most pronounced in manufacturing industries where the annual accident rate per 1,000 workers at workplaces with a workforce of one to nine people is about 9 times higher than at workplaces with 300 or more workers.

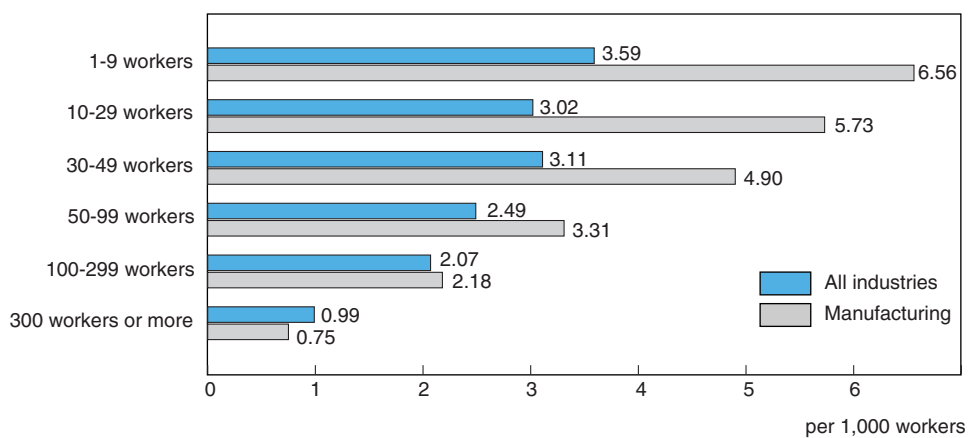


Fig. 10 Annual Accident Rate per 1,000 Workers by Scale of Workplace (2003)

Source: Data from Workmen's Accident Compensation Insurance Benefits.

(5) Deaths and Injuries by Type of Accident

The most common accident resulting in deaths and injuries in all industries was “a fall to lower level.” This was followed by “a fall on same level,” “caught in or compressed by equipment,” “cut or abrasion,” and “reaction or reckless move.” These five types of accident account for about 70% of all accidents.

For all industries, “traffic accidents” and “falls to lower level” accounted for more than half of all deaths.

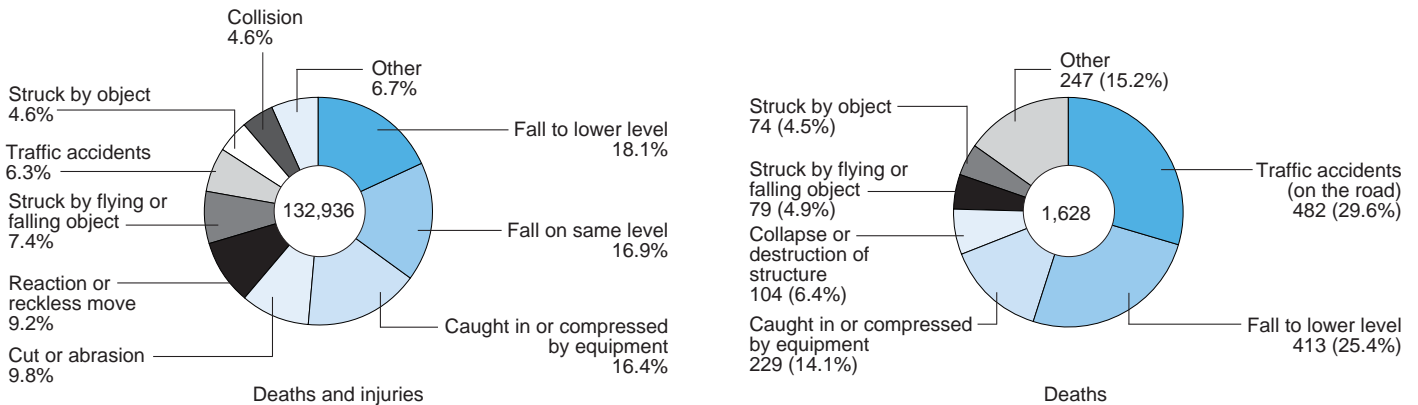


Fig. 11 Types of Accidents in All Industries (2003)

In the construction industry, “falls to lower level” were the most common accident, accounting for a large percentage of deaths and injuries.

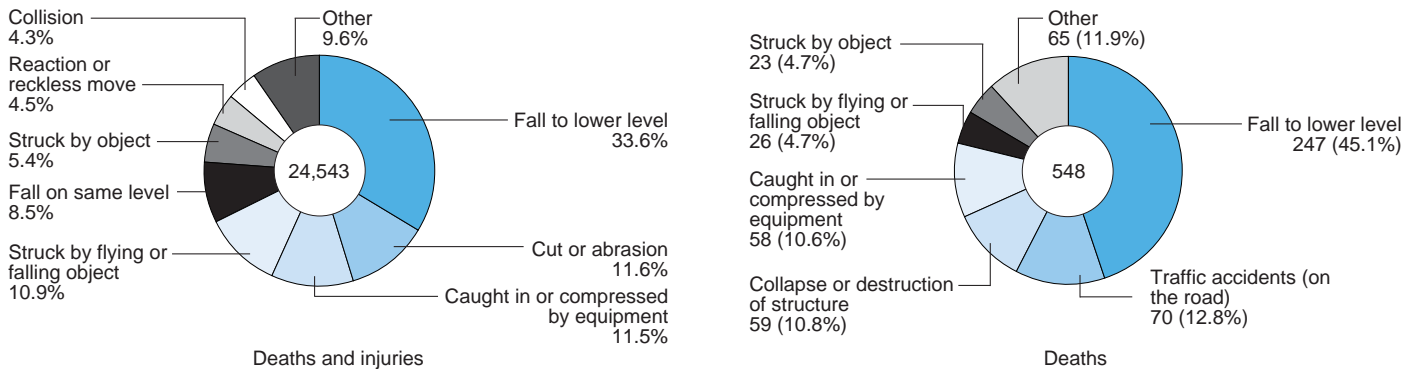


Fig. 12 Types of Accidents in the Construction Industry (2003)

In the manufacturing industry, “caught in or compressed by equipment” was the most common accident.

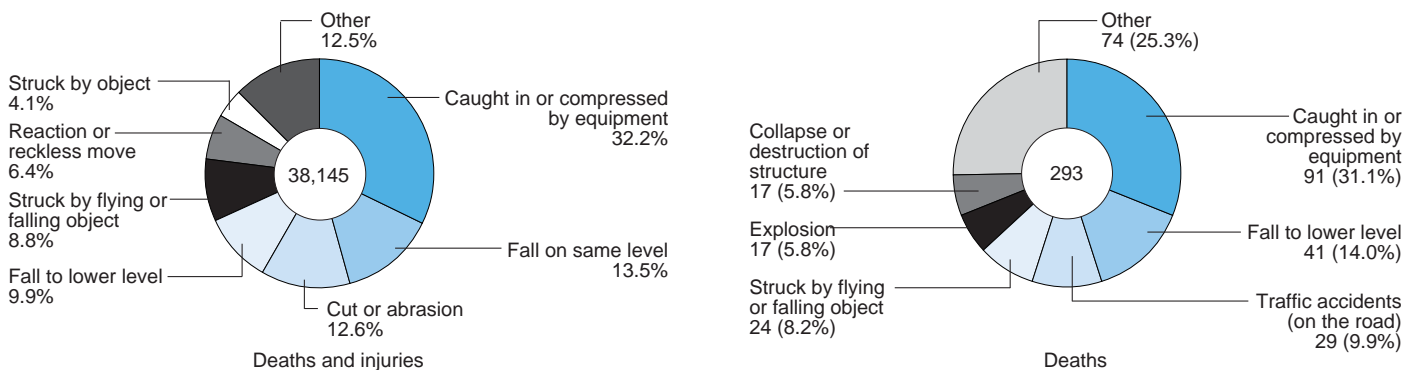


Fig. 13 Types of Accidents in the Manufacturing Industry (2003)

Source: For deaths and injuries: Report of Fatal Accidents. For deaths: Data from the Safety Division, MHLW.

(6) Deaths and Injuries by Cause of Accident

The highest number of occupational accidents resulting in deaths and injuries on an all-industry basis was caused by “temporary facilities, buildings, structures, etc.” This was followed by “power-driven carriers” and “materials.” Fatal accidents on an all-industry basis were mostly caused by “power-driven carriers,” “temporary facilities, buildings, structures, etc.” and “vehicles.”

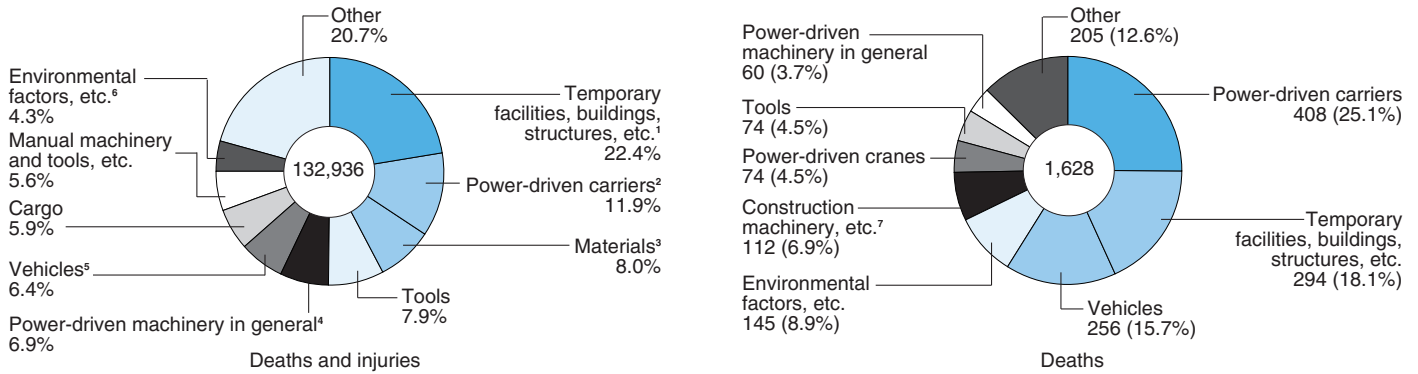


Fig. 14 Cause of Accidents in All Industries (2003)

In the construction industry, “temporary facilities, buildings, structures, etc.” caused the largest number of accidents. In addition, the percentage of accidents caused by “materials,” and “tools” was higher than in any other industry. “Temporary facilities, buildings, structures, etc.” caused 38% of the fatal accidents, overwhelmingly more than any other reason.

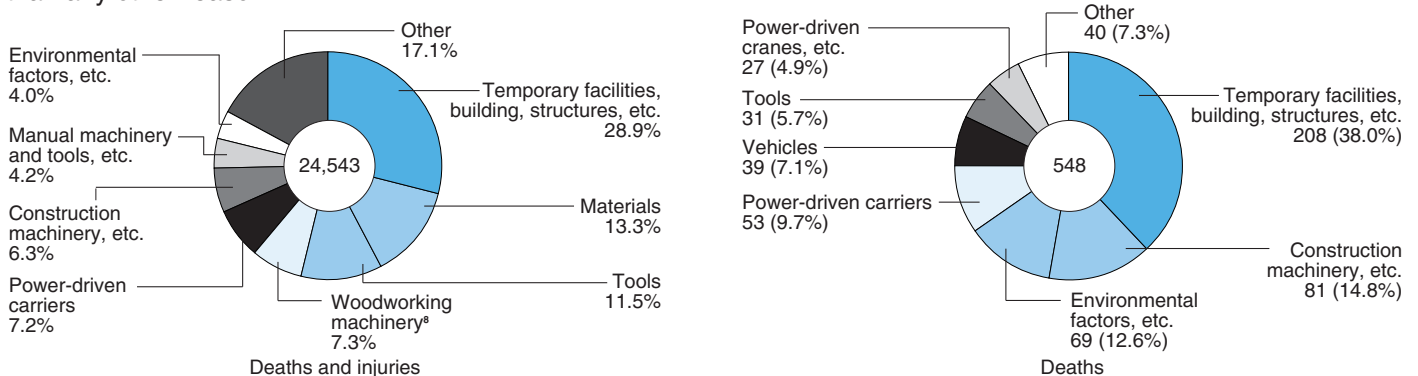


Fig. 15 Cause of Accidents in the Construction Industry (2003)

In the manufacturing industry, the most common cause of occupational accidents was “power-driven machinery in general,” followed by “temporary facilities, buildings, structures, etc.” and “materials.” The percentage of accidents caused by “power-driven machinery in general” and “materials” was higher than the all-industry average. In manufacturing, the percentage of deaths caused by “power-driven carriers” and “power-driven machinery in general” was high.

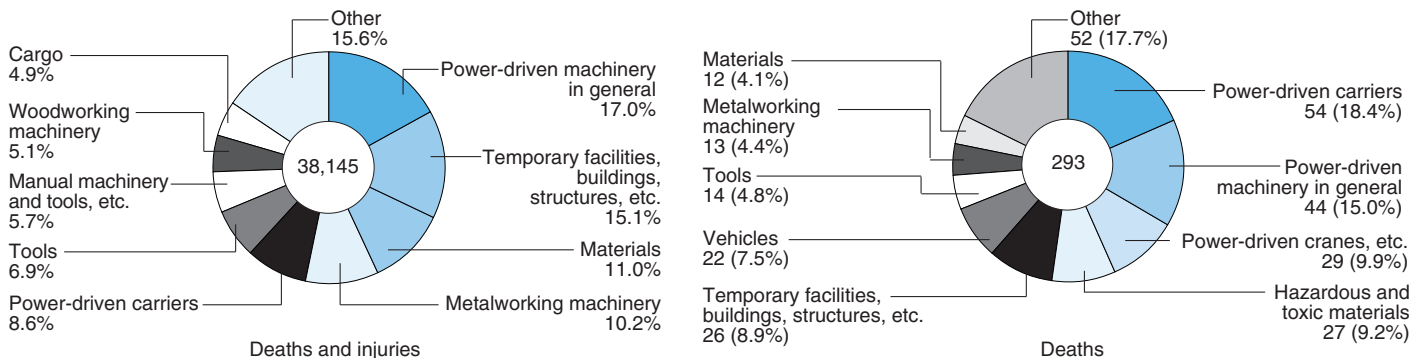


Fig. 16 Cause of Accidents in the Manufacturing Industry (2003)

Source: For deaths and injuries: Report of Fatal Accidents. For deaths: Data from the Safety Division, MHLW.

- Notes:
1. Scaffolds, stairs, bridges, etc.
 2. Trucks, forklifts, conveyors, etc.
 3. Metallic materials, wood, glass, etc.
 4. Power-driven presses, roll mixers, etc.
 5. Passenger cars, railroad cars, aircraft, etc.
 6. Natural ground, rivers, extraordinary air pressure, etc.
 7. Bulldozers, drag shovels, pile drivers, etc.
 8. Circular saws, band saws, planing and moulding machines, etc.

(7) Occupational Accidents Caused by Machinery and Equipment

A total of 41,384 workers were involved in occupational accidents caused by machinery and equipment in 2003, accounting for 31.1% of occupational accidents that year. These figures indicate that such accidents still occur frequently.

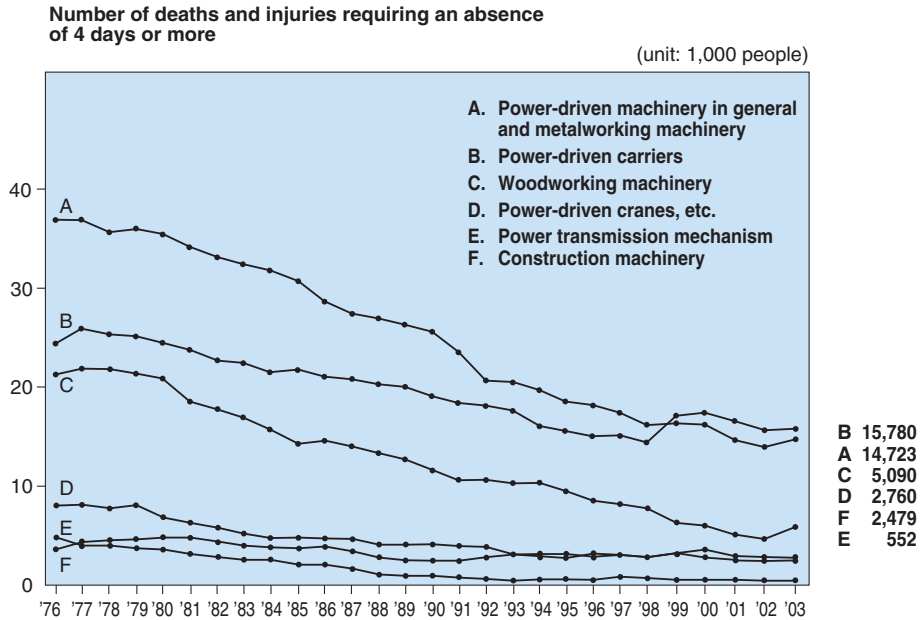


Fig. 17 Trends in the Number of Deaths and Injuries due to Machinery and Equipment

Source: (1976-1998) Data from Worker Accident Compensation Insurance Benefits.
(1999-2003) Report of Workers Casualties.

(8) Occupational Accidents in Tertiary Industry

In conjunction with the development of service industries, the workforce in tertiary industries is increasing. As a result, the rate of accidents in tertiary industries is on the rise. Recently, accidents that result in death and injury (requiring an absence for 4 days or more) in tertiary industries accounted for about 40% of all accidents.

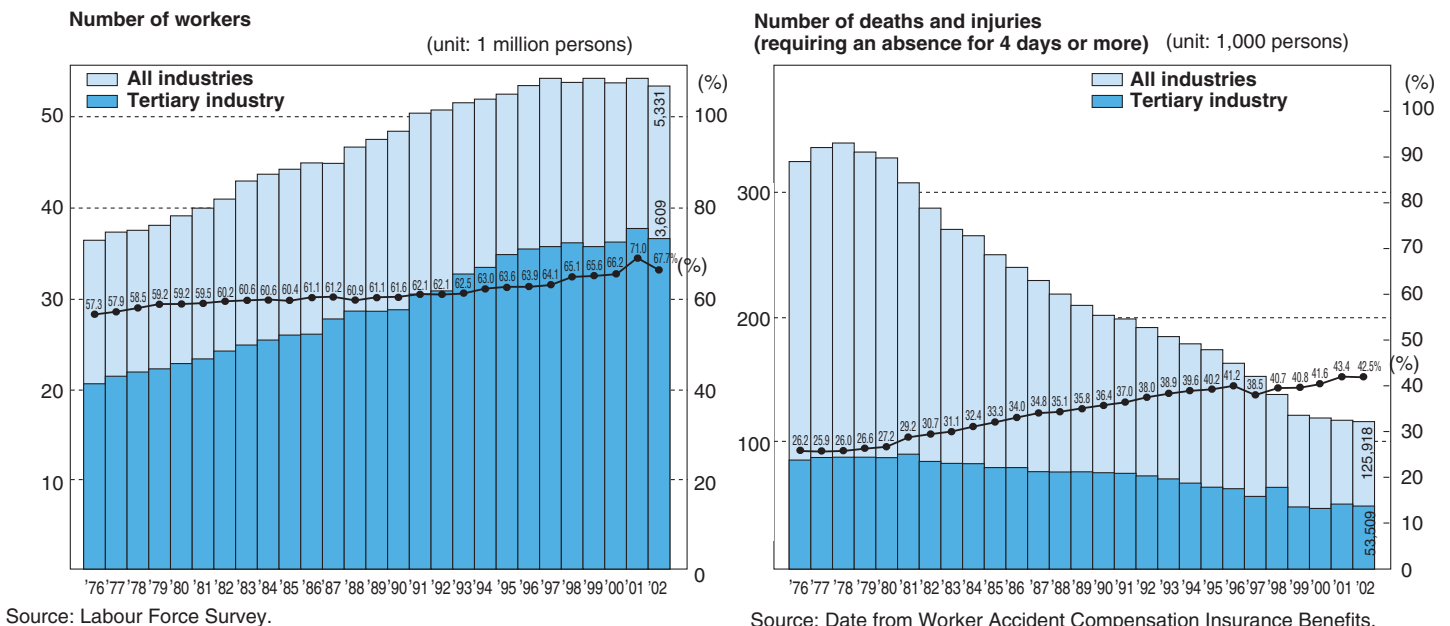


Fig. 18 Trends in the Number of Workers' Deaths and Injuries in Tertiary Industries

(9) Deaths and Injuries by Age Group

When the number of deaths and injuries requiring an absence of 4 days or more for all industries in 2003 is classified by age group, the over-60s category accounts for about 15% (19,452 workers).

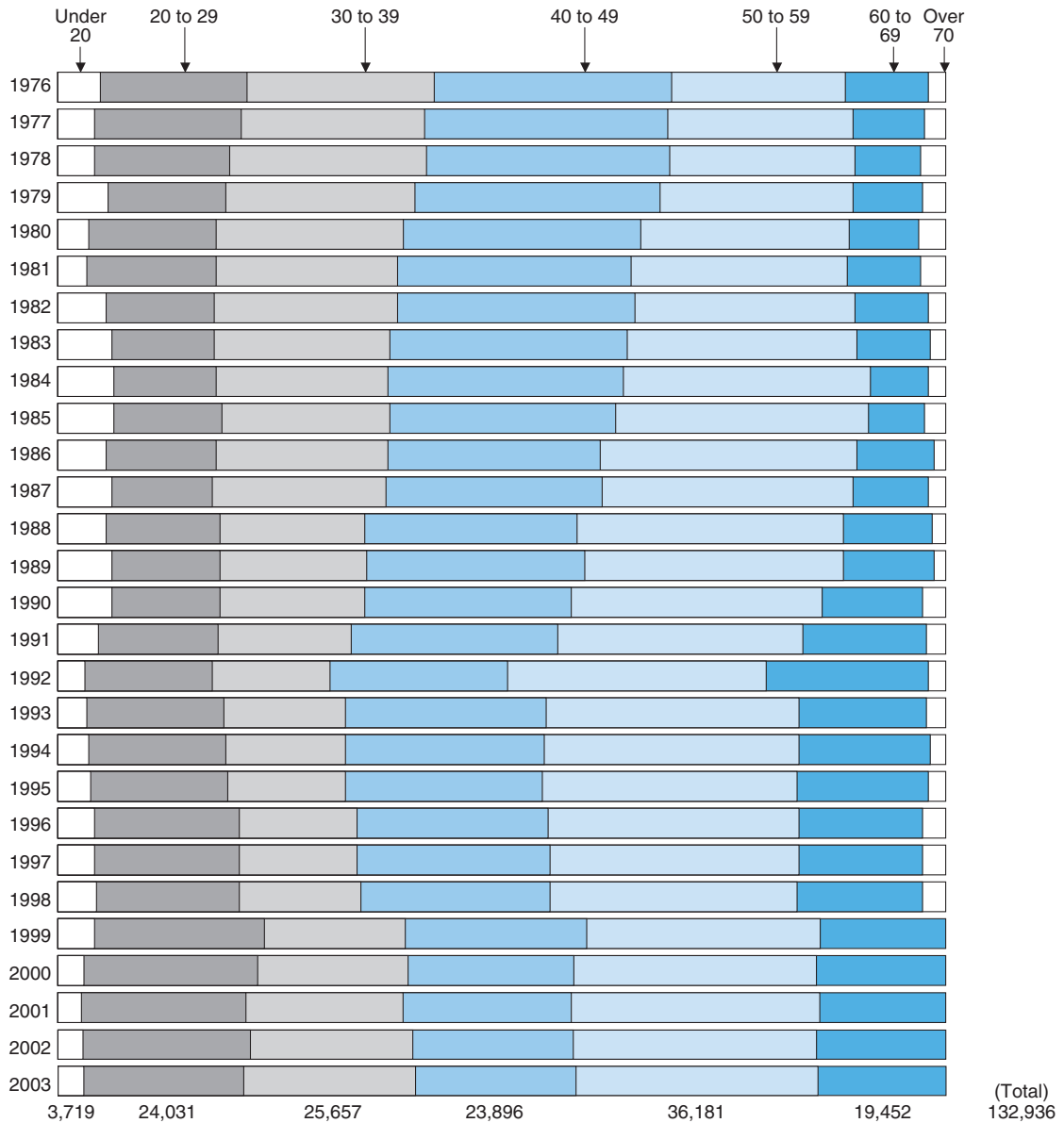


Fig. 19 Deaths and Injuries by Age of Worker

Source: (1976-1998) Data from the Workmen's Accident Compensation Insurance Benefits.
(1999-2003) Report of Workers Casualties.

Table 1 Accident Frequency Rates and Severity Rates by Industry (2002-2003)

Classification Industry	2002		2003							
	Frequency rate	Severity rate	Frequency rate							Severity rate
			Death and injury	Death	Permanent total disability	Permanent partial disability	Temporary disability			
Absence from work of 8 days or more	Absence from work of 4-7 days	Absence from work of 1-3 days								
All industries	1.77	0.12	1.78	0.01	0.00	0.03	1.16	0.21	0.37	0.12
Forestry	—	—	—	—	—	—	—	—	—	—
Forestation	—	—	—	—	—	—	—	—	—	—
Mining	0.86	0.03	1.03	0.08	0	0.08	0.64	0.08	0.16	0.75
Metal	2.31	0.06	1.33	0	0	0	0.80	0.27	0.27	0.04
Coal	—	—	—	—	—	—	—	—	—	—
Crude oil and natural gas	0.00	0.00	0	0	0	0	0	0	0	0
Nonmetallic minerals	0.49	0.02	1.01	0.13	0	0.13	0.63	0	0.13	1.18
Construction (General)	1.04	0.28	0.51	0.01	0	0.02	0.40	0.03	0.05	0.06
Civil engineering	1.78	0.78	1.54	0.07	0	0.05	0.83	0.03	0.56	0.62
Building work	0.91	0.20	1.63	0.02	0	0.02	0.78	0.13	0.69	0.16
Manufacturing	0.98	0.12	0.98	0.00	0.00	0.05	0.61	0.08	0.23	0.11
Food, drink, feed and tobacco	2.77	0.25	2.72	0	0	0.13	1.79	0.18	0.62	0.19
Textiles (excluding clothing and other textile products)	1.53	0.43	1.52	0	0	0.10	0.85	0.16	0.41	0.19
Clothing and other textile products	0.83	0.04	0.95	0	0	0	0.73	0.02	0.19	0.02
Lumber and wood products (excluding furniture)	3.20	0.42	2.63	0	0	0.12	1.92	0.09	0.50	0.11
Furniture and fixtures	1.70	0.20	1.45	0	0	0.19	0.86	0.08	0.31	0.13
Pulp, paper and paper products	1.67	0.11	1.30	0.01	0.01	0.10	0.92	0.09	0.18	0.20
Publishing, printing and related industries	1.15	0.06	1.03	0.00	0	0.04	0.69	0.08	0.22	0.17
Chemicals	0.83	0.07	0.92	0	0	0.02	0.52	0.11	0.26	0.07
Chemical fertilizers	0.00	0.00	0.85	0	0	0	0.63	0.21	0	0.03
Inorganic chemical products	0.85	0.02	1.30	0	0	0.03	0.74	0.05	0.49	0.03
Organic chemical products	0.62	0.08	0.93	0	0	0.04	0.50	0.24	0.15	0.08
Chemical fiber products	0.51	0.04	0.28	0.03	0	0.03	0.22	0	0	0.31
Medical supplies	0.97	0.14	0.90	0	0	0.01	0.54	0.08	0.27	0.03
Other chemical products	0.64	0.01	0.73	0	0	0.06	0.37	0.08	0.22	0.07
Petroleum and coal products	0.41	0.02	0.33	0.05	0	0	0.14	0.05	0.09	0.36
Rubber products	1.06	0.17	0.93	0.02	0	0.13	0.51	0.06	0.22	0.24
Tanned leather and fur products	2.25	0.19	0.77	0	0	0	0.38	0.19	0.19	0.01
Ceramics, earthenware and stone products	1.16	0.27	1.40	0.03	0.01	0.04	0.86	0.13	0.32	0.45
Iron and steel	0.94	0.40	0.89	0.04	0	0.06	0.62	0.04	0.13	0.37
Nonferrous metal	1.12	0.20	0.75	0	0	0.05	0.49	0.07	0.14	0.03
Metal products	1.08	0.18	1.11	0.01	0	0.05	0.78	0.12	0.15	0.13
General machinery and equipment	0.77	0.11	0.79	0.00	0.00	0.04	0.44	0.09	0.21	0.05
Electrical machinery and equipment	0.36	0.03	0.35	0	0	0.01	0.18	0.04	0.13	0.01
Transportation equipment	0.57	0.08	0.56	0.01	0.00	0.05	0.36	0.05	0.09	0.13
Precision machinery and instruments	0.50	0.05	0.55	0	0	0.02	0.35	0.04	0.14	0.01
Weapons, etc.	0.99	0.03	1.02	0.01	0	0.03	0.65	0.08	0.26	0.11
Transportation and communications	4.42	0.19	4.43	0.01	0.00	0.01	3.06	0.63	0.72	0.22
Railroad transportation	0.82	0.06	0.87	0	0	0.01	0.57	0.15	0.14	0.02
Road passenger transportation	3.98	0.22	3.71	0.00	0.01	0.01	2.95	0.38	0.35	0.23
Road cargo transportation	3.34	0.15	3.07	0.02	0	0.03	2.19	0.24	0.60	0.23
Water transportation	1.62	0.09	3.55	0	0	0	1.33	0	2.22	0.04
Air transportation	3.74	0.07	3.01	0	0	0	2.31	0.60	0.10	0.06
Warehousing	2.92	0.06	3.00	0	0	0.05	1.72	0.48	0.75	0.07
Services related to transportation	1.54	0.15	1.42	0.01	0	0.01	0.96	0.13	0.31	0.15
Postal services	10.55	0.02	12.14	0.03	0	0.01	7.76	2.16	2.19	0.44

Classification Industry	2002		2003							
	Frequency rate	Severity rate	Frequency rate							
			Death and injury	Death	Permanent total disability	Permanent partial disability	Temporary disability			Severity rate
Absence from work of 8 days or more	Absence from work of 4-7 days	Absence from work of 1-3 days								
Electricity, gas and water supply	0.64	0.00	0.58	0	0	0.00	0.41	0.07	0.10	0.01
Electric power supply	0.20	0.00	0.33	0	0	0	0.22	0.03	0.07	0.01
Gas supply	1.36	0.00	0.96	0	0	0	0.71	0.12	0.12	0.03
Water supply	1.65	0.00	1.29	0	0	0.03	0.93	0.15	0.18	0.04
Wholesale and retail trade	1.82	0.00	1.91	0.00	0	0	1.10	0.26	0.54	0.04
Wholesale	0.87	0.00	0.93	0	0	0	0.57	0.11	0.24	0.02
Merchandise wholesale	0.12	0.00	0.10	0.00	0	0	0.03	0	0.07	0.00
Retail	2.54	0.00	2.76	0	0	0	1.57	0.40	0.79	0.06
Merchandise retail	2.70	0.00	2.63	0	0	0	1.46	0.38	0.79	0.04
Retail of furniture, home furnishings	1.73	0.00	2.21	0.05	0	0	1.00	0.26	0.89	0.43
Services	3.83	0.01	3.75	0.01	0	0.01	2.58	0.45	0.70	0.19
Hotels	3.50	0.00	3.05	0	0	0	1.62	0.45	0.99	0.05
Laundry	3.63	0.03	3.66	0	0	0.06	2.53	0.38	0.70	0.12
Golf courses	6.34	0.00	6.20	0.05	0	0	5.37	0.26	0.52	0.61
Automobile maintenance	0.42	0.00	0.62	0	0	0	0.62	0	0	0.03
Machinery repair	0.68	0.02	0.42	0.02	0	0	0.26	0.09	0.04	0.17
Building management	3.86	0.01	3.09	0.01	0	0.02	2.45	0.19	0.42	0.18
Waste disposal (including industrial waste disposal)	13.43	0.04	12.84	0.04	0	0.04	7.91	2.90	1.95	0.57

Notes:

- This table contains findings of a survey performed by the Statistics and Information Department of the Ministry of Health, Labour and Welfare, on the rates of deaths and injuries requiring an absence of 1 day or more in the calendar years 2002 and 2003 at about 14,000 workplaces which employed more than 100 workers and belonging to those lines of industry which are enumerated in this table.
- The lines of industry enumerated in this table are in line with the Japan Standard Industry Classification, excluding the construction and transportation industries.
- "Construction (General)" covers construction sites for which the contract price exceeds ¥190 million or where the approximate premiums under the Workmen's Accident Compensation Insurance were in excess of ¥1.6 million (As for constructions that were put under contract on or before March 31, 1999, "Construction (General)" covers construction sites for which the contract price exceeds ¥120 million or where the approximate premiums under the Workmen's Accident Compensation Insurance were in excess of ¥1 million). However, it does not cover projects for the installation of machinery and appliances, electric work and plumbing.
- The totals for "All industries" are those of the surveyed industries. The totals for the surveyed industries do not include "Construction (General)."
- The accident frequency rate is expressed in terms of the number of deaths and injuries in occupational accidents per 1 million work-hours in the aggregate. The rate is gained by dividing the number of deaths and injuries (multiplied by 1 million) in occupational accidents that occurred during the survey period by the aggregate number of work-hours for all workers who were exposed to risks in the same period.

$$\text{Accident frequency rate} = \frac{\text{Number of deaths and injuries in occupational accidents}}{\text{Aggregate number of work-hours}} \times 1,000,000$$

- The accident severity rate is expressed in terms of the number of workdays lost per 1,000 work-hours in the aggregate. The rate is gained by dividing the number of workdays lost (multiplied by 1,000) in occupational accidents that occurred during the survey period by the aggregate number of work-hours for all workers who were exposed to risks in the same period.

$$\text{Accident severity rate} = \frac{\text{Number of workdays lost}}{\text{Aggregate number of work-hours}} \times 1,000$$

Number of workdays lost:

- Deaths: 7,500 days
- Workdays lost with physical disorders

Grade of physical disorder	1~3	4	5	6	7	8	9	10	11	12	13	14
Number of workdays lost	7,500	5,500	4,000	3,000	2,200	1,500	1,000	600	400	200	100	50

- Workdays lost without physical disorders

$$\text{Number of workdays lost} = \text{Number of days off} \times \frac{300}{365}$$

- The rates have been rounded to the second decimal point.
- "0" indicates that no occupational accidents occurred. "0.00" denotes a rate less than 0.005.

3. Serious Accidents

(1) Trends in Serious Occupational Accidents

The number of serious occupational accidents (accidents that involved three or more people at the same time) peaked at 480 in 1968, and then followed a downward trend. However, since 1985, there has been an increase in such accidents.

The year 2003 witnessed 249 serious occupational accidents. This was an increase of 18 cases or 7.8% from the previous year. A total of 1,720 workers were killed or injured in those accidents, an increase of 569 people or 49.4%. The number of deaths was 90, a decrease of 1 person or 1.1%.

By industry, the construction and manufacturing industries accounted for more than 50% of all serious accidents.

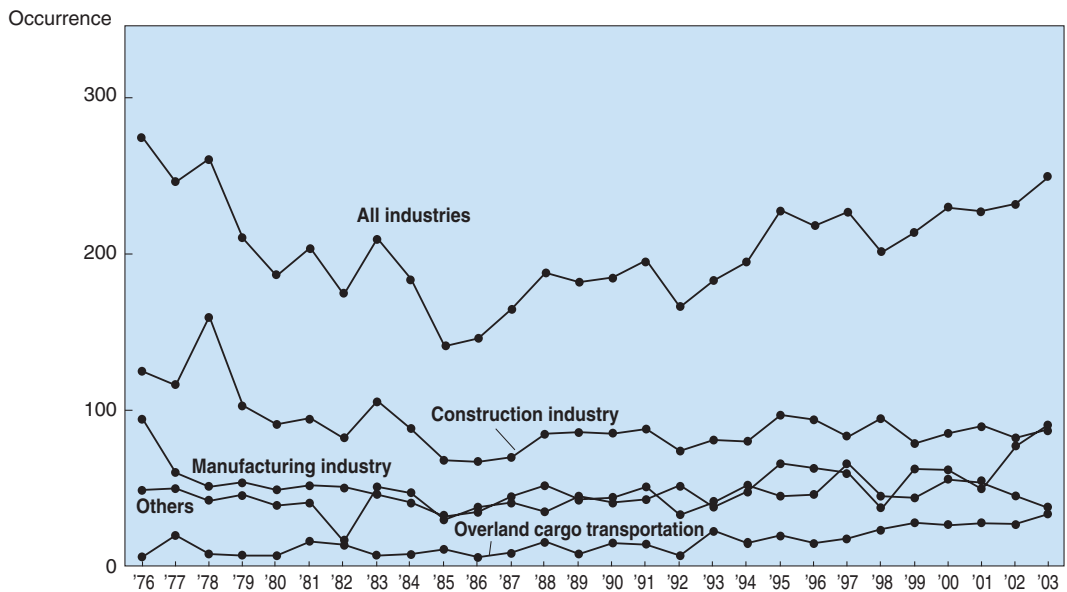


Fig. 20 Trends in the Number of Serious Accidents by Industry

Source: Data from the Labour Standards Bureau, MHLW.

(2) Cause of Serious Accidents

When serious occupational accidents in 2003 are classified by cause, traffic accidents lead the list with 120 cases, followed by “poisoning and chemical injuries” at 54, “fires or contact with hot objects” at 13 and “explosions” at 13.

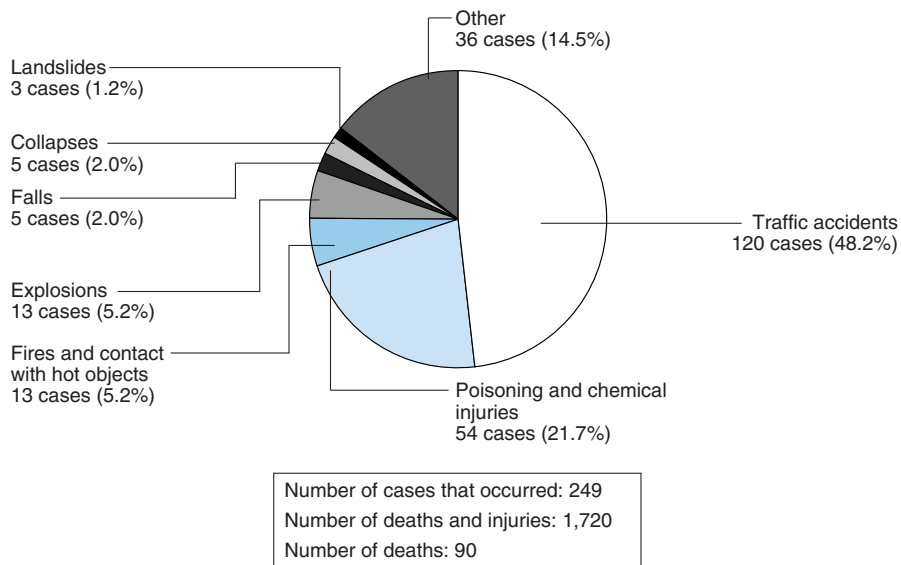


Fig. 21 Cause of Serious Accidents

(3) Outline of Serious Accidents in 2003 (January-December)

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Manufacturing	Struck by objects	<Iron and steel> Workers were operating an overhead traveling crane. Suddenly, the hoist of the crane fell, killing 1 worker and leaving 3 others injured.	4	1
	Collapses	<Lumber and wood products> Four workers were injured after they were pinned under 4 laminated lumber boards when the boards fell like dominos as they were being polished.	4	0
		<Metal products> A crane operator died and 2 others were injured when a gust of wind toppled 3 overhead cranes that were moving steel pipes outside a factory. The cab of one of the cranes fell 9 meters, and the crane's operator could not survive.	3	1
		<Ship and boat building and repairing> Workers on a scaffold were mounting the rudder of a ship under repair with using 2 chain blocks. Suddenly, one of the chain blocks broke because the connection between the chain block's metal structure and the hook ruptured. The rudder swung violently, hitting and toppling the scaffold.	3	0
	Contact with hot objects or substances	<Iron and steel> A worker died and 2 others were burned at a steel mill. A ladle containing molten steel was inappropriately placed on the tray of a measuring scale, and the molten steel spilled over the workplace.	3	1
	Exposure to harmful substances	<Chemicals and allied products> When a worker was mixing material to produce red lead paint, the material became hot and began to emit white smoke. Workers who attempted to suppress the white smoke complained of sore eyes and received medical treatment.	3	0
		<Chemicals and allied products> Workers were sterilizing work uniforms and tools in the bio-clean room of a factory. They complained of sore eyes and sore throats when ethylene oxide gas leaked from a sterilizer because the door packing was faulty while they were filling the sterilizer with ethylene oxide gas.	3	0
		<Electric machinery or apparatus> After complaining of headaches and nausea, 9 workers were rushed to the hospital, where they were diagnosed with CO-poisoning. No ventilation system, such as a flue, had been built to accompany a space heater that had just been installed.	9	0
		<Food products> While fast-freezing food in a food processing facility, the pipe near the ceiling which supplies the refrigerant to the freezer suddenly broke, and a large amount of refrigerant leaked out. Workers in the plant suffered anoxia.	43	0
		<Food products> Hospital employees suffered CO-poisoning when they were using a LP gas dishwasher, a cooking stove and a gas rice cooker in the hospital kitchen because the ventilator had not been switched on.	6	0
		<Food products> Five workers who were baking cakes suffered CO-poisoning from imperfect combustion of a gas oven.	5	0
		<Food products> Exhaust fumes containing carbon monoxide from a small boiler installed in a boiler room seeped into the cooking room, via a smoke duct, where workers were washing dishes. The workers complained of nausea, headaches and numbness of the limbs and were rushed to a hospital where they were diagnosed with CO-poisoning.	5	0
		<Food products> While a solution of sodium hypochlorite used for disinfectant was being transferred from a 20-liter container to a 10-liter container, a pH-adjustment agent, mainly consisting of phosphoric acid, was mistakenly poured in the 10-liter container because the both 20-liter containers were of the same shape. The phosphoric acid reacted with the sodium hypochlorite that remained in the 10-liter container, generating chlorine gas. Two workers on the job, and 2 others nearby, suffered sore throats and were rushed to the hospital.	4	0

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Manufacturing	Exposure to harmful substances	<Stone, clay, and glass products> While workers were molding glassware, the cooling water from the pipe of a vacuum furnace leaked, generating a carbon monoxide leak from the safety valve on the vacuum furnace. Workers in the room with the furnace and those in the next room inhaled carbon monoxide, suffering CO-poisoning.	9	0
	Poisoning and chemical injuries	<Electric machinery or apparatus> Workers suffered chemical burns on their wrists, eyebrows, necks, etc. when weighing, mixing and stirring a reagent (1,4-butanediol diacrylate) to be used for coating the film of an electronic display. The reagent leaked into the workers' gloves from the top, and their eyebrows were affected when they took off their eye protectors before removing their contaminated gloves.	3	0
		<Textile> Five workers and 1 resident were rushed to a hospital after complaining of sore throats. They inhaled chlorine gas when a drum containing chemicals (sodium nitrobenzene sulfonate, citric acid, sodium thiosulfate, sodium dichloroisocyanurate, etc.) that was stored in a factory warehouse fell, releasing chemicals that ignited as a result of chemical reaction.	5	0
		<Other products> A worker who delivered sodium hypochlorite to a business establishment, the employees of the establishment and passersby were poisoned when the worker poured the sodium hypochlorite into a sulfuric acid tank by mistake, which resulted in accidental release of chlorine gas.	5	0
	Explosions and bursts	<Chemicals and allied products> Workers were remodeling parts of a cooling system at a LPG plant. Suddenly, the filter of the cooling system broke, and compressed air gushed out. Five workers were injured.	5	0
		<Electric machinery or apparatus> Five workers were injured when cell phones were being polished, generating dust which gathered in the duct of a dust collector, sparking an explosion.	5	0
		<Iron and steel> Seventeen workers were injured when a carbon monoxide holder (a cylindrical tower about 50 meters high and about 30 meters in diameter where carbon monoxide generated in a coke oven is stored) exploded when being chilled in a heat exchanger.	17	0
		<Iron and steel> Four workers were injured after an explosion occurred in a third blast furnace in an ironworks plant when they were closing the furnace tank cover after they had released all the gas during a regular inspection and repair.	4	0
		<Metal products> Welding gas collected in the plant, and it exploded for an unknown reason, leaving 8 workers pinned under flying steel sheets.	8	0
		<Metal products> When workers were building a bonfire during break time, one poured thinner on the fire to make the wood burn better. The thinner can caught fire and exploded.	4	0
		<Metal products> A worker mistakenly poured ethanol into a bottle containing nitric acid and then closed it in an examination process of a steel plate which had been welded. Suddenly, the bottle exploded, and several workers including him were injured by flying glass fragments.	4	0
<Ship and boat building and repairing> A worker died and four others were injured following an explosion in the engine room of a newly-built ship while they were cutting an object with acetylene gas in the nearby pump room.		5	1	
<Other products> An explosion occurred at a gunpowder mill, and a powder magazine went up in flames, blowing up a powder mixing mill and a powder storage facility.		12	9	
Fires	<Food products> A fire broke out in a 3-story building of a lunch caterer, completely gutting the building, and 4 people were trapped in the top story. One died and 3 others suffered burns.	4	1	

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Manufacturing	Fires	<Food products> A fire broke out when a worker removed cooking oil in a fryer after making ganmodoki (deep-fried bean curd containing bits of various vegetables), because the heat source had not been switched off.	3	0
		<Furniture and fixtures> Three workers were burned when 1 opened the shutter of a dust collector. A fire had broken out in the dust collector after sparks from a fire generated at a wood grinder at a sawmill flew from a duct into the collector.	3	1
Construction	Falls	<Building construction> Three workers fell and were injured when they moved to the same side of a suspended scaffold that was fixed to a steel beam, causing a weight imbalance.	3	0
		<Building construction> Workers were attaching a horizontal beam to a steel frame for a single-story warehouse. Three of them rode the beam, which had been hoisted by a crane and tentatively fastened to a column, and were fastening the beam with bolts. The beam suddenly slipped from the top of the column and fell. All the three workers were injured, 1 seriously when hit by the beam.	3	0
		<Civil engineering> Workers were operating a crane so that they can carry a bridge girder to the upper part of the bridge. Suddenly, the cable snapped, and workers on the girder fell and were injured.	3	0
		<Other construction> Workers were installing an electrodeposition tank. Six workers were getting on a 7 ton weigh portable scaffolding and were hoisting the scaffolding to the installation spot by using a chain hoist. Suddenly, a wire rope sling and the chain hoist broke, and the workers on the scaffolding fell to the ground 5 meters below.	6	0
		<Other construction> Employees of an environmental center were trying to lower one of the three pieces of a disassembled deodorizing device from the first floor to the basement by using a chain hoist. Suddenly, the piece fell to the basement due to unknown reasons, killing an employee and leaving two others injured.	3	0
	Struck by objects	<Building construction> Workers were disassembling a cylindrical kiln 3.35 meters in diameter when about 30 bricks from the upper part of a cylindrical kiln, weighting a total of about 16kg, fell, bouncing on the bottom of the kiln and hitting four workers.	4	0
		<Civil engineering> In a 7.5 meter deep shaft for shield tunneling work, workers suspended a temporary strut (about 4 meters long and weighing about 550 kg) made of an H-beam using a backhoe (no the original purpose of a backhoe) and were doing walling and fastening with bolts. The hook of the safety belt on the backhoe operator's waist became caught on the lever of the operator's seat, and the boom suddenly moved toward the operator. The walling material became loose and fell, and 3 workers who were tightening bolts were sent flying and were injured.	3	0
		<Other construction> Four workers, using a breaker, were disassembling the fire-resistant floor of a furnace in an aluminum casting plant. Suddenly, part of a fire-resistant ceiling of the furnace fell, and three of them were injured. It is thought that the vibrations from the breaker caused the ceiling to collapse.	3	0
	Collapses	<Building construction> Workers were checking a 110-ton unloaded traveling crane's operating radius. When the jib was extended to the maximum length, it toppled, killing 2 workers and leaving 2 others injured.	4	2
		<Building construction> Workers were working on a projecting slab above a swimming pool which was under construction. Suddenly, the slab collapsed, and the workers fell to the ground.	6	0
<Building construction> When 2 workers were removing a curing sheet on the first step of the scaffolding at a building demolition site, the scaffolding tilted toward the building, and the 2 workers were injured when they jumped down. Another worker was injured when he tried to flee from under the tilting scaffolding.		3	0	

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Construction	Collapses	<Civil engineering> Three workers were injured when dirt, asphalt and the struts of a guard rail collapsed on them as they entered a ditch for a cast iron pipe while working on sewerage pipes.	3	0
		<Other construction> Three workers were laying a plastic drainage pipe in a trench. Suddenly, the wall of the trench collapsed, and the workers were buried alive. A worker died and 2 others were injured.	3	1
		<Other construction> Three workers were injured when a pipe under repair fell after the ring of the chain block used to suspend it became loose.	3	0
	Landslides	<Civil engineering> When 7 workers were removing a steel erector used for building a retaining wall on a slope about 60 degrees during a forestry conservation project, there was a landslide about 15 meters high and about 20 meters wide. Three workers were caught in the landslide and buried alive.	3	2
		<Civil engineering> As part of a road widening operation, workers were drawing black lines on the concrete foundation so that they can appropriate install L-shape retaining walls on a slope. Suddenly, the slope 3 meters high, 3.9 meters wide and 0.9 meters deep collapsed. Three workers were buried under about 9 cubic meters of soil, and 1 worker died.	3	1
		<Civil engineering> Two workers were buried and injured because of a landslide that occurred when they were pouring freshly mixed concrete with a backhoe into the space behind block that were piled up at the foot of a slope along a municipal road. Trying to rescue them, a third worker jumped on the backhoe and swung the arm. Suddenly, a second landslide occurred. The backhoe fell, and the third worker was pinned under the backhoe and died.	3	1
		<Civil engineering> Workers were renewing the concrete surface of an embankment along a railway line. While they were breaking the surface, the upper earth where the work had been finished the previous day collapsed. Seven workers fell and were injured.	7	0
		<Civil engineering> Workers were spraying concrete on a work face about 3.1km from the portal of the tunnel. The work face collapsed, and dirt and sand flowed to about 10 meters from the work face while the workers were fleeing from the dirt and sand. Later, a second landslide occurred, and dirt and sand flowed to about 42 meters from the work face. The workers stopped the operation and made sandbags to stop the flow of dirt and sand. About 6 hours after the second landslide, a third landslide occurred, and dirt and sand flowed to about 337 meters from the work face, flowing over the sandbags. Three of the 6 workers who were checking a machine or piling the sandbags up were injured.	3	0
	Exposure to harmful substances	<Building construction> Workers were removing rainwater from the second basement of a building under construction with a pump driven by an internal combustion engine. They inhaled carbon monoxide contained in the exhaust fumes from the engine and fell. Rescue workers who rushed the site were also overcome.	4	1
		<Building construction> A worker was using an engine-driven concrete cutter to dig a ditch while remodeling the refrigeration room of a food processing plant. The worker and 17 others nearby inhaled an exhaust fume containing carbon monoxide because the ventilator had not been switched on. They were rushed to a hospital.	18	0
<Building construction> When a worker was using a pile driver to install logs at an ex-military facility, a bottle containing liquid was found in the drilling site. Workers who were working around the site smelled a pungent odor and complained of nausea and head stuffiness. They were rushed to a hospital and diagnosed with hypoxemia.		4	0	
<Building construction> Workers who were removing the coating of building exterior siding panels with a releasing agent felt an unusual feeling on their hands and pain in the fingers, and their skin became inflamed.		4	0	

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Construction	Exposure to harmful substances	<Building construction> Workers were burying cornerstones in a parking lot on the first floor of a building under construction. Other worker was operating a power shovel in the same work site so that he can dig a ditch for pipes. The workers working on the cornerstones inhaled carbon monoxide contained in exhaust fumes from the power shovel, complaining of nausea and other physical troubles. They were rushed to a hospital where they were diagnosed with CO-poisoning.	3	0
		<Civil engineering> Workers walked in an underground sewer system and were burying a semicircular shaped vinyl chloride sewer in a ditch about 600 meters from a manhole. They used a gasoline-driven forklift to carry ready-mixed concrete to the burial place, and exhaust fumes containing carbon monoxide filled the underground sewer system. The workers and the rescue team suffered CO-poisoning.	10	0
		<Civil engineering> Four workers were rushed to the hospital with carbon monoxide poisoning while using power-driven welding machines in a tunnel. Although there was a ventilator in the tunnel which was turned on, it was placed too far away the worksite.	4	0
		<Other construction> There were 5 series of facilities generating carbon monoxide in the chemical plant. During regular repair work, automatic valves were being installed on three series of facilities, which were temporarily shut down while two other series of facilities were kept in operation. Prior to the installation, the inside of the scrubber for the three series was cleaned by professionals, and the manhole cover was left open. When workers opened an automatic valve, carbon monoxide generated from other two facilities flowed backward and leaked from the open manhole. The workers inhaled carbon monoxide, and the rescue workers also suffered CO-poisoning.	20	1
		<Other construction> While remodeling the cooling conveyor belt at a bakery, 1 worker who was welding a rail of the conveyor belt using two engine-powered welding machines began to feel unwell about 1 hour after starting the work, and was carried out of the workshop. Other workers who tried to resume the welding also felt unwell and went outside the workshop. All were rushed to the hospital, and were diagnosed as suffering from CO-poisoning.	4	0
		<Other construction> Workers were disassembling the scaffold inside a secondary combustion furnace. One of the workers lost his footing and fell. Because he suffered no injury and displayed no symptoms of illness, he was ordered to rest and another worker was assigned to the job. Shortly afterward, another worker fell on the control panel, and he was rushed to a hospital, and diagnosed with CO-poisoning. Two other workers working on the furnace were also rushed to the hospital. At a different facility in the same plant, work to pass an oxygen converter gas had been started.	3	0
	Poisoning and chemical injuries	<Civil engineering> A worker suffered an alkaline chemical injury when a piece of freshly mixed concrete get into his work boot while laying concrete for foundation work. He kept working without removing the piece of concrete.	5	0
		<Other construction> Workers were changing a drainpipe to stop water leaks from the drain pipe that connected to an autoclave and an ethylene oxide sterilization apparatus. But after the drainpipe was cut, waste water flowed out, so the workers were bailing out the waste water and were connecting the pipe. They accidentally inhaled ethylene oxide contained in the waste water, and had headaches and nausea and were hospitalized.	4	0
		<Other construction> Three workers suffered chemical burns when styrene monomers overflowed from a separated pipe they were working on while doing expansion work at a chemical plant.	3	0
	Explosions and bursts	<Civil engineering> When one of the workers who were engaged in digging at a site where a hot water vein was expected went to light a cigarette, the gas generated during the digging caught fire.	3	0

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Construction	Explosions and bursts	<Other construction> Workers were doing a pressure resistance test of a new test apparatus. Suddenly, glass-made parts attached to a pipe exploded, and four workers were injured.	4	0
	Fires	<Building construction> Four workers were burned when a fire broke out in a dormitory at a construction site after 1 worker was smoking in bed.	4	0
		<Civil engineering> Bed linens which workers were using in the company's temporary lodging facility caught fire from an overheated electrical heater.	3	0
		<Other construction> Six workers died and 1 was burned when vaporized gasoline set off a fire while they were repairing 2 adjacent gasoline storage tanks inside the tanks.	7	6
		<Other construction> A fire broke out when workers were pasting a vinyl chloride sheet and glass fiber sheet to the inside of a drainpipe and the inside of a manhole in a process of repairing a drainpipe. Two workers were burned and 2 others who tried to rescue them inhaled hot air and were injured. It is believed that the synthetic resin used in the repair caught fire.	4	0
	Other	<Civil engineering> Road extension work was being done in the forest. Workers, who were standing on a scaffold, were doing formwork to a retaining wall. Suddenly, they were caught in an avalanche about 30 meters long, about 10 meters wide and with a volume of about 300 cubic meters.	3	0
Transportation	Struck by objects	<Air transportation> A helicopter was toppled by strong winds while it was being washed, hitting the worker who was sent flying for about 50 meters and died. Two other workers working nearby were hit by the first worker and injured.	3	1
	Traffic accidents	<Air transportation> Cabin crew members fell from their seats when the pilot of the airliner suddenly stopped taxiing because he noticed that the aircraft had passed the holding point before takeoff.	4	0
		<Air transportation> When a passenger plane hit turbulence during landing, the cabin crew suffered neck and other injuries.	3	0
		<Air transportation> Flight attendants were injured when a passenger airliner made a hard landing.	3	0
Cargo handling	Falls	<Overland cargo transportation> Containers were being carried to other place. A container on which three workers were standing became unsteady, and they jumped down to prevent a collision. They were injured.	3	0
	Struck by objects	<Port cargo transportation> An automatic unloader on the docks of a steel mill was hit by a gust of wind, began sliding on a rail without control and crashed into another unloader that was in operation. The operating unloader fell on a boat, and a worker was sent flying, fell into the sea and drowned. Three others in the worksite were injured.	4	1
	Collapses	<Overland cargo transportation> Workers were unloading steel railings. Suddenly, a steel railing that was leaning against a wall fell, and 3 workers were pinned underneath.	3	0
	Exposure to harmful substances	<Overland cargo transportation> A worker who was washing the inside of a tank truck that had been used to transport beer yeast (liquid) suddenly became unwell. When 2 other workers entered the tank to rescue him, they also felt unwell and fell down. It was concluded that the cause was anoxia.	3	0
	Poisoning and chemical injuries	<Overland cargo transportation> Two tanks containing phosphoric acid on a 4-ton truck fell when the vehicle turned left at an intersection, and the phosphoric acid liquid spilled onto the road. The workers who tried to remove the liquid from the pavement suffered chemical burns on their hands and complained of pain.	6	0

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Cargo handling	Other	<Overland cargo transportation> A man took over the branch office of a company, sprinkled gasoline on the floor and occupied the office, taking the branch manager hostage. After some time, there was an explosion during which time the branch manager died, and policemen, firefighters and reporters near the building were showered by fragments of broken glass and were injured.	13	1
		<Port cargo transportation> Three workers who had unloaded a ship complained of itchiness. The doctor who examined them said that the itchiness was due to acute contact dermatitis caused by ticks or other harmful insects.	3	0
Other	Falls	<Amusement and recreation services > A haunted house in the shape of a ship was exposed to strong winds. Workers covered the stern with a net and stretched a wire between the mast and the stern. But the stern was blown off by a strong wind, and 5 workers fell on a garden 4.8 meters below. Moreover, one of them had been hit by rectangular timber which had been carried by a wind.	5	0
		<Forestry> When 8 workers were riding a mountain tram to go to a worksite in the woods, the tram suddenly began sliding at a high speed. Four workers jumped off and were injured.	4	0
	Collapses	<Cleaning> A case of food poisoning broke out at a buffet-style dinner party.	8	0
		<Cleaning> Workers who were descending a ladder after dusting the ceiling and beams of a warehouse of a rolling tower grabbed onto the top of the scaffolding when they lost their footing. The rolling tower toppled, and 2 workers were injured.	2	0
	Contact with hot objects or substances	<Cleaning> Three workers were removing dust that had accumulated in the duct of a vacuum exhaustor using a vehicle-mounted vacuum system. When 1 worker moved inside the exhaust duct while holding the end of the vacuum hose, he accidentally fell into a dust hopper and suffered burns from the heat generated by the accumulated dust. The other 2 were injured when they tried to rescue him.	3	0
		<Commerce> Three workers were burned by deep-frying oil when one of the workers was mistakenly returning the electric heater under the fryer to its original location in the kitchen of a store.	3	0
		<Other> At an institution for the rehabilitation of mentally handicapped people, patients and staff members suffered emesis, diarrhea and came down with a fever. Food poisoning due to noroviruses was suspected.	17	0
		<Other> Workers were changing the liquid measurement on the LPG tank in a municipal cultural exchange center. Four workers suffered moderate burns from liquefied petroleum gas, when they mishandled the tank and the petroleum gas blew out.	4	0
	Exposure to harmful substances	<Cleaning> Eight workers who had removed residues containing N,N-dimethylformamide (DMF) from the interior of a butadiene extraction column (a device which extracts butadiene of high purity by adding DMF) complained of symptoms such as nausea and abdominal pain 3 days after finishing the job. They were examined at a hospital and diagnosed with organic solvent poisoning.	8	0
		<Cleaning> When a worker opened a machine that sorts garbage into flammable and nonflammable waste at a bulk garbage disposal facility in order to clean the facility, he smelled an unusually pungent odor and developed a strong pain in his eyes.	6	0
<Cleaning> Workers were removing industrial waste fluids (concentrated sulfuric acid, hydrogen fluoride, sodium hydroxide, N,N-dicyclohexylcarbodiimide, organic solvent, etc.) from a factory compound. They extracted industrial waste containing N,N-dicyclohexylcarbodiimide from a badly corroded drum using a suction pump and transferred the waste to 10-liter plastic bottles. They complained of dimmed vision and eye pain after the work and were treated at a hospital. The workers had worn personal protective equipment including eye protectors.		3	0	

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Other	Exposure to harmful substances	<Health services> When a bottle containing formalin fell to the floor and broke, the vaporized formalin spread. A male nurse who wiped the floor and 8 others who were in adjacent rooms, including an operating theater, were exposed to the vapor and complained of such symptoms as sore eyes.	8	0
		<Health services> Workers preparing breakfast in a kitchen of a health facility inhaled carbon monoxide generated by the imperfect combustion of a dishwasher. Some fell and others complained of discomfort, and all were rushed to a hospital, where they were diagnosed with CO-poisoning.	7	0
		<Hotels and restaurants> A heavy rain flooded a hotel located near a river. Hotel employees and servicemen from a maintenance company were pumping out water of the basement using 4 underwater pumps and an engine pump. Ten workers inhaled carbon monoxide contained in the exhaust fumes from the engine pump and were rushed to a hospital.	10	0
		<Hotels and restaurants> Germicidal lamps were mistakenly mounted on four insect light traps in a kitchen, and kitchen workers felt pain in their eyes and on their skin. Their condition worsened, and when they received a medical exam at a hospital later, they were diagnosed with electric ophthalmia.	8	0
		<Hotels and restaurants> Workers were burning charcoal in several pots to cook food and did not turn on the ventilator because they wanted the air conditioner to work better. They complained of headaches and nausea and received a medical check at a hospital. The doctor diagnosed the problem as CO-poisoning.	6	0
		<Cleaning> Workers who were sorting bottles by hands at a garbage sorting facility complained of sore throats and sore eyes when a bottle containing chlorinated chemical waste cracked, releasing chlorine gas.	17	0
	Poisoning and chemical injuries	<Cleaning> A worker was boring a hole in a gas cylinder at a metal waste recycling service when chlorine gas that remained in the gas cylinder has escaped. The worker and others in an office and nearby workplaces inhaled the chlorine gas and complained of sore throats.	17	0
		<Cleaning> Chlorine gas leaked from a cylinder buried in a concrete wall of a temporary yard used to collect waste matter at a garage-cum-workshop. Six workers who attempted to stop the gas leak and a worker at an adjacent workshop inhaled the chlorine gas, and all of them were poisoned.	7	0
		<Educational services> Acid gas-containing sulfur hexafluoride that was discharged from plasma etching equipment was being channeled to a neutralizing device through a duct. Since there was a failure on the duct, the hazardous gas escaped and reacted with the oxygen in the air, producing sulfur dioxide. Three workers were poisoned.	3	0
		<Health services> Workers suffered headaches and nausea when vaporized formalin was released while they were sorting dissected parts of a human body in the dissecting room of a hospital.	3	0
		<Hotels and restaurants> A restaurant employee poured some drops of a bleaching agent, which was a chlorinated solvent, and a neutral detergent, both undiluted, on a cutting board, beat them into froth, rested the board against a wall and washed dishes with the chemicals without turning on the ventilator. The chlorinated solvent reacted with the neutral detergent and released chlorine gas. Moreover, some unused bleaching agent that had flowed into the sink reacted with the fluid in the drainage pipe, including vinegar, and also released chlorine gas. A worker fell, while four others complained of headaches and discomfort. All were rushed to a hospital.	5	0

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Other	Poisoning and chemical injuries	<Other> Preparing an liquid analysis, workers mixed the liquid together with acetic acid, hydrogen bromide, etc. , in a glass ampoule, sealed it and heated it about 150 degrees centigrade in a thermostat oven. The ampoule exploded in about 15 minutes, releasing oxidizing gas. Four workers in the room inhaled it and complained of a sore throat.	4	0
	Explosions and bursts	<Educational services> One worker died and 2 others were injured when a test was carried out at an experimental plant to obtain oil from melted tires and plastics. During the test there was a fire at the bottom of the furnace where 300 used tires had been put the preceding day.	3	1
		<Educational services> When a kitchen worker went to light a burner on a gas stove to boil water, gas which was trapped in the gas stove because of system failure caught fire and exploded.	3	0
		<Health services> Eight workers were injured in an explosion while changing MRI equipment in a hospital. The workers were filling the vacuum around the liquid helium layer with air so that they can cause helium vaporizing through heat exchange. The internal pressure in the helium layer rose, setting off an explosion.	8	0
		<Hotels and restaurants> When a worker was removing butane gas from a cassette cylinder in a kitchen, the gas caught fire for some unknown reason and exploded. Three workers, including the first worker, were injured.	3	0
		<Livestock farming and fishery> Three fishermen were boarding on a fishing boat. One worker died and 2 others injured when the engine of the fishing boat exploded just after they started it.	3	1
		<Other> A pyrotechnic worker died and 3 others were injured when a skyrocket exploded shortly after being ignited during a fireworks display.	3	1
		<Other> When workers were cooling down a fuel which had become hot, the fuel suddenly exploded.	4	0
	Fires	<Mining> A fire broke out in a rest area about 5.7km from the portal of a tunnel (about 6.2km long) which leads to a work face of an open-cut limestone mine. Eleven workers at the work face and 5 others at the portal ran to put out the fire, but 6 from the work face and 5 from the portal had to turn back because the smoke was too thick. The 5 other workers were found later and carried outside of the tunnel. Three died and 2 were injured, 1 seriously.	5	3
	Traffic accidents	<Communications> Four people were injured when a sightseeing ship used by the TV crew to film a program was hit by a wave from behind and ran into with a reef.	4	0
		<Health services> When workers were on their way to work in a company minibus, the driver mismanaged the steering wheel, and a traffic accident occurred.	10	0
	Food poisoning	<Commerce> Workers who had eaten lunch prepared at the company's kitchen complained of abdominal pain and diarrhea. The cause was identified as O-169.	179	0
		<Educational services> Workers who ate fried noodles, a meal served at the company cafeteria for overtime work, suffered food poisoning.	15	0
		<Health services> Staff and inmates of the healthcare facility developed food poisoning after eating meals prepared at the facility's kitchen.	143	0
		<Health services> Sixty seven people (company employees and visitors) exhibited symptoms of food poisoning, such as abdominal pain and diarrhea, after eating lunch at the company cafeteria.	67	0
		<Health services> Hospital employees showed the symptoms of food poisoning one day after eating a lunch prepared at the hospital kitchen.	27	0

By Industry	Type of Accident	Description of Accident	Deaths and Injuries	Deaths
Other	Food poisoning	<Health services> People at a hospital, mainly the staff, complained of nausea, diarrhea and other physical troubles. But no patients in the hospital suffered such symptoms. Food poisoning was suspected.	27	0
		<Health services> Inpatients and employees of a hospital complained of abdominal pain and diarrhea after eating lunch that was prepared at the food facility. Food poisoning due to Welch bacilli was suspected.	15	0
		<Health services> There was an outbreak of food poisoning believed to be from a meal in a hospital.	13	0
		<Health services> Nine hospital employees came down with food poisoning after eating meals served by the hospital and complained of fever and diarrhea.	9	0
		<Other> Workers who ate broiled swordfish at the company cafeteria came down with food poisoning.	32	0
		<Other> Employees who had eaten meals prepared at the company kitchen complained of diarrhea and were diagnosed with salmonella.	5	0
	Other	<Health services> Some employees and patients of a rehabilitation institution were injured when windows were cracked by Typhoon No. 14.	16	0
		<Health services> Hospital staff members came down with scabies after treating a patient with the disease.	16	0
		<Health services> Employees contacted scabies from a patient of a home for elderly people who were requiring special care.	12	0
		<Health services> Eleven employees of a life-assisting service contracted scabies at homes they visited.	11	0
		<Health services> Healthcare professionals contracted TB after they had palpated TB patients.	7	0
		<Health services> Staff and inmates of a nursing home contracted scabies from an inmate.	6	0
		<Health services> Three nursing home employees who did not know that the person they were treating had scabies contracted the disease.	3	0
		<Other> A ruffian entered a retail store and set off a grenade. Fifteen employees suffered from the shock of the explosion and post-traumatic stress disorder (PTSD). Two of the employees were injured when they subdued the ruffian.	15	0
<Other> An employee of a pachinko parlor was stabbed when he subdued a customer who had stolen pachinko balls.	3	0		

(Note: In the case of road traffic accidents, only those that killed or injured 10 or more persons are included in the list.)

4. Occupational Diseases

(1) Trends in Occupational Diseases

The number of patients with occupational diseases that required an absence of four days or more exceeded 20,000 in 1979, but then steadily declined. The figure for 2003 was 8,055, up 553 people, a 7.4% increase from the preceding year.

By cause, diseases stemming from occupational injuries came to 5,861 in 2003, representing 72.8% of the total. The number of patients with lumbago caused by accidents was 4,765, representing 81.3%. Patients with pneumoconiosis and its complications represented 10.6% of all patients with occupational diseases diagnosed in 2003.

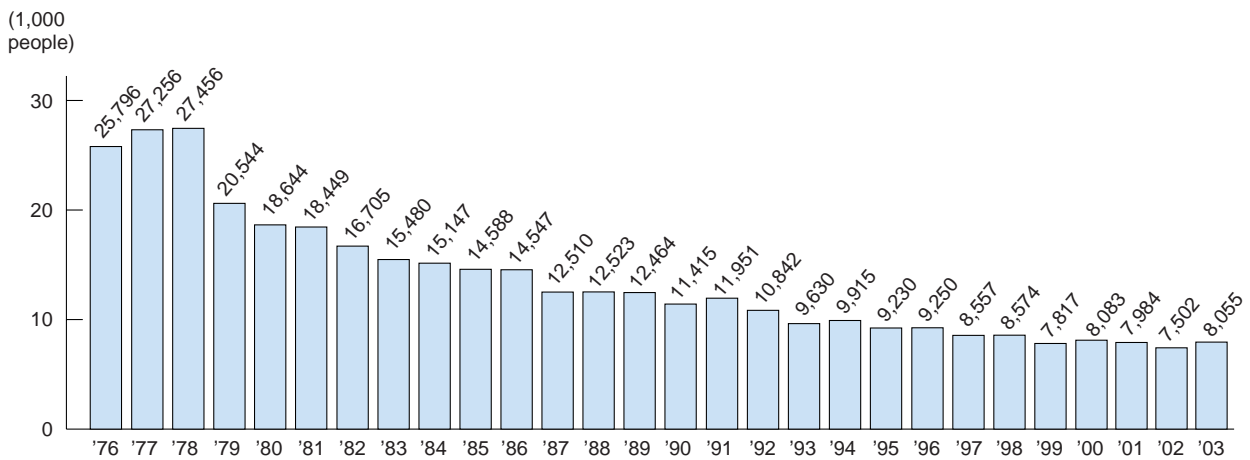


Fig. 22 Occupational Diseases by Year

Source: Survey of Occupational Diseases, MHLW.

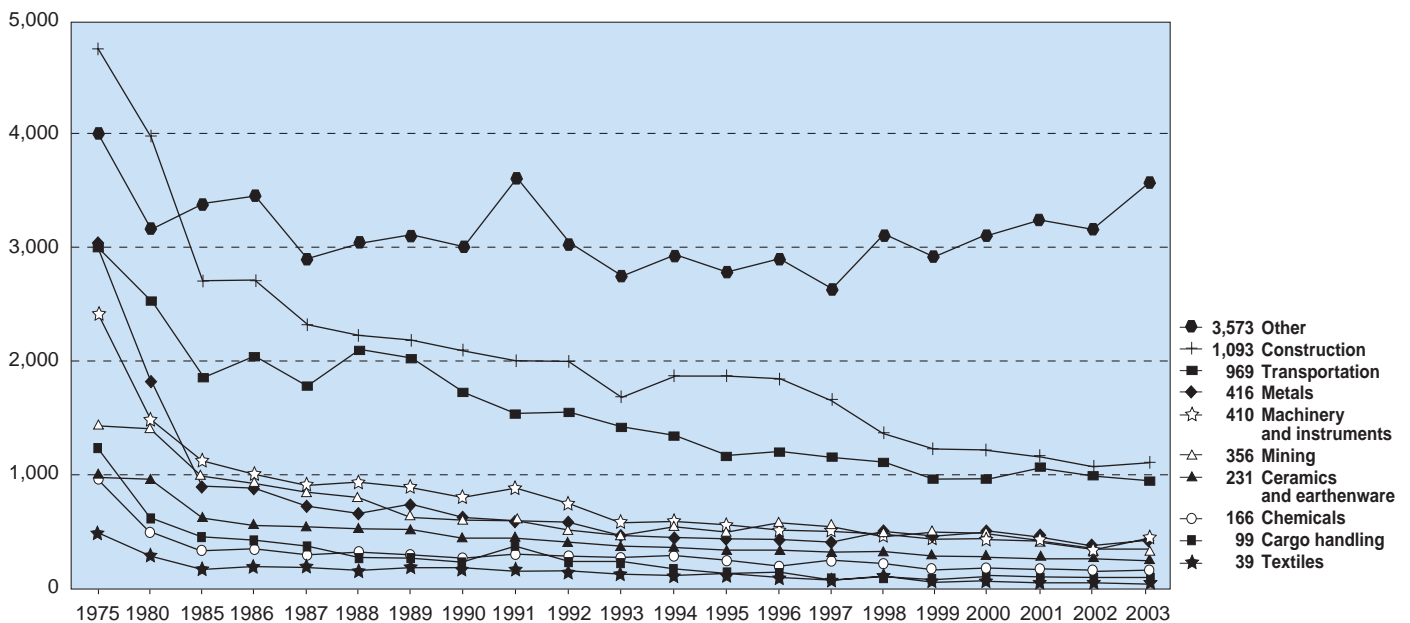


Fig. 23 Trend in the Number of Occupational Diseases by Industry

Source: Survey of Occupational Diseases, MHLW.

Table 2 Occupational Diseases by Year and Industry

(Unit: person)

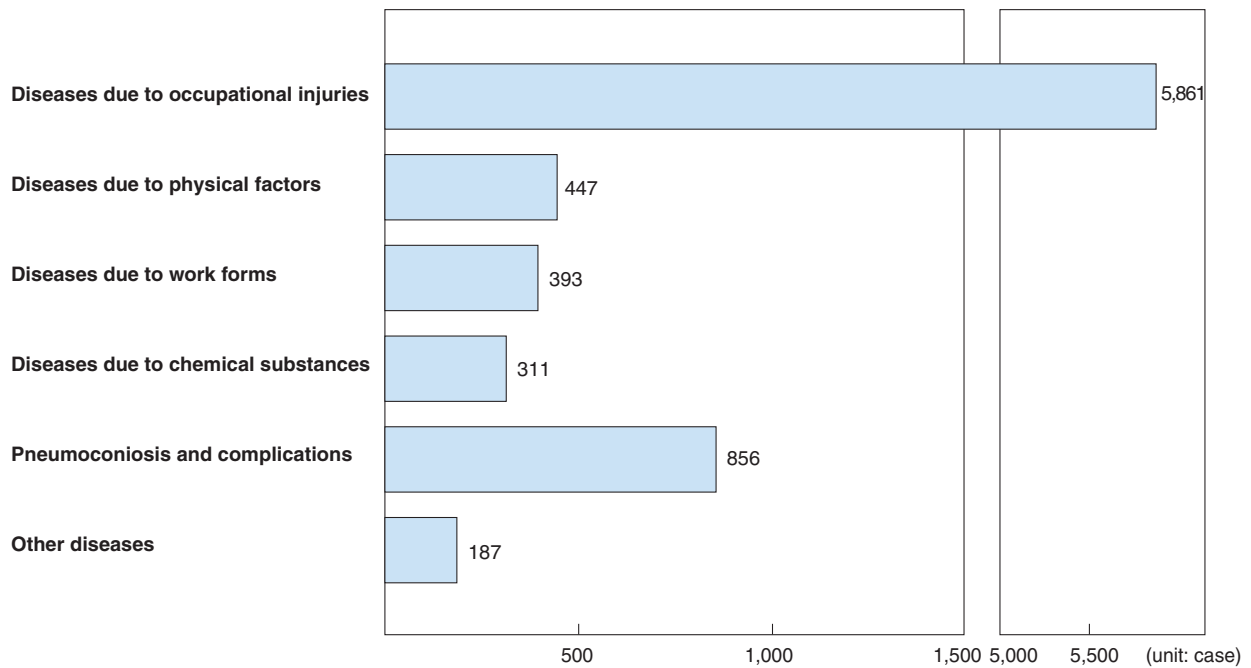
Industry	Year																
	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All manufacturing industries	10,809 (0.8)	7,020 (0.6)	5,298 (0.4)	3,824 (0.3)	3,927 (0.3)	3,587 (0.3)	3,154 (0.2)	3,123 (0.2)	2,844 (0.2)	2,631 (0.2)	2,517 (0.2)	2,457 (0.2)	2,136 (0.2)	2,208 (0.2)	2,054 (0.2)	1,853 (0.1)	1,965 (0.2)
Textiles	413 (0.3)	263 (0.2)	162 (0.1)	163 (0.1)	156 (0.1)	134 (0.3)	114 (0.1)	106 (0.1)	113 (0.1)	92 (0.1)	72 (0.1)	87 (0.1)	52 (0.1)	71 (0.1)	50 (0.1)	52 (0.1)	39 (0.1)
Chemicals	938 (1.0)	493 (0.6)	325 (0.4)	243 (0.3)	290 (0.4)	289 (0.2)	268 (0.2)	282 (0.2)	235 (0.2)	189 (0.1)	246 (0.2)	221 (0.2)	162 (0.1)	184 (0.2)	176 (0.1)	155 (0.1)	166 (0.1)
Ceramics and earthenware	951 (1.7)	947 (1.7)	600 (1.1)	425 (0.9)	435 (0.9)	383 (0.8)	340 (0.7)	344 (0.7)	320 (0.6)	322 (0.6)	306 (0.7)	306 (0.7)	284 (0.6)	272 (0.6)	254 (0.6)	245 (0.3)	231 (0.6)
Metal products	3,025 (1.5)	1,811 (1.2)	881 (1.0)	624 (0.8)	553 (0.7)	564 (0.6)	451 (0.5)	439 (0.5)	418 (0.4)	427 (0.5)	388 (0.4)	490 (0.4)	465 (0.4)	489 (0.4)	428 (0.3)	377 (0.1)	416 (0.4)
Machinery and instruments	2,409 (0.6)	1,473 (0.4)	1,110 (0.3)	785 (0.2)	872 (0.2)	734 (0.1)	572 (0.1)	560 (0.1)	543 (0.1)	490 (0.1)	498 (0.1)	470 (0.1)	418 (0.1)	445 (0.1)	405 (0.1)	364 (0.1)	410 (0.1)
Mining	1,416 (7.8)	1,394 (11.6)	974 (8.5)	583 (6.4)	572 (6.2)	507 (7.5)	462 (6.8)	539 (8.0)	482 (7.1)	572 (8.4)	543 (10.0)	468 (8.7)	490 (9.1)	480 (8.9)	386 (7.1)	359 (6.6)	356 (9.0)
Construction	4,618 (1.2)	3,965 (1.1)	2,679 (0.7)	2,078 (0.6)	1,983 (0.5)	1,982 (0.5)	1,661 (0.4)	1,846 (0.4)	1,843 (0.4)	1,834 (0.4)	1,653 (0.4)	1,364 (0.3)	1,230 (0.3)	1,216 (0.3)	1,157 (0.3)	1,055 (0.2)	1,093 (0.3)
Transportation	2,975 (1.6)	2,518 (1.2)	1,835 (0.9)	1,708 (0.8)	1,523 (0.7)	1,533 (0.7)	1,400 (0.6)	1,329 (0.6)	1,157 (0.5)	1,187 (0.5)	1,143 (0.5)	1,100 (0.5)	963 (0.4)	971 (0.4)	1,062 (0.4)	998 (0.4)	969 (0.4)
Cargo handling	1,166 (2.7)	600 (2.8)	433 (2.3)	233 (1.4)	354 (2.2)	217 (0.9)	221 (0.9)	159 (0.7)	131 (0.6)	138 (0.6)	86 (0.6)	87 (0.6)	82 (0.6)	107 (0.7)	85 (0.6)	73 (0.5)	99 (0.8)
Other	3,969 (0.2)	3,147 (0.2)	3,369 (0.2)	2,989 (0.1)	3,592 (0.1)	3,016 (0.1)	2,732 (0.1)	2,919 (0.1)	2,773 (0.1)	2,888 (0.1)	2,615 (0.1)	3,098 (0.1)	2,916 (0.1)	3,101 (0.1)	3,240 (0.1)	3,164 (0.1)	3,573 (0.1)
Total	24,953 (0.7)	18,644 (0.5)	14,588 (0.4)	11,415 (0.3)	11,951 (0.3)	10,842 (0.2)	9,630 (0.2)	9,915 (0.2)	9,230 (0.2)	9,250 (0.2)	8,557 (0.2)	8,574 (0.2)	7,817 (0.2)	8,083 (0.2)	7,984 (0.2)	7,502 (0.1)	8,055 (0.2)

Source: Survey of Occupational Diseases, MHLW.

- Notes: 1) The table covers only occupational diseases requiring an absence of 4 days or more.
 2) The figures in parentheses show the number of occupational disease cases per 1,000 workers.

$$\text{Occupational diseases per 1,000 workers} = \frac{\text{Patients of occupational diseases}}{\text{Workers to whom the Labour Standards Law is applied}} \times 1,000$$

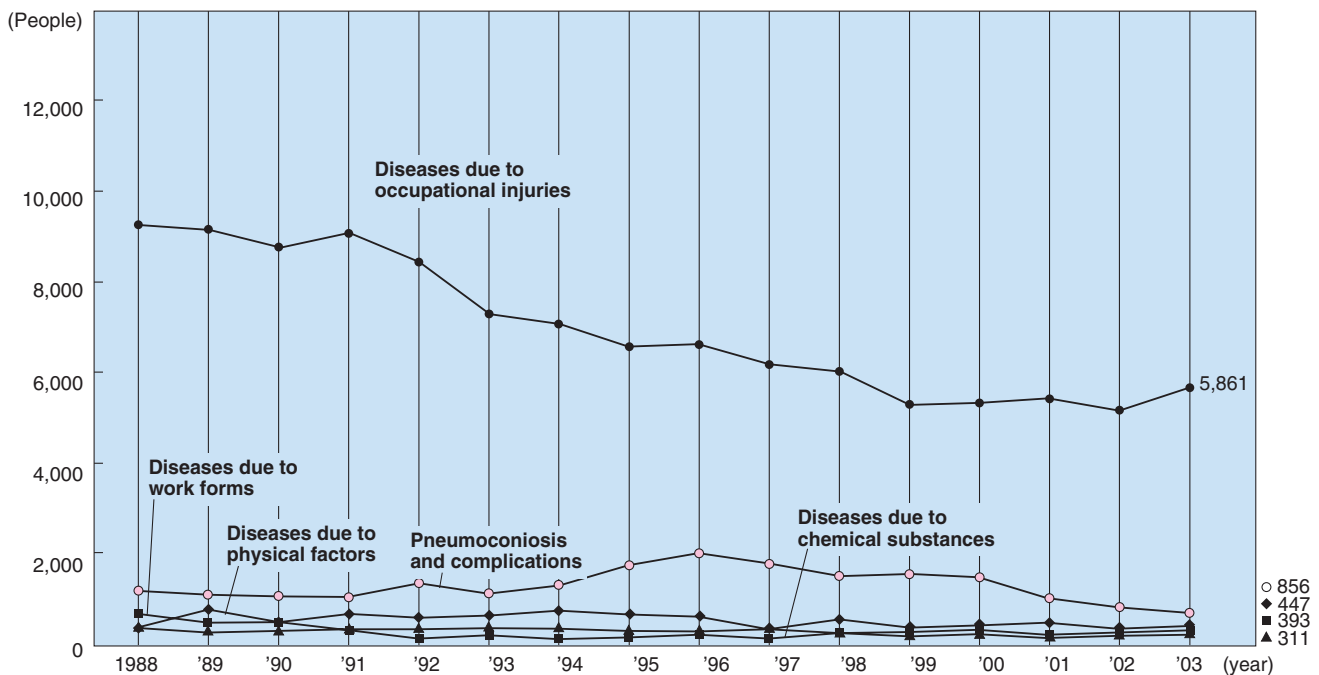
(2) Breakdown of Occupational Diseases



Source: Survey of Occupational Diseases and a Report of Pneumoconiosis Screenings, MHLW.

Note: The number of "pneumoconiosis and complications" cases is the sum of the number of cases diagnosed as supervision 4 (needing medical treatment) and complication cases (including the cases diagnosed by checkups other than compulsory regular examinations for pneumoconiosis).

Fig. 24 Breakdown of Occupational Diseases by Industry (2003)



Source: Survey of Occupational Diseases and a Report of Pneumoconiosis Screenings, MHLW.

Note: The number of "pneumoconiosis and complications" cases is the sum of the number of cases diagnosed as supervision 4 (needing medical treatment) and complication cases (including the cases diagnosed by checkups other than compulsory regular examinations for pneumoconiosis).

Fig. 25 Occupational Diseases by Year

Table 3 Types of Diseases by Industry (2003)

Disease classification		Industry							
		Manufacturing							
		Food	Textile	Lumber, wood products and furniture	Pulp, paper, printing and binding	Chemicals	Ceramic and earthenware	Steel and nonferrous metals	Metal products
Total		399	39	72	73	166	231	124	292
(1) Diseases due to occupational injuries		259 (201)	26 (20)	58 (39)	59 (47)	107 (83)	74 (59)	54 (31)	202 (164)
Diseases due to physical factors	(2) Diseases due to hazardous rays	1	—	—	—	—	—	—	1
	(3) Diseases due to ionizing radiation	—	—	—	—	—	—	—	—
	(4) Diseases due to abnormal atmospheric pressure	—	—	—	—	—	—	—	—
	(5) Diseases due to abnormal temperature	60	2	—	2	8	5	29	15
	(6) Ear diseases due to noise	—	—	—	—	1	1	—	—
	(7) Diseases due to factors other than (2) to (6)	4	1	—	—	—	1	1	1
Diseases due to work forms	(8) Diseases of locomotion and internal organs due to heavy and excessive work load	12	1	1	4	5	2	2	4
	(9) Occupational lower back pain excluding that caused by occupational injuries	4	1	1	—	1	1	—	4
	(10) Diseases due to vibration	—	—	1	—	—	2	—	1
	(11) Disorders in fingers and forearms, and cervico-bronchial disorder	18	3	3	2	7	—	—	9
	(12) Diseases due to causes other than (8) to (11)	5	—	3	1	1	1	1	2
(13) Anoxia		—	—	—	—	2	—	—	—
(14) Diseases due to chemical substances (excluding cancer)		30	5	1	3	29	5	9	27
(15) Pneumoconiosis and complications		—	—	—	—	2	138	28	26
(16) Diseases due to pathogenic organisms		3	—	—	—	1	—	—	—
Cancer	(17) Cancer due to ionizing radiation	—	—	—	—	—	—	—	—
	(18) Cancer due to chemical substances	—	—	—	—	2	—	—	—
	(19) Cancer due to causes other than (17) and (18)	—	—	—	—	—	—	—	—
(20) Other diseases evidently due to occupational causes		3	—	4	2	—	1	—	—

Source: Survey of Occupational Diseases, MHLW.

Note: (1) The table covers only those requiring an absence of 4 days or more.

(2) The disease classification is based on the method set forth in Article 35 of Enforcement Ordinance of Labour Standards Law.

(3) The figures in the parentheses in "(1) Diseases due to occupational injuries" are those of lower back pain and are included in the bare figures.

(unit: person)

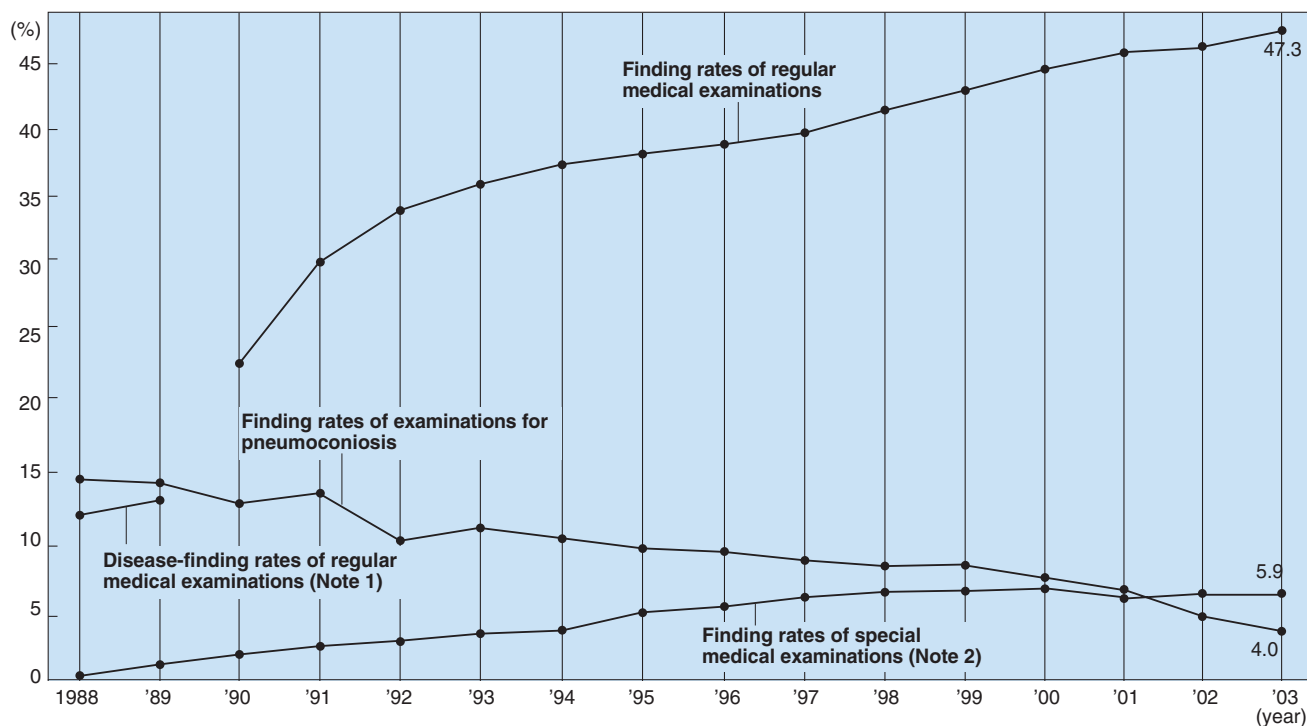
				Mining	Construction	Transportation	Cargo handling	Agriculture, forestry and fisheries	Commerce, finance and advertising	Public health	Entertainment	Cleaning and slaughtering	Other industries	Total
General/electric/transport machinery and equipment	Electricity, gas and water supply	Other manufacturing	Subtotal											
410	6	153	1,965	356	1,093	969	99	218	1,185	983	463	394	330	8,055
287 (203)	5 (2)	119 (95)	1,250 (944)	7 (5)	630 (393)	880 (781)	86 (83)	188 (109)	1,061 (936)	823 (750)	335 (268)	345 (281)	256 (215)	5,861 (4,765)
2	—	—	4	—	1	—	—	—	3	—	—	—	—	8
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	3	1	—	3	—	—	—	—	1	8
12	—	9	142	2	92	26	6	3	25	8	69	10	11	394
—	—	1	3	—	1	1	—	—	1	1	—	—	1	8
4	—	1	13	—	1	1	—	1	4	1	3	2	3	29
1	—	3	35	1	13	21	1	5	9	12	8	4	6	115
3	—	3	18	—	6	8	—	2	8	7	6	2	4	61
—	—	—	4	1	2	—	—	—	—	—	—	—	—	7
21	—	3	66	—	4	2	2	3	34	16	11	4	7	149
3	—	3	20	—	6	9	—	1	11	8	2	3	1	61
1	—	—	3	—	—	—	—	—	—	—	1	1	—	5
28	1	4	142	—	76	12	4	5	16	7	21	17	11	311
44	—	6	244	345	253	—	—	—	—	—	—	—	14	856
2	—	—	6	—	3	—	—	4	6	97	5	3	8	132
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	2	—	—	—	—	—	—	—	—	—	—	2
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	1	13	—	2	8	—	3	7	3	2	3	7	48

(4) The chemical substances in column (18) are those specified in No. 7, Appendix 1-2, Enforcement Ordinance of Labour Standards Law.

(5) The table covers only those cases found during 2003 and reported by the end of March 2004.

(6) Public health, entertainment, and cleaning and slaughtering are usually included in "other industries" but are handled separately in this table.

(3) Medical Examinations



- Note:
- (1) Regular medical examination items were revised in October 1989.
 - (2) Medical examination items for organic solvents and lead were revised in October 1989.
 - (3) Data collection methods for special medical examinations were revised in 1995.
 - (4) Items covered by the regular medical examinations were revised in January 1999.

Fig. 26 Finding Rates of Medical Examinations

Table 4 Chronological Statistics of Special Medical Examinations

Items Year	Establishments covered	Workers who underwent a special medical examination (A)	Workers with abnormal findings (B)	Finding rate (%) (B)/(A) × 100
1965	8,927	226,979	24,048	10.6
1970	14,865	304,793	30,735	10.1
1975	30,446	557,224	29,962	5.4
1980	71,976	1,213,867	30,546	2.5
1985	81,689	1,436,463	24,429	1.7
1986	81,573	1,441,636	22,583	1.6
1987	81,245	1,425,720	21,447	1.5
1988	81,069	1,418,294	19,971	1.4
1989	80,242	1,415,940	25,015	1.8
1990	75,746	1,376,847	31,994	2.3
1991	73,617	1,385,573	41,844	3.0
1992	75,131	1,509,273	47,995	3.2
1993	76,986	1,553,650	52,353	3.4
1994	76,051	1,558,666	55,969	3.6
1995	76,041	1,536,770	78,198	5.1
1996	76,355	1,554,080	80,661	5.2
1997	77,503	1,585,063	84,125	5.3
1998	78,099	1,606,353	93,438	5.8
1999	79,421	1,608,603	94,686	5.9
2000	80,153	1,609,154	96,656	6.0
2001	79,628	1,596,593	92,718	5.8
2002	80,989	1,626,958	96,795	5.9
2003	79,055	1,637,878	97,328	5.9

Source: Report of Special Medical Examinations, MHLW.

Note: The items in medical examinations for organic solvents and lead were changed in October 1989.

Table 5 Breakdown of Special Medical Examinations (2003)

Items		Establishments covered	Those who underwent special medical examinations	Those who needed medical advice	Finding rate (%)
Substance work category					
Statutory special medical examinations					
Organic solvents		32,713	503,839	28,745	5.7
Lead		5,321	89,002	1,443	1.6
Tetraalkyl lead		11	105	2	1.9
Ionizing radiation		11,470	190,450	8,266	4.3
High atmospheric pressure	High pressure working place	40	495	29	5.9
	Dive	210	1,407	103	7.3
	(Subtotal)	250	1,902	132	6.9
Manufacturing-prohibited substances	Benzidine	35	173	0	0.0
	4-Aminodiphenyl	11	51	1	2.0
	4-Nitrodiphenyl	3	3	0	0.0
	Bis (chloromethyl) ether	21	92	1	1.1
	β -Naphthylamine	22	76	1	1.3
	Amosite	4	31	3	9.7
	Crocidolite	0	0	0	0.0
(Subtotal)	96	426	6	1.4	
Specified chemical substances	Dichlorobenzidine	28	329	10	3.0
	α -Naphthylamine	73	465	15	3.2
	Chlorinated biphenyl	61	512	2	0.4
	o-Tolidine	105	597	18	3.0
	Dianisidine	29	315	3	1.0
	Beryllium	75	802	2	0.2
	Benzotrichloride	14	152	0	0.0
	Acrylamide	309	4,281	16	0.4
	Acrylonitrile	265	5,646	65	1.2
	Alkyl mercury compounds	42	216	0	0.0
	Asbestos	2,033	18,155	156	0.9
	Ethyleneimine	53	383	10	2.6
	Vinyl chloride	180	3,522	38	1.1
	Chlorine	1,107	18,712	189	1.0
	Auramine	22	142	5	3.5
	o-Phthalodinitrile	13	142	1	0.7
	Cadmium	351	3,231	63	1.9
	Chromic acid	2,455	22,221	219	1.0
	Chloromethyl methyl ether	30	223	4	1.8
	Vanadium pentoxide	191	2,326	43	1.8
	Coal tar	642	12,381	45	0.4
	Arsenic trioxide	218	2,669	45	1.7
	Potassium cyanide	646	6,464	70	1.1
	Hydrogen cyanide	160	2,446	7	0.3
	Sodium cyanide	721	5,939	96	1.6
	3,3'-Dichloro-4, 4'-diamino diphenyl methane	107	1,020	43	4.2
	Methyl bromide	175	1,341	48	3.6
	Dichromic acid	403	4,156	31	0.7
	Mercury	410	3,779	69	1.8
	Tolylenediisocyanate	346	5,704	43	0.8
	Nickel carbonyl	9	115	5	4.3
	Nitroglycol	5	69	0	0.0
	p-Dimethylaminoazobenzene	9	24	0	0.0
	p-Nitrochlorobenzene	23	187	1	0.5
	Hydrogen fluoride	1,499	41,029	246	0.6
	β -Propiolactone	9	36	0	0.0
	Benzene	680	14,222	166	1.2
	Pentachlorophenol	20	130	0	0.0
	Magenta	21	77	1	1.3
	Manganese	1,134	14,663	97	0.7
Methyl iodide	97	642	2	0.3	
Hydrogen sulfide	378	7,714	24	0.3	
Dimethyl sulfate	154	1,308	13	1.0	
(Subtotal)	15,302	208,487	1,911	0.9	
Total		65,163	994,211	40,505	4.1

Table 5 Breakdown of Special Medical Examinations (2003) (continued)

Substance work category	Items	Establishments covered	Those who underwent special medical examinations	Those who needed medical advice	Finding rate (%)
Special medical examinations by administrative recommendation					
Ultraviolet and infrared ray		3,089	62,421	1,388	2.2
Noise		4,349	201,742	33,887	16.8
Manganese compounds (basic manganese oxides)		32	756	59	7.8
Yellow phosphorus		19	272	7	2.6
Organophosphorus pesticide		64	946	22	2.3
Sulfurous acid gas		56	831	20	2.4
Carbon disulfide (excluding those related to work which uses organic solvents)		3	314	17	5.4
Nitroamide compounds of benzene		21	312	30	9.6
Chloro/bromo aliphatic hydrocarbons		40	1,114	45	4.0
Arsenic or arsenic compounds (excluding arsenic trioxide)		86	3,227	20	0.6
Phenylmercury compounds		1	15	0	0.0
Alkyl mercury compounds (excluding those covered by Ordinance on Prevention of Hazards due to Specified Chemical Substances)		0	0	0	0.0
Chloronaphatalene		1	1	1	100.0
Iodine		27	292	0	0.0
Red cedar, etc.		3	63	0	0.0
Ultrasonic depositing machine		51	735	55	7.5
Key punching, VDT work		4,000	246,713	14,971	6.1
Vibration		248	40,760	2,435	6.0
Handling heavy goods and care work that puts a significant burden on the waist		210	8,725	1,402	16.1
Cashier		267	3,252	344	10.6
Tools with trigger		636	54,615	1,816	3.3
Laser equipment		572	14,447	150	1.0
Others		117	2,114	154	7.3
Total		13,892	643,667	56,823	8.8
Grand total		79,055	1,637,878	97,328	5.9

Source: Report of Special Medical Examinations, MHLW.

Note: There were some changes in the contents of medical examinations for organic solvents and lead in October 1989. In 1996, amosite and crocidolite began to be handled separately from asbestos in reports.

(Victims, Case)

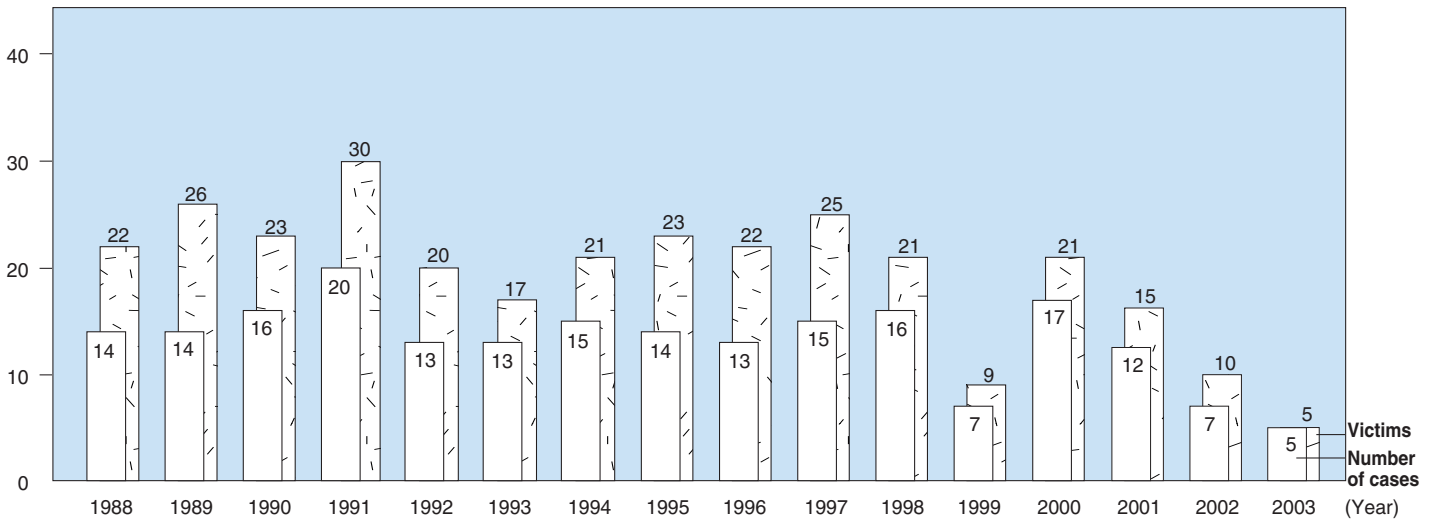


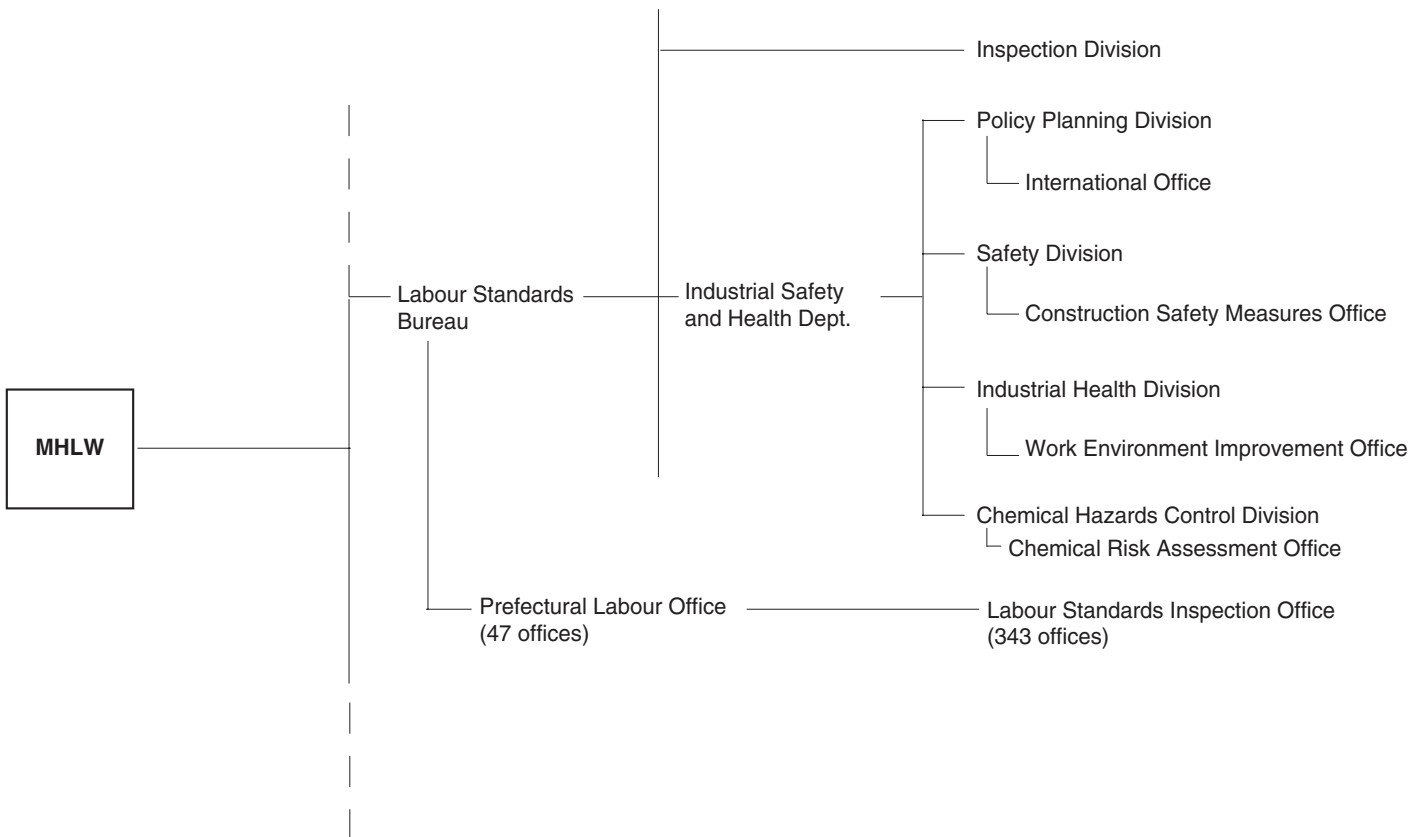
Fig. 27 Cases of Anoxia

III. Appendix

1. Government Organizations Involved in Industrial Safety and Health

Industrial safety and health administration in Japan is under the direct control of the government. The relevant authorities are the Ministry of Health, Labour and Welfare (MHLW), with its headquarters in Tokyo, the 47 prefectural labour offices located in different administrative divisions throughout the country, and 343 labour standards inspection offices under the supervision of the prefectural labour offices.

The MHLW formulates policies, and the prefectural labour offices and the labour standards inspection offices carry out the policies and ensure compliance with the laws.



2. Industrial Safety and Health-related Non-governmental Organizations in Japan

In addition to the administrative agencies, various industrial safety and health-related non-governmental organizations play important roles in upgrading industrial safety and health in Japan.

They are mainly: (1) JISHA and five sector-specific industrial accident prevention associations, (2) safety and health-related organizations designated by the government to play the role of authorized inspection agencies, authorized qualifying examination institutions, authorized education/training institutions, and (3) associations for specialists and technical institutions. These organizations are listed on the next page.

- Industrial Accident Prevention Associations
 - Japan Industrial Safety and Health Association
 - Japan Construction Safety and Health Association
 - Japan Land Transportation Industry Safety and Health Association
 - Japan Port Transportation Industry Safety and Health Association
 - Japan Forestry and Timber Manufacturing Labour Accident Prevention Association
 - Japan Mining Safety and Health Association

- Authorized inspection/examination agencies
 - Japan Boiler Association
 - Japan Crane Association
 - Boiler and Crane Safety Association
 - Technology Institution of Industrial Safety
 - and others

- Authorized qualifying examination institution
 - Institute for Safety and Health Qualifying Examinations

- Association for Specialists and Technical Institutions
 - Japan Association for Working Environment Measurement
 - Japan Association of Safety and Health Consultants
 - and others

3. Safety and Health Laws and Regulations

Industrial Safety and Health Law (1972)

- Enforcement Order of Industrial Safety and Health Law
- Ordinance on Industrial Safety and Health
- Ordinance on Safety of Boilers and Pressure Vessels
- Ordinance on Safety of Cranes and Other Similar Equipment
- Ordinance on Safety of Gondolas
- Ordinance on Prevention of Organic Solvent Poisoning
- Ordinance on Prevention of Lead Poisoning
- Ordinance on Prevention of Tetraalkyl Lead Poisoning
- Ordinance on Prevention of Hazards due to Specified Chemical Substances
- Ordinance on Safety and Health of Work under High Pressure
- Ordinance on Prevention of Ionizing Radiation Hazards
- Ordinance on Prevention of Anoxia, etc.
- Ordinance on Health Standards in the Office
- Ordinance on Prevention of Hazards due to Dust
- Ordinance on Authorized Inspection Agencies, etc.
- Ordinance on Examination of Machines and Other Equipment
- Ordinance on Industrial Safety Consultants and Industrial Health Consultants

Working Environment Measurement Law (1975)

Enforcement Order of Working Environment Measurement Law
 Enforcement Ordinance of Working Environment Measurement Law

Pneumoconiosis Law (1960)

Enforcement Ordinance of Pneumoconiosis Law

Industrial Accident Prevention Organizations Law (1964)**4. Outline of Japan Industrial Safety and Health Association (JISHA)****<Purpose of Establishment>**

JISHA was established in 1964 under the Industrial Accident Prevention Organizations Law. The purpose of JISHA's operations is to prevent occupational accidents and diseases and achieve a high quality working life by upgrading the standards of occupational safety and health through promoting voluntary activities by employers and other concerned people in the private sector.

<Membership> (March 2004)

Industrial Accident Prevention Associations for specified industries (5)
 Nationwide employers' organizations (56)
 Prefectural safety and health promotion organizations (48)
 Other organizations engaged in occupational accident prevention activities (15)
 Honorary members (178 persons)
 Associate members (4,973 companies)

<Organization> (July 2004)

Chairperson
 Vice-Chairperson
 President
 Executive Director
 Senior Managing Director
 Head Office Administration / Finance and Accounting / Research and Surveys / Education / Publishing and Sales / Zero-accident Promotion / Technical / Health Promotion / Comfortable Workplace Promotion / Small and Medium-sized Enterprises / Business Promotion Team
 Branches Regional Safety and Health Service Centers (9)
 Occupational Safety and Health Education Centers (2: Tokyo, Osaka)
 Occupational Health Service Centers (2: Tokyo, Osaka)
 Japan Bioassay Research Center
 Prefectural associations (48 affiliated associations)

<Budget>

Total Budget: 12.09 billion yen for FY 2004
 General Account: 9.99
 Special Account (Education Centers): 0.58
 (Japan Bioassay Research Center): 1.52



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