

JISHA

ANNUAL REPORT 2010





Safety and Health Motif

The green cross motif was adopted at the first-ever Safety Week in 1928 as a symbol of safety activities. The white cross motif was then adopted at the Fourth Industrial Health Week in 1953 to symbolize occupational health activities. In 1965, in order to underline the objective of pressing forward with safety and health as a unified concept, the two separate motifs were reworked and integrated into the safety and health motif that you see here.



President's Foreword

The number of occupational accidents in Japan has continued to decline steadily in recent years. Work-related fatalities in particular have declined considerably, hitting a record low of 1,075 in 2009. This decline can probably be explained in part by the recent slowdown in economic activity, but I believe it also reflects the widespread introduction of risk assessment and other preventive efforts in workplaces.

Nevertheless, I am concerned about the following trends in the workplace: dangers and hazards in the workplace have diversified as production processes have become more varied and complex, and as new machinery, equipment and chemical substances have been introduced. Furthermore, in some cases know-how in occupational safety and health has not been handed down well enough to younger workers due to the retirement of the generation of workers that has sustained safety and health expertise. In other instances, unskilled workers are not given adequate safety and health training.

In terms of worker health, the proportion of workers with problems identified in health examinations and those who feel strong anxiety and stress about work and working life remains high, and health impairment from overwork has increased.

In light of these circumstances, the implementation of safety and health-focused management and the strengthening of on-site capacity are important management issues for employers today. I believe, therefore, that they need to enhance and strengthen their independent efforts toward that end. In particular, it is important for employers to try to invigorate day-to-day safety and health activities and to promote good mental and physical health for all workers in the workplace.

Accordingly, in order to support employers positively in their autonomous efforts to promote accident-prevention activities, we, at JISHA, eliciting their diverse needs, wish to fully utilize our integrated business competence to develop more effective, efficient and attentive projects such as: diffusion of risk assessment and occupational safety and health management systems (OSHMS); offering of various educational programs on safety and health; expansion of the Zero Accident Campaign; promotion of physical and mental health (especially support for mental health measures); encouragement of safety and health measures for small and medium-sized enterprises; and provision of the latest information about safety and health.

In the area of international activities, JISHA will continue to organize training courses for safety and health professionals from overseas, to collect and disseminate safety and health information, and to promote exchanges with international organizations and safety and health associations of other countries.

2011 marks the centenary year for the industrial safety campaign. We, at JISHA, pledge to keep striving to prevent occupational accidents by supporting our official members, associate members, and all other organizations and enterprises with their initiatives to ensure the safety and health of their workers.

December 2010

A handwritten signature in black ink that reads "Yohtaro Sawada". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

Yohtaro Sawada
President of JISHA

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Introduction to JISHA

The Japan Industrial Safety and Health Association (JISHA), which was established in 1964 under the Industrial Accident Prevention Organizations Act, is a legal entity whose membership consists of employers and employers' associations. JISHA's overall objective is to help prevent work-related accidents and injuries and protect the health of workers by promoting safety and health efforts undertaken by employers and employers' associations, and by offering safety and health guidance and services. JISHA's major activities are listed below.

- Promoting occupational accident prevention efforts undertaken by employers and employers' associations
- Establishing and operating educational facilities and support facilities for providing safety and health technical services
- Providing technical guidance and assistance
- Collecting and disseminating safety and health information and documents
- Conducting research, surveys and public relation services
- Operating programs entrusted to JISHA by the government, such as studies of the impact of toxic chemicals on humans and the campaign to create comfortable workplaces



Overview of JISHA's Core Activities

In 2009, the number of work-related fatalities declined for the tenth consecutive year, reaching an all-time low of 1,075. The sum of fatalities and injuries requiring four or more days off from work was 105,718, which is an 11.4% decrease from last year. In addition, although the number of serious accidents involving three or more fatalities or injuries had been on the rise since 1985, it dropped in 2009 for a third straight year, falling by 53 to 228. (See the statistics in the appendices.)

To help prevent occupational accidents, JISHA undertakes the core activities described below.

1. Support for the introduction of risk assessment and establishment of occupational safety and health management systems (OSHMS)

- (1) In response to enterprises' demand for skilled manpower that will immediately be useful in the field of risk assessment and OSHMS, JISHA organizes a set of seminars ranging from a fundamental course covering the basics of risk assessment to a more sophisticated course which teaches how to introduce, operate, and audit OSHMS in a workplace.

Furthermore, JISHA implements training courses on risk assessment and risk reduction associated with machinery and equipment in accordance with the Guidelines for the Comprehensive Safety Standards of Machinery established by the Japanese Ministry of Health, Labour and Welfare (MHLW) and international standards (ISO 12100 and ISO 14121, etc.). It also implements risk assessment training courses on chemical substances for preventing explosions and fires as well as health impairment.

- (2) Upon request from enterprises, JISHA sends experts to the workplace to give employers certain advice necessary for implementing risk assessment as well as introducing or establishing an OSHMS appropriately.

JISHA also conducts a certification service based on JISHA OSHMS Standards in accordance with the guidelines of the MHLW and the International Labour Organization (ILO).

2. Physical and mental health promotion and mental health measures

- (1) With a view to promoting both the physical and mental health of people in the workplace, JISHA organizes seminars for instructors and practitioners of enterprises in the field of physical exercise, nutrition guidance, health guidance or counseling, and/or sends experts to enterprises upon request for in-house health promotion training. In addition, JISHA provides a health-advice service that has been developed in the form of health guidance tools to promote workers' self-awareness.

- (2) In order to promote mental health measures in the workplace, JISHA runs several types of seminars: e.g., those where preventive measures ranging from step one to three can be studied comprehensively, or those designed to help supervisors or occupational safety and health (OSH) staff learn the approaches and techniques required to exercise their specific responsibilities. JISHA, as in the case above, sends experts to the workplace upon request to help arrange in-house training.

3. Promotion of OSH education

- (1) JISHA organizes a set of seminars targeting different ranks of people in enterprises, corresponding to their specific roles: e.g., OSH Top Seminars designed to help top managers learn the importance of OSH management in business; trainings for newly employed staff or for foremen or team leaders in special industries, which are obligatory based on the Industrial Safety and Health Act; or technical training designed to help OSH-responsible staff or line managers learn practical

know-how and techniques about OSH affairs. JISHA also dispatches experts to workplaces upon request to provide technical advice or to help organize in-house training.

- (2) The Occupational Safety and Health Education Centers in Tokyo and Osaka run a variety of OSH technical training courses for the OSH trainers/instructors of enterprises.
- (3) JISHA holds a National Industrial Safety and Health Convention once a year, where, in addition to ceremonial events including award ceremonies, special lectures and symposiums as well as presentations on research findings and good practices are organized to expose participants to the latest OSH-related information and knowledge, and give them opportunities to learn OSH-related practical experience from other enterprises.

4. Assistance in the introduction and operation of Zero-Accident-Campaigns

- (1) A Zero-Accident-Campaign is a culture-oriented activity that places priority on OSH and a lively workplace. Based on the philosophy of respect for human beings, all managers and employees participate as a whole in industrial-accident prevention activities at their workplaces, striving to find solutions to problems and to realize “zero accidents” as their ultimate goal. Currently, JISHA is promoting campaigns under the 8th five-year Campaign Promotion Plan that started in 2008.
- (2) In order to promote campaigns across the country, JISHA organizes a set of seminars, namely: seminars for top managers who are planning to introduce campaign activities; seminars for line managers who are primarily responsible for the campaign in the workplace on zero-accident theory and practice; or training for the KYT trainers who will educate leaders of KYT activities, or hazard-prediction activities, in the workplace. Recently, in addition to the above-mentioned activities, JISHA also implements KYT training on safe driving and in the medical occupations.

5. JISHA's on-demand technical services

- (1) Upon request from enterprises, JISHA sends experts such as safety/health officers to workplaces to diagnose issues related to the safety and health management of production facilities and processes, operation methods, and workplace environments, and to give employers necessary advice on problems.
- (2) Upon request from enterprises or when commissioned by the MHLW, JISHA implements analysis, investigation, research or consultation on hazardous chemicals such as the volatile organic compounds (VOCs) which cause sick house syndrome, electromagnetic waves, or airborne asbestos.
- (3) Regarding working conditions stipulated by law, JISHA conducts measurements of dust, lead, noise, intensity of illumination for VDT work, velocity control of local exhaust ventilation systems, or the status of use of organic solvents and specified chemical substances. Based on the measurement results, JISHA proposes countermeasures to improve conditions, or sends experts to the enterprises to help with in-house training.
- (4) JISHA analyzes employee's blood, urine, or hair to detect chemical substances, and analyzes raw materials to determine silica, asbestos or poisonous substances such as metal or organic solvents.
- (5) JISHA conducts regular health examinations. JISHA also implements special health examinations for workers dealing with chemical hazards, engaged in VDT work, or working amid vibration or noise, and gives overall advice on health management that takes into consideration each type of working environment.

6. International cooperation

- (1) JISHA promotes international exchange with overseas OSH organizations in the form of receiving guests on an ad hoc basis or attending international meetings including those of ILO/CIS and the Asia Pacific Occupational Safety and Health Organization (APOSHO).

- (2) JISHA organizes the JISHA OSH Seminar annually to provide technical cooperation for overseas OSH organizations. In addition, JISHA arranges training courses on OSH policy-related affairs, on commission from the Japan International Cooperation Agency (JICA), and holds workshops or seminars commissioned by the MHLW.

7. Assistance to small and medium-sized enterprises

- (1) Commissioned by the MHLW and based on cooperation with the local Prefectural Labour Bureaus of the ministry, JISHA offers the “Tampopo (Dandelion) Project” to group(s) of enterprises with less than 50 employees. The project consists of guidance and assistance by OSH experts, supply of funds necessary for the activities of the groups, OSH education, and measurement of the working environment.
- (2) On commission from the MHLW, JISHA provides SMEs that are members of the Tampopo Project or accredited for another project by the Prefectural Labour Bureau director(s) with financial subsidies for installing new equipment to create better working environment. It also provides a new financial subsidy to special medical examination institutions for the introduction of thoracic digital X-ray equipment.

8. Production and dissemination of publications and other items, and provision of the latest information

- (1) JISHA issues monthly magazines and other publications, and produces posters and other OSH-related goods.
- (2) JISHA offers information via the Internet. In particular, JISHA’s Japan Advanced Information Center of Safety and Health (JAISH) provides a large variety of information at its website, including information on laws and regulations, examples of industrial accidents, statistics, chemical substances and material safety data sheets (MSDS) which are compliant with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
- (3) JISHA operates Safety Museums and Safety Theaters in an integrated manner with its other educational initiatives. It provides technical safety and health information corresponding to the current status of occupational accidents and undertakes safety and health education programs using real safety equipment.
- (4) JISHA provides the latest information on safety and health-related protective equipment and devices at the Green Cross Exhibition, which it holds concurrently with the National Industrial Safety and Health Convention.

9. Investigation of chemical substances for toxicity and safety testing

On commission from governments and private companies, the Japan Bioassay Research Center conducts a variety of animal toxicity tests on chemical substances and mutagenicity tests using microorganisms and cultured cells, and provides them with the resulting data.

Program Content

1. Proactive Development of Programs Relating to Risk Assessment and OSHMS

Risk assessment is the practice of identifying dangers to people or potential sources of harmful effects, estimating the effects (risks) to people, and eliminating or reducing unacceptable risks.

An occupational safety and health management system (OSHMS) is a system for achieving specific organizational goals set out in an OSH policy made by top management, creating a concrete plan for achieving those goals, and ensuring that the entire organization works together toward the goals with each individual playing his or her part. The PDCA (plan-do-check-act) cycle is regarded as an effective tool for implementing the system.

(1) Expansion of risk assessment and OSHMS-related programs

Japan's revised Industrial Safety and Health Act, which went into force in April 2006, stipulates, without penalty, that employers should make an effort to implement risk assessment (RA). JISHA conducts the following training courses in order to develop the human resources needed to implement RA based on the Guidelines for Risk Assessment published in March 2006, and to properly introduce, set up, and operate OSHMS based on the Revised Guidelines for Occupational Safety and Health Management Systems, both published by the MHLW.

Table 1 on the next page shows these training courses held in fiscal 2009.

(a) Practical risk assessment training course

A training course on proper methods and practical techniques for introducing RA systems, targeting safety and health staff members and others who will play the main roles in the introduction of an RA system

(b) Risk assessment training course for workplace leaders

A training course on practical RA techniques, targeting workplace leaders who know the workplace well and will actually perform the RA

(c) Management system leader training course

A training course on the proper introduction and setup of an OSHMS based on the OSHMS guidelines, targeting safety and health staff members and others who will play the main roles in the introduction of an OSHMS

(d) Practical system auditing training course

A training course on proper methods for introducing an OSHMS and system auditing techniques based on the OSHMS guidelines, targeting safety and health staff members and others who will play the main roles in the OSHMS, in introducing important system auditing

(e) OSHMS internal auditor training course

A training course on practical system auditing techniques, targeting managers and supervisors in each department who will actually be in charge of system auditing

JISHA also sends personnel to enterprises that are planning to introduce or are in the process of establishing an OSHMS to provide customized training, OSHMS total support services, and other services.

Table 1: Risk Assessment/OSHMS-related Training Courses in Fiscal 2009

Training course	Number of times	Participants
1. Practical risk assessment training	76	2,900
2. RA training for workplace leaders	21	662
3. OSHMS leader training	15	423
4. Practical system auditing training	10	238
5. OSHMS internal auditor training	23	801
Total	145	5,024

In addition to the training courses shown in the table, JISHA conducted two comprehensive management system training courses and 89 customized on-site training courses.

(2) JISHA OSHMS Standards Certification service

JISHA conducts the JISHA OSHMS Standards Certification service. The certification criteria follow the guidelines of Japan's MHLW and those of the ILO. The certification is based on an investigation that includes whether the management system established at the enterprise is helping to improve the level of safety and health, whether the enterprise's OSHMS has been set up properly, and whether it is being operated appropriately to produce step-by-step improvements in safety and health performance. In fiscal 2009, JISHA certified 35 new enterprises and renewed certification for 67 enterprises, bringing the number of JISHA-certified enterprises to 260. Of these, five are outside Japan—including Taiwan, Thailand and China.

(3) Enhancement of assistance in risk assessment of chemical substances and of machinery and equipment

JISHA provides a comprehensive set of services relating to chemical substances, ranging from RA to risk reduction measures. Furthermore, it holds a variety of training courses on control of chemical substances. Its other services include assistance in implementing the details of RA, preparation of GHS-compliant MSDS, and analysis and measurement for exposure assessment. JISHA also provides model MSDS and other information via the JAISH website.

Regarding machinery and equipment, JISHA helps ensure the intrinsic safety of machinery at workplaces through RA and risk reduction measures. The various training courses are arranged so that the trainees can, step by step, study safety techniques that are compliant with the guidelines of the MHLW and international standards and applicable on site.

Upon request from enterprises, JISHA also provides customized on-site training programs on chemical substances and machinery/equipment.

Table 2 shows the training courses on control of chemical substances and machinery and equipment safety management held in fiscal 2009. In addition, JISHA conducted 11 customized on-site training courses on control of chemical substances and two on machinery and equipment.

Table 2: Training Courses on Control of Chemical Substances and Safety Management of Machinery and Equipment in Fiscal 2009

Training course	Number of times	Participants
1. Chemical risk assessment training to prevent health impairment	4	89
2. Chemical risk assessment training to prevent explosions and fires	4	81
3. Training of dioxin operations supervisors	9	649
4. Training for control of chemical substances	14	1,236
5. New approach to machinery safety training	10	262
6. Risk assessment practicum on machinery and equipment	4	82
7. Training on machinery and equipment risk reduction techniques	4	46
8. Training on specified self inspection guidelines for power presses	5	209
Total	54	2,654

2. Ensuring Health and Promoting Comfortable Workplace Environments

(1) Physical and mental health promotion for workers

As Japanese society ages, the incidence of so-called lifestyle-related diseases—such as hypertension, diabetes and ischemic heart disease—continues to rise. This tendency reflects not only the safety and health conditions of workplaces but also the lifestyle people have led since their youth, including diet, exercise and habitual behavior, as well as the levels of stress workers have been exposed to. For this purpose, the government revised the Industrial Safety and Health Act in 1988, which stipulates, without penalty, that employers should attempt to take steps to maintain and promote the health of their employees, including providing general health education and medical advice. In the same year, the government also launched the Total Health Promotion Plan (THP) for workers, and JISHA started the following projects to promote THP. Figure 1 on the next page shows the flow of the THP programs.

Table 3 on the next page shows the THP training courses conducted in fiscal 2009. Besides the courses shown in the table, JISHA dispatched instructors to enterprises for 106 health promotion training courses conducted upon request.



Health care training

Fig. 1: Flow of THP Programs

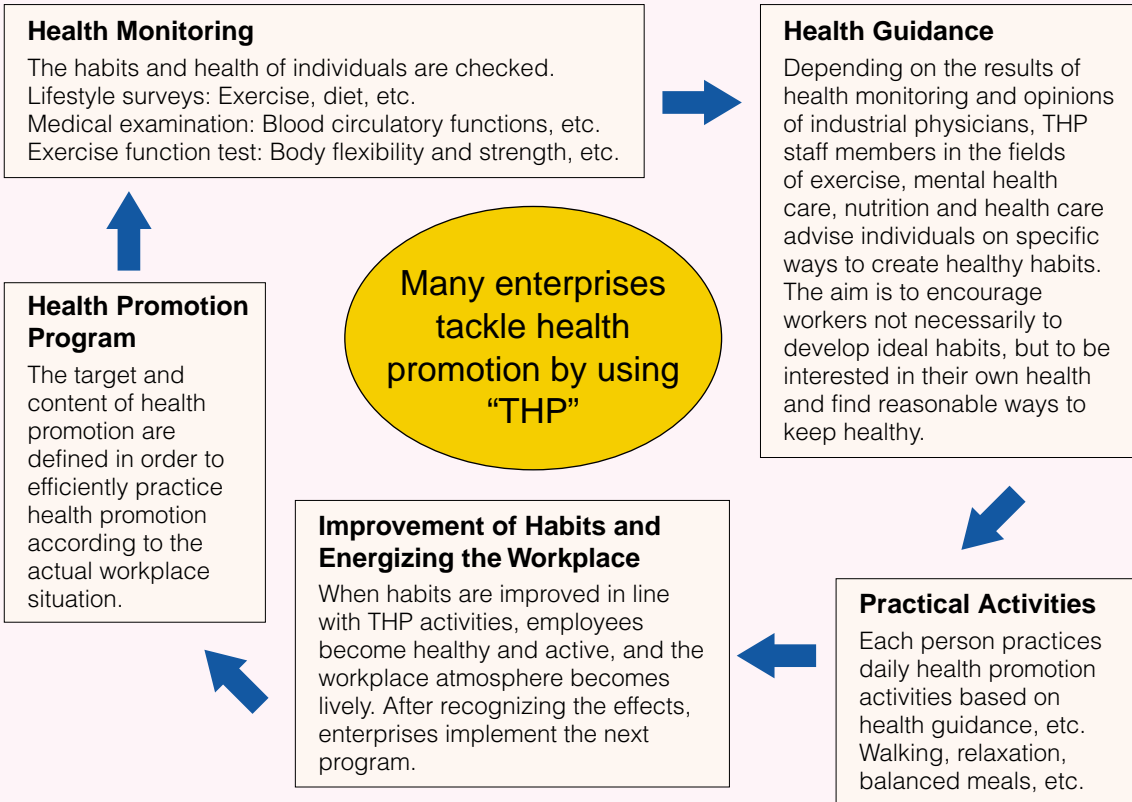


Table 3: THP Training Courses in Fiscal 2009

Training course	Number of times	Participants
1. THP leader training	28	1,529
2. Dietary improvement instructor training related to specified health guidance	5	106
3. Practical training for improvement	19	1,213
4. Specified health guidance practitioner training for THP leader	7	286
5. Brush-up seminar	15	566
Total	74	3,700

(2) Mental health measures

In March 2006, the MHLW published the Guidelines for Promoting Mental Health Care of Workers, which outline the principal measures for mental health care that employers are advised to provide. The basic points of mental health measures in the guidelines are establishing, publishing and disseminating policies for mental health measures; preparing a mental health promotion plan; establishing a counseling system; implementing education and training for managers, supervisors and employees; making efforts to improve the working environment; and setting up rules governing how employees who have taken a long leave for a mental health reason can re-enter the workforce.

JISHA conducts the following seminars to disseminate the guidelines and to make sure they are implemented: a comprehensive mental health measures seminar which helps persons in charge of mental health measures in enterprises learn topics ranging from the fundamental points of mental health measures to policies on workforce re-entry, and a seminar for managers and supervisors to learn needed attentive listening skills.

In addition, JISHA holds other seminars and workshops, including a seminar that assists industrial health staff members to learn how to provide guidance in autogenic training and how to use transactional analysis. It conducted seminars in fiscal 2009 to improve communication for promoting mental health measures where participants learn specific methods for improving day-to-day communication in the workplace, which is effective for reducing workers' stress and re-energizing worksites.

Furthermore, upon request from enterprises, JISHA dispatches instructors to the workplace to conduct training on line care for managers and supervisors and on self care for employees.

In fiscal 2009, JISHA held 99 training courses related to mental health, which were attended by a total of 7,582 people. It also dispatched instructors to enterprises to conduct 503 mental health training courses upon request.

(3) Promotion of comfortable workplace environments

Japan's Industrial Safety and Health Act stipulates, without penalty, that employers should make an effort to create a comfortable workplace environment that induces the least amount of fatigue and stress. The Minister of Health, Labour and Welfare has issued guidelines for measures to be taken by employers to create a comfortable workplace environment. Moreover, for the purpose of creating a comfortable workplace environment, employers who submit to a Prefectural Labour Bureau a Comfortable Workplace Promotion Plan can have the plan accredited by the director general of the bureau when appropriate.

The government encourages the accreditation of the plans and conducts a number of programs at the national and prefectural levels to encourage the creation of comfortable workplace environments. JISHA established the National Center for Promoting Comfortable Workplaces, which, upon commission by the government, assists the Prefectural Comfortable Workplace Promotion Centers, undertakes public awareness campaigns, conducts research and educational training programs, and provides counseling.

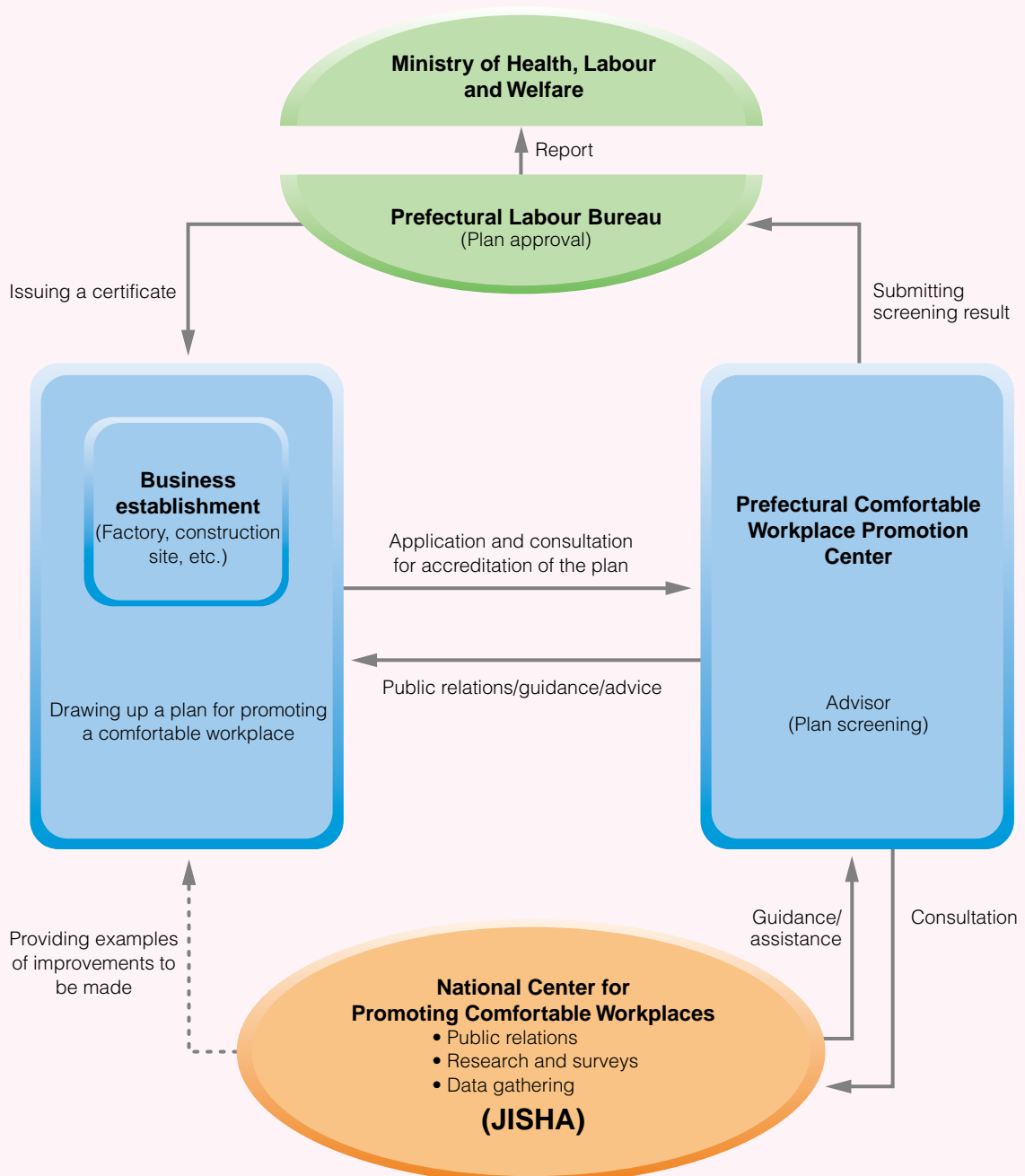
Table 4 shows the number of plans accredited under this program since its inception. Figure 2 shows the flow of the comfortable workplace promotion program and the process by which plans are accredited.

Table 4: Accredited Comfortable Workplace Promotion Plans

FY1992-2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	Total
14,622	2,634	2,995	3,210	3,207	3,082	3,088	3,081	35,919

Fig. 2: Flow Chart for Accreditation of Comfortable Workplace Promotion Plans

This flow chart shows the process by which an enterprise formulates a Comfortable Workplace Promotion Plan, and, through assessment, obtains the accreditation of the director of a Prefectural Labour Bureau.



3. Promotion of Safety and Health Education

(1) A broad arrangement of training and education programs, plus instructor dispatch

To begin with, JISHA offers the Top Seminar on Occupational Safety and Health for top management, which includes lectures on topics such as safety, health and mental health, and the obligation to consider safety based on the concept that safety and health must be ensured first of all by the initiatives of top management. It also provides lectures and information exchanges on a wide range of knowledge and learning for executives to stay abreast of the latest developments. Second, JISHA provides a variety of education and training courses, mainly to help newly appointed safety officers have the practical ability to perform their duties with certainty by acquiring knowledge relating to safety management, safety education, and relevant laws and regulations. Third, it organizes seminars for staff responsible for safety and health, supervisors or foremen to help them learn basic and practical knowledge and techniques that will be useful for their safety and health activities.

In addition, JISHA plans and conducts on-demand training courses, including training on workplace patrols and near misses, upon request from enterprises.

In fiscal 2009, JISHA held 189 seminars and training courses, which were attended by 5,988 people (see table 5).

Table 5: Seminars and Training Courses in Fiscal 2009

Training course	Number of times	Participants
1. Top Seminar on Occupational Safety and Health (for executives)	2	71
2. Safety and Health Management Training	42	2,166
3. Seminars to acquire basic and practical knowledge and skills	126	2,939
4. On-demand training courses (workplace patrols, near misses, etc.)	19	812
Total	189	5,988

(2) Instructor training for safety and health education

Occupational Safety and Health Education Centers were established in Tokyo and Osaka to train trainers, instructors and others who are responsible for safety and health education conducted by enterprises (employers), as well as safety and health advisers and promoters. Both centers were established by the Ministry of Labour (currently the Ministry of Health, Labour and Welfare) and are operated by JISHA.

The Occupational Safety and Health Education Centers distinguish themselves by offering highly practical education under the guidance of experienced experts and offering cutting-edge education facilities, and by providing an environment in which trainees seek to compete against and emulate each other by living communally. The centers conduct a wide variety of training programs including RST, which is the MHLW standard training for safety and health education trainers. After completing the education and training courses, trainees help raise the safety and health levels at enterprises and other organizations not only as trainers and instructors but also as production line supervisors, safety and health staff members, and safety and health consultants.

In fiscal 2009, the Tokyo and Osaka Occupational Safety and Health Education Centers held 162 and 147 training courses, respectively, for a total of 5,829 trainees.

4. Expansion of the Zero-Accident Campaign

JISHA began to advocate the Total Participation Zero-Accident Campaign in 1973 and has been promoting it ever since. The campaign is based on a spirit of respect for human beings that holds that “each person is an indispensable being,” as expressed in three basic principles: (1) “the principle of zero-accidents,” which requires that all kinds of danger in every person’s daily life, not limited to the dangers lurking at workplaces and in jobs, be detected, comprehended, and resolved, and which is aimed at stamping out all accidents including industrial accidents, occupational diseases, and traffic disasters; (2) “the principle of pre-emptive action,” which requires the detection, comprehension, and resolution of all dangers (and problems) hidden in daily life before one starts action and thereby prevents accidents and disasters; and (3) “the principle of participation,” in accordance with which top management, supervisors, staff members, and rank-and-file workers cooperate and act to resolve problems in their respective positions through self-initiated endeavors.

In order to spread and expand the Total Participation Zero-Accident Campaign, JISHA, focusing on the principles of the campaign and techniques for putting those principles into practice, holds the Zero-Accident Campaign Top Seminar for executives, the Zero-Accident Campaign Program Training for line managers and supervisors, the KYT (*Kiken Yochi*, or hazard-prediction, training) Trainer Training, the KYT Training for Medical Care Safety primarily for safety supervisors at medical institutions, and the Traffic KYT Training primarily for driving safety supervisors.

In the effort to prevent occupational accidents, it is also vital to strengthen on-site capacity—the capability of workers themselves to proactively identify risk factors and other problems that occur in the workplace and then resolve them. To this end, JISHA holds a campaign to enhance capabilities in the field, within the Zero Accident Campaign framework, emphasizing the introduction of a Zero Accident Campaign as the first step toward boosting the on-site capacity of everyone in the workplace to think about risks and problems in the workplace from the worker’s perspective, help make sure these issues are understood by all, and take action to resolve them.

What is KYT?

Preventing accidents due to human error and ensuring safety and health on-site requires that workplace leaders take the initiative to identify hidden dangers in the workplace and in work tasks, and take action to resolve them. With that purpose in mind, efforts must be made to heighten workers’ sensitivity to danger, foster their powers of concentration and problem-solving abilities, and increase their eagerness to put these skills into practice. This series of activities is called *Kiken Yochi*, or hazard prediction, training. Accordingly, the practice of predicting and resolving hazards as part of the process of carrying out work tasks is called KYT.

KYT is helpful for effectively implementing risk assessment, which is a core action in occupational safety and health management systems.

KYT is carried out in teams based on the following four steps (four-round method):

Step 1: Understanding the situation

Workplace members talk with each other about the kinds of hazards that could be hidden in a given situation.

Step 2: Investigating the nature of the hazard

The essence of each hazard is clearly defined.

Step 3: Establishing countermeasures

Members talk with each other about their ideas for how to deal with the identified hazards.

Step 4: Setting targets

Countermeasures are defined in terms of specific actions to be taken, and action targets are set for each team.

In addition to its regular KYT training courses, JISHA dispatches instructors to enterprises and extends guidance in hazard prediction upon request. Aiming to support enterprises' social activities and increase participation in the campaign, JISHA has established a registration system for enterprises which publicly declare their commitment to running a Zero-Accident Campaign. JISHA has been working to increase the number of businesses making that declaration.

Table 6 shows training courses related to the Zero-Accident Campaign and KYT held in fiscal 2009.



KYT seminars



Table 6: Zero-Accident Campaign and KYT Training Courses in Fiscal 2009

Training course	Number of times	Participants
1. Zero-Accident Campaign Top Seminar (for executives)	2	97
2. Zero-Accident Campaign Program Study Course	9	323
3. KYT Trainer Training	120	5,458
4. KYT Training for Medical Care Safety	12	306
5. KYT Training for Safe Driving	5	111
6. Seminar for Managers and Supervisors on Proceeding with KYT Activities Used in Risk Assessment	6	118
Total	154	6,413

5. Provision of Safety and Health Technical Services

(1) Workplace safety and health assessments

Upon request, JISHA's safety and health officers, as safety and health professionals, visit enterprises to conduct safety and health diagnoses. They verify compliance with safety and health legislation, check the status of safety and health management, diagnose problems related to safety and health management of production equipment, processes, work procedures and workplace environments, and provide accurate advice for making improvements. They also accept requests from enterprises to help with their safety and health education based on the diagnosis results.

In fiscal 2009, these professionals conducted 648 safety and health diagnoses, provided 925 safety and health education sessions, and gave 498 safety and health lectures.



Working environment measurements



(2) Working environment measurements and medical examinations

JISHA takes measurements to help improve the working environment. Measurements are conducted on dust, organic solvents, specified chemical substances, lead and other metals, which are harmful substances specified by laws and ordinances, and noise, intensity of illumination for VDT work, and velocity control of local exhaust ventilation systems, as well. JISHA also provides working environment follow-ups based on measurement results, including suggesting improvement measures, inspecting local exhaust ventilation systems, and providing guidance on the use of material safety data sheets (MSDS).

In addition to periodic general medical examinations, JISHA implements special medical examinations relating to such matters as harmful chemical substances, vibration, noise, and VDT work. Physicians and other professional staff members, based on the medical examination results, provide advice on ways of managing overall health that take into consideration work conditions and working environment conditions. In addition, JISHA dispatches industrial physicians to enterprises upon request and assists with health management in the workplace by providing occupational health education and follow-up actions based on medical examination results.

JISHA also conducts analyses, investigations, research, and counseling on a large range of harmful factors, including volatile organic compounds (VOCs)—which play a pathogenic role in sick house syndrome—indium, electromagnetic waves, and airborne asbestos (measured using dispersion staining).

Furthermore, JISHA conducts analyses of toxic substances and their metabolites in biological samples such as urine, blood, and hair, as well as analyses of airborne and material-embedded toxic substances including free silicic acid, asbestos, metals, and organic solvents. Upon request, JISHA also develops sampling and analysis methods.

Table 7 shows the working environment measurements and other technical services provided in fiscal 2009.

Table 7: Working Environment Measurements and Other Technical Services in Fiscal 2009

Services	Cases
1. Working environment measurement	1,245 enterprises
2. Biological sample analyses	16,875 samples
3. Non-biological sample analyses	6,464 samples
4. Analyses and measurement of asbestos (in raw materials, construction materials, and airborne)	95 samples
5. Special medical examinations	7,653 people
6. General medical examinations	4,825 people
7. Dispatch of industrial physicians to enterprises	202 times (11 enterprises)
8. Certification training for industrial physicians	13 times (1,282 physicians)



Analytical measurements



Medical examination

6. International Cooperation

(1) Exchanges with safety and health organizations abroad and provision of safety and health information

JISHA engages in international exchanges with OSH organizations abroad. These exchanges take the form of the acceptance of overseas guests on an ad hoc basis and participation in international conferences, including meetings of ILO/CIS national centers and annual conferences of the Asia Pacific Occupational Safety and Health Organization (APOSHO).

JISHA gathers safety and health information from the United States, Asian and European countries and provides this information in Japanese in the form of global topics via its website. JISHA also provides information in English for people outside Japan on its own activities.

(2) Technical assistance to developing countries

JISHA conducts a seminar on occupational safety and health once a year to provide technical assistance to OSH organizations outside Japan. On commission from the Japan International Cooperation Agency (JICA), JISHA conducts seminars on industrial safety and health policy, and on working environment control for occupational disease prevention, which are both group training courses, and provides support for country-specific technical assistance projects in China and Malaysia. JISHA also holds seminars and workshops commissioned by the MHLW.

In addition, JISHA accepts requests from abroad to dispatch experts overseas or to receive and arrange customized study tours in Japan.

International cooperation programs conducted during fiscal 2009 are introduced in detail in Appendix 5.

7. Assistance to Small and Medium-sized Enterprises for Safety and Health Measures

On commission from the Ministry of Health, Labour and Welfare, JISHA conducts the “Tampopo (Dandelion) Project,” which provides assistance for group-based safety and health activities.

The Tampopo Project provides comprehensive financial and technical assistance for three years to support the safety and health activities of groups—mainly comprised of small enterprises with less than 50 workers—and their member enterprises. The types of assistance provided are indicated below. In fiscal 2009, assistance was provided to 185 groups (with a total of 4,077 enterprises).

- (1) Guidance and advice by experts on safety and health activities
- (2) Supply of group activity funds necessary for the implementation of safety and health activities by the registered groups
- (3) Five safety and health services for member enterprises:
 - Safety and health diagnoses
 - Safety and health education
 - Specified self inspections
 - Special medical examinations
 - Working environment measurements

JISHA also holds safety and health seminars for SME employers, runs the Zero-Accident Certification Program for SMEs, and promotes projects for disseminating and establishing OSHMS and risk assessment systems at SMEs.

8. Production and Distribution of Publications and Other Items and Provision of the Latest Safety and Health Information

(1) Production and distribution of periodicals, books, posters, and other items

JISHA produces and distributes two monthly magazines, *Anzen to Kenko* (“Safety & Health”) for safety and health staff and managers and *Anzen-Eisei no Hiroba* (“Safety and Health Plaza”) for workplace leaders, and a quarterly journal, *Kokoro to Karada no Oashisu* (“Mental and Physical Oasis”) for the tertiary industry. It also produces and distributes two semimonthly publications, *Anzen-Eisei Tsushin* (“Safety and Health News”), a bulletin of safety and health information, and *Anzen-Eisei Kabeshimbun* (“Safety and Health Wall Newspaper”), using illustrations to explain points of safety and health measures.

Additionally, JISHA produces and distributes approximately 350 textbooks, JISHA paperbacks, and other publications on the theme of safety and health. The following are just some examples of these. In all, nearly 2.72 million copies were issued in fiscal 2009.

Main types of books (all in Japanese):

- Textbooks for obtaining qualifications and the like: *Organic Solvent Operations Chiefs Manual*, etc., for skill training courses, *Divers' Manual*, etc., for license examinations, and *Prevention of Oxygen Deficiency and Related Conditions*, etc., for special educational topics.
- Books relating to laws and ordinances: *Directory of Safety and Health Legislation*, which contains information on the Industrial Safety and Health Act and related ministerial order, and *Explanation of the Ordinance on Prevention of Health Impairment due to Asbestos*, which explains specific laws and ordinances and guidelines, etc.
- Books useful when safety and health personnel and managers implement safety and health activities: *Practice! Occupational Safety and Health Management Systems*, *The Top Manager's Guide to Safety and Health*, *Safety and Health Staff Manual*, and *Mental Health Measures in the Workplace*, etc.
- Illustrated pamphlets for workers that clearly explain the prevention of work accidents: *No More Getting Caught or Trapped in Equipment*, and *Danger Ahead: Handling and Transport Work*, etc.
- JISHA paperbacks that explain safety and health topics in a reading material presentation: *Museum of Accidents and Disasters*, and *The Zero-Accident Campaign Changed Our Company*, etc.

JISHA produces and distributes numerous books, posters, and other items related to such campaigns as the National Safety Week and the National Occupational Health Week, the Year-End and New-Year Zero-Accident Campaign, a campaign to promote safety & health education and communication for new employees, and campaigns for the prevention of heat stroke and the strengthening of on-site capacity.

Every year, JISHA issues the *General Guidebook on Industrial Safety* before the National Safety Week and the *General Guidebook on Industrial Health* before the National Occupational Health Week as books that provide guidelines for activities at enterprises.

All these publications, posters, and other items are available at JISHA's Publishing and Sales Department, Regional Safety and Health Service Centers, and prefectural branches.

(2) Provision of information via the Internet and other information-related activities

The Japan Advanced Information Center of Safety and Health (JAISH) provides information on its website (<http://www.jaish.gr.jp>), about matters from laws to ministerial notices, as well as occupational accident statistics, and safety and health videos. The website also introduces a variety of case studies of fatal and other serious occupational accidents including their status of occurrence, causes, and countermeasures, case studies of near-miss accidents, and case studies of accidents as seen in pictures. Other useful case studies include examples of ingenuity and improvements, examples of creating comfortable workplaces, and anti-smoking measures. As for risk assessment, JAISH has made a system available via the internet since fiscal 2009 that enables users to easily estimate risks in 11 types of work or industries mainly in the manufacturing sector, including product assembly. Website users can also view information on the nearly 59,000 chemical substances published in accordance with Japan's Industrial Safety and Health Act as well as GHS-compliant MSDS for approximately 1,900 substances.

In fiscal 2009, the JAISH website was accessed a total of 31.51 million times.

Additionally, JAISH offers a service that integrates on one card the records of all the skill-training course certificates held by workers in the construction, manufacturing and other industries concerned. JAISH maintains data on those who have finished skill-training courses. In fiscal 2009, a total of 982,697 entries were added to the database, bringing it to more than 37.79 million records.



Risk Assessment Implementation Support System

(3) Operation of Safety Museums and Safety Theaters

JISHA's Safety Museums in Tokyo and Osaka are the only establishments in Japan that have exhibits relating to occupational safety and health for study in general: namely, exhibits on safe machinery operation, prevention of fires from explosions, prevention of construction accidents, asbestos, protective equipment, and other topics.

The Safety Theaters in Tokyo and Osaka are well suited to safety and health education and training for workers. Visitors can view images of safety patrols in many different work scenarios and images that draw on examples of serious occupational accidents that actually occurred and examples of near-misses. Visitors can also watch safety and health videos (the collection has 349 titles) on a large screen and learn about dangerous situations and the status of occurrence of accidents.

Additionally, special exhibitions are held on important issues and urgent challenges in safety and health, including heat stroke, the history of protective equipment, and measures against getting caught or trapped in equipment.

The Safety Museums received 64,590 visitors and the Safety Theaters received 7,500 visitors in fiscal 2009.



Special exhibition



Safety Theater

9. National Events and Campaigns

(1) National Industrial Safety and Health Convention and other events

Every autumn, JISHA holds the National Industrial Safety and Health Convention. The Convention was initiated in 1932, and in recent years it has been attended by approximately 10,000 corporate safety and health personnel and other interested persons from across Japan. The convention includes awards and other ceremonies, presentations of research findings and case studies on occupational safety and health activities undertaken by different workplaces, lectures, a symposium, and workshops (see Table 8). Convention attendees can learn the latest OSH-related information and knowledge, and OSH-related practical experience from other enterprises.

In fiscal 2009, the 68th convention was held over three days in October in Saitama City, Saitama Prefecture, attended by about 9,000 people.

Concurrent with the National Industrial Safety and Health Convention, JISHA holds the Green Cross Exhibition and Comfortable Workplace Forum. The Green Cross Exhibition, a fair meant to develop workers' sense of security, is the largest exhibition of safety and health equipment and devices in Japan, offering techniques and information relating to safety and health management in all kinds of workplaces and working environment improvement. The Comfortable Workplace Forum includes lectures and presentations on exemplary workplaces that are striving to create comfortable working environments.

Table 8 gives a program summary of the fiscal 2009 convention.



National Industrial Safety and Health Convention 2009

Table 8: Convention Program

General Assembly	Opening ceremony, awards ceremony, convention declaration, lectures, and special lectures
Group meetings	Risk assessment/management system group meeting
	Safety management activity group meeting
	Safety and health education group meeting
	Machinery and equipment safety group meeting
	Small and medium-sized enterprise group meeting
	Chemical substance management group meeting
	Zero-accident campaign group meeting
	Traffic safety group meeting
	Occupational health management activity group meeting
	Health promotion group meeting
	Mental health group meeting
Simultaneously held events	Green Cross Exhibition 2009
	Comfortable Workplace Forum 2009

(2) National safety and health campaigns

Together with the MHLW, JISHA holds campaign activities every year during the National Safety Week (first seven days of July) and the National Occupational Health Week (first seven days of October). In the month prior to each, as a preparatory period, awareness campaign activities are conducted.

Ongoing since 1926, the 82nd National Safety Week was marked in 2009. The National Safety Week is targeted as an opportunity to roll out a campaign aimed at deepening awareness of industrial accident prevention and encouraging the steady implementation of safety activities in each workplace.

Continuing since 1950, the 60th National Occupational Health Week was observed in 2009. This week is designed as a chance to promote efforts to ensure and advance the health of workers and to create comfortable workplaces.

Additionally, JISHA holds a Year-End and New-Year Zero-Accident Campaign for one month and a Heat Stroke Prevention Campaign for four months from May to August. It also rolls out campaigns to promote safety and health education and communication for new employees and to strengthen on-site capacity.

10. Research and Surveys

In response to changes in the environment that companies are facing such as evolving industrial structure or employment patterns, JISHA conducts research and surveys on both the status quo and the ideal form of safety and health management.

The results of the research and surveys and the data collected in the process are published on the Internet and in various other publications. These results and data are also utilized in safety and health education or when providing guidance, etc.

The main research and surveys conducted in fiscal 2009 are shown in Table 9.

Table 9: Research and Survey Topics in Fiscal 2009

1. Research and surveys relating to good safety and health measures and practices in department stores, general merchandise stores, foods supermarkets, and home improvement stores with a view toward the future safety and health of people who work in retail
2. Research and surveys relating to the current status of and measures for industrial health activities in workplaces
3. Research and surveys relating to good practices of risk assessment and company-wide safety and health activities in manufacturing industry
4. Research and surveys relating to the current status of safety and health of non-regular workers in manufacturing operations

11. Japan Bioassay Research Center

The Japan Bioassay Research Center, founded in 1982, conducts animal studies (with rats and mice) to investigate the single dose toxicity (acute toxicity), short-term (28-day, 2-week, and 13-week) repeated-dose toxicity, chronic toxicity, reproductive and developmental toxicity, and carcinogenicity of chemical substances administered via inhalation and orally.

The center features technologies to conduct inhalation exposure studies on chemical substances that appear in the form of a gas, mist, or particles as well as short-term and long-term inhalation devices (see photos in the appendix), which make it a large-scale testing facility without parallel anywhere in the world. It is important to understand the inhalation toxicity of chemical substances because there are many opportunities for exposure to chemical substances through inhalation from the ambient air in the general environment and in workplace environments. Given the urgent need to confirm the safety of nanoparticles and asbestos substitutes, the center recently started to develop exposure technologies for these materials. Thus far, the center has conducted carcinogenicity tests (including 2-week and 13-week repeated-dose preliminary tests) on more than 40 chemical substances, whose results have been published in scientific papers and other forms,^a and have been rated highly worldwide.

The center also conducts mutagenicity studies using microorganisms, chromosome aberration studies using mammalian cell cultures, micronucleus studies using rodents, and other studies to screen for carcinogenicity. It has developed effective mutagenicity testing technologies for gaseous substances and volatile substances to which its animal inhalation exposure technologies are applied (see photos in the appendix). These technologies have been used in the center's genetic toxicity studies, which have produced numerous study achievements.

All studies conducted by the center are performed in compliance with Good Laboratory Practice (GLP) standards.

Appendix 11 shows the commissioned studies, the number of studies conducted in fiscal 2009, and pictures of the equipment.

a) See the JISHA website (<http://www.jisha.or.jp>) for information on test results.

One of many published papers: K. Nagano, T. Sasaki, Y. Umeda, T. Nishizawa, N. Ikawa, H. Ohbayashi, H. Arito, S. Yamamoto and S. Fukushima. "Inhalation carcinogenicity and chronic toxicity of carbon tetrachloride in rats and mice," *Inhalation Toxicology* 19: pp. 1089-1103, 2007.

Appendices

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Membership



JISHA Members and Associate Members (March 2010)

Notes

1) Five Industrial Accident Prevention Associations

- Japan Construction Occupational Safety and Health Association
- Japan Land Transportation Industry Safety and Health Association
- Japan Port Transport Industry Safety and Health Association
- Japan Forestry and Timber Manufacturing Safety and Health Association
- Japan Mining Safety and Health Association

2) Nationwide Employers' Organizations

There are 55, including:

- Japan Business Federation
- The Japan Iron and Steel Federation
- The Federation of Electric Power Companies Japan
- The Japan Electrical Manufacturers' Association
- Japan Petrochemical Industry Association
- Japan Chemical Industry Association
- The Shipbuilders' Association of Japan

3) “Prefectural Safety and Health Promotion Organizations” are established in each prefecture under the authorization of the Director of the Prefectural Labour Bureau. There are 48 such organizations.

4) Other Organizations Engaged in Industrial Accident Prevention Activities

There are 16, including:

Japan Boiler Association

Japan Crane Association

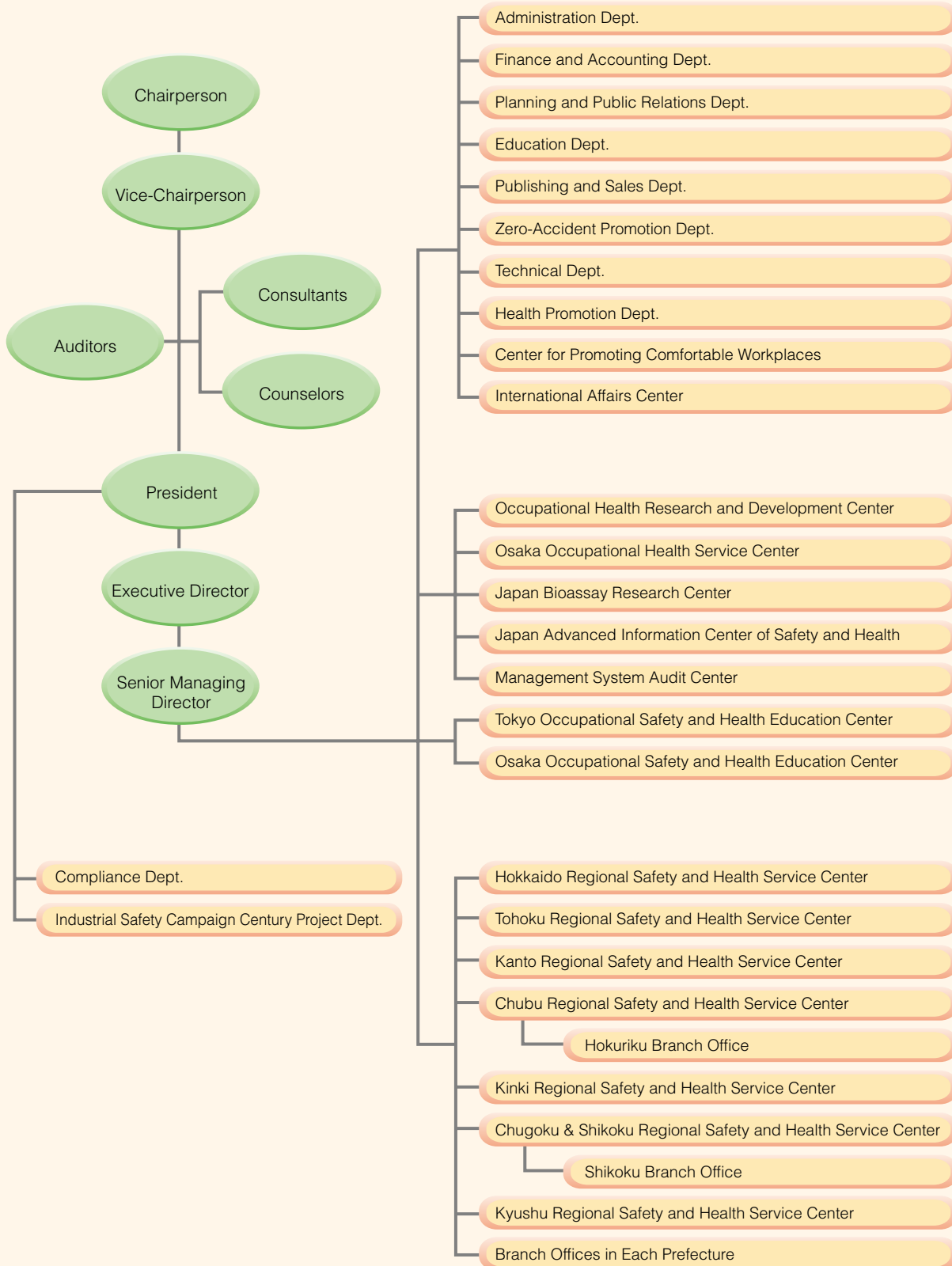
Japan Association of Safety and Health Consultants

5) Associate Members, by Industry

(As of March 31, 2010)

Industry	Number	Industry	Number
Agriculture	0	Metal products	190
Forestry	0	General machinery	219
Fishery	3	Electrical machinery	330
Mining	12	Transport machinery	230
Construction	597	Precision instruments	52
Foods	236	Other manufacturing	246
Textiles	40	Electricity, gas and water	100
Lumber and furniture	26	Transport	244
Pulp and paper	101	Finance and insurance	21
Publishing and printing	75	Telecommunications	113
Chemicals	434	Labour unions	30
Coal and petroleum	81	Public sector	78
Rubber	50	Others	233
Ceramics, clay and stones	104	Services	775
Iron and steel	140	Medicine and public health	229
Nonferrous metal	79	Total	5,068

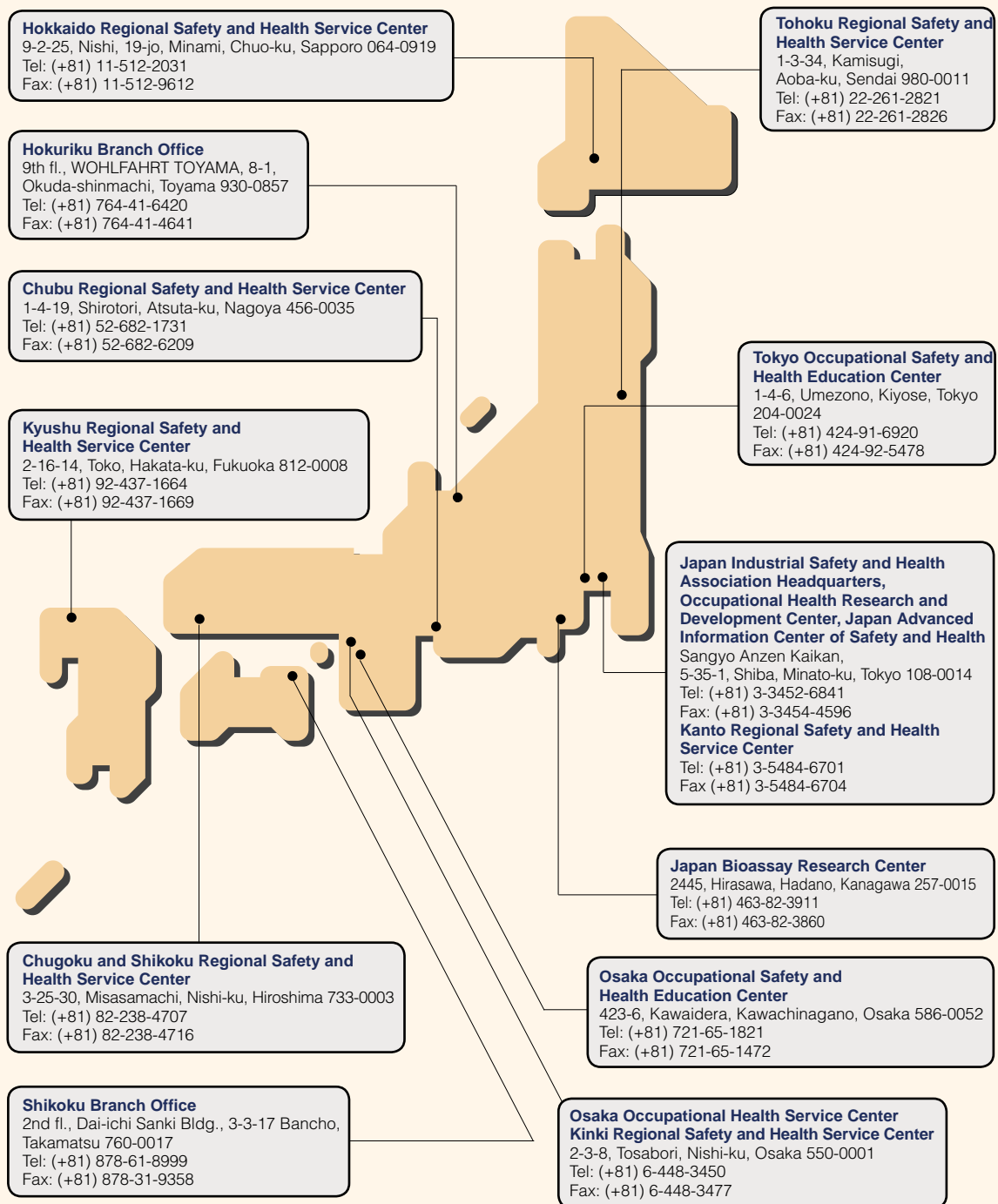
JISHA Office Organization Chart



(as of November 2010)

JISHA Office Locations

JISHA operates Occupational Safety and Health Education Centers in Tokyo and Osaka, the Occupational Health Research and Development Center, the Osaka Occupational Health Service Center, and seven Regional Safety and Health Service Centers and three branch offices. All of these Regional Centers offer technical advice, conduct working environment measurements, organize seminars and distribute books and other JISHA materials. This map shows the location of JISHA facilities throughout Japan.



(as of November 2010)

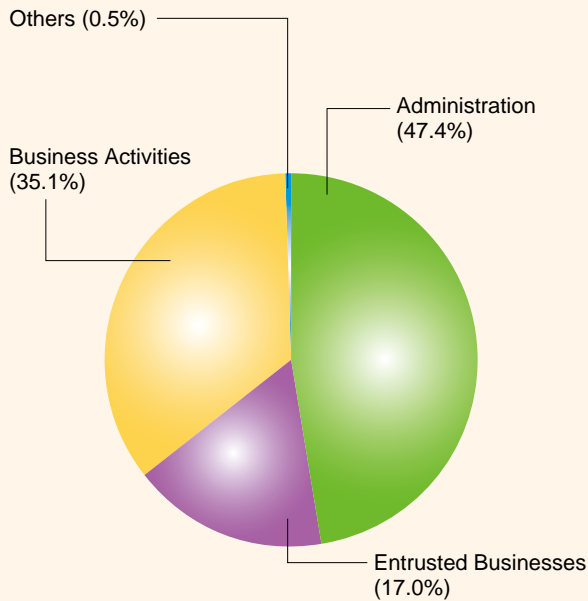
Budget

Changes in Budget

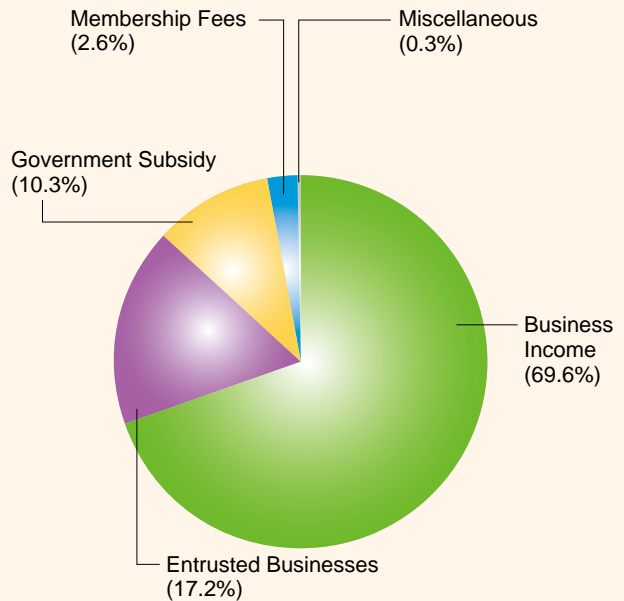


Expenditure and Income for FY2010

EXPENDITURE



INCOME



FY2009 International Cooperation Activities

1) Promotion of Exchanges with Overseas Safety and Health Organizations

Mission	Overview
Dispatching JISHA's own executives and employees overseas (one per project)	<ul style="list-style-type: none"> • Speech at an international workshop sponsored by the Korea Occupational Safety and Health Agency (KOSHA) (South Korea, Apr. 9 – 11, 2009) • Speech at the Korea-Japan International Workshop for the Prevention of Accidents in the Shipbuilding Industry co-sponsored by the Korean Employers Federation (KEF) and KOSHA (South Korea, Jul. 2 – 4, 2009) • Speech at the Symposium on Cooperative Organizational Activities for Accident Prevention at Industrial Parks sponsored by Taiwanese Council of Labor Affairs (Taiwan, Sep. 13 – 18, 2009) • Speech at the Seminar on Workplace Health and Welfare sponsored by Hong Kong's Occupational Safety & Health Council (China, Sep. 28 – 30, 2009) • Attended the annual meeting of the ILO-CIS National Center and a workshop co-sponsored by WHO (Switzerland, Oct. 20 – 24, 2009) • The annual APOSHO meeting was supposed to be held in the Philippines at the end of October 2009 but was canceled due to outbreak of the new influenza virus.
Receiving visitors and trainees from overseas	<ul style="list-style-type: none"> • Group from the China Academy of Safety Science and Technology (2 persons, Apr. 2, 2009) • Delegates of KOSHA including the President (4 persons, Jun. 15-18, 2009) • Group of employer's association labor safety and health personnel from developing countries invited by the Nippon-Keidanren International Cooperation Center (20 persons, Jun. 25, 2009) • Mission including the Vice Minister of Vietnam's Ministry of Labour—Invalids and Social Affairs (5 persons, Aug. 4, 2009) • Group including the Commander of the United States Air Force Academy at Kadena Air Base (2 persons, Sep. 1, 2009) • Group from the Korea Industrial Safety Association (3 persons, Sep. 3, 2009) • Industrial Safety and Health Association of Taiwan (1 director, Oct. 20, 2009) • Group of trainees on JICA training course received upon commission by the University of Occupational and Environmental Health, Japan (9 trainees, Oct. 26, 2009) • Delegates including South Korea's Director-General, Occupational Safety and Health Policy Bureau, Ministry of Employment and Labor (5 persons, Oct. 27, 2009) • Group from the Occupational Health Measures Project of Vietnam's Ministry of Health (5 persons, Nov. 9, 2009) • Group of the Mongolian WHO Fellowship for Occupational Health Training (6 persons, Nov. 19, 2009) • Group from the Health Bureau of Gaoxiong County Government, Taiwan (6 persons, Dec. 21, 2009) • Study mission of a Chinese petrochemical group (20 persons, Mar. 15 – 19, 2010)

2) Technical Cooperation with Developing Countries

Name of Project	Project Outline
a. JISHA OSH Seminar	The training program for 10 trainees from overseas (Jul. 8-14, 2009) (Theme: OSHMS in Japan)
b. Support for JICA technical cooperation projects	<p>Project on Scientific and Technological Capacity Building for Work Safety in China</p> <ul style="list-style-type: none"> • Short-term expert dispatched (3 experts: the fields and periods shown below) <ul style="list-style-type: none"> In-house training instructor training (Sep. 21 – 26, 2009) Risk assessment of chemical substances (Oct. 12 – 17, 2009) Zero-Accident Seminar (Nov. 2 – 6, 2009) • Trainees received in Japan (10) <ul style="list-style-type: none"> [3 training courses] Tests for hazardous chemical properties (2 trainees, Jun. 24 – Jul. 17, 2009) Enterprise safety (zero accidents, RST, risk assessment) (3 trainees, Aug. 11 – Sep. 16, 2009) Cooperation between government and private enterprises (5 trainees, Jan. 14 – 22, 2010) <p>Project for Improving Occupational Safety and Health Administration of Department of Occupational Safety and Health of Malaysia</p> <ul style="list-style-type: none"> • Short-term expert dispatched (2 experts: the field and period shown below) <ul style="list-style-type: none"> Zero-Accident Seminar (Jul. 2 – 10, 2009) • Interim evaluation investigators (Mar. 7 – 11, 2010)
c. Implementation of JICA training	<ul style="list-style-type: none"> • Implemented Seminar on Working Environment Control for Occupational Disease Prevention (9 trainees, May 25 – Aug. 1, 2009) • Implemented Seminar on Policy of Industrial Safety and Health (8 trainees, Oct. 6 – Nov. 6, 2009)
d. Safety and health seminars overseas	<p>Held an international safety and health seminar (Dec. 1 – 4, 2009)</p> <ul style="list-style-type: none"> • 24 participants from 9 ASEAN countries (Myanmar declined to participate), China, and South Korea (including 2 privately funded participants from South Korea) <ul style="list-style-type: none"> Theme: Workshop on the Current Situation and Efforts Regarding Asbestos Exposure Countermeasures <p>Dispatch of experts to workshops held in ASEAN countries</p> <ul style="list-style-type: none"> • Indonesia (2 persons, Feb. 18 – 19, 2010) <ul style="list-style-type: none"> Themes: Japanese administrative policies regarding asbestos, techniques for asbestos-related health examinations (including practice) • Malaysia (2 persons, Mar. 25 – 26, 2010) <ul style="list-style-type: none"> Themes: Japan's measures for prevention of asbestos exposure, techniques for asbestos-related health examinations (including practice)

3) Collecting and Providing Information to Domestic and Overseas Users

- Provision via website
- *JISHA Annual Report 2009*, issued in March 2010

Project-type Technical Cooperation



(ODA) in Which JISHA Was Involved



to Seminars Conducted by JISHA with



JISHA English Publication List

1. Periodicals

Annual Report

2. Books

General Guidebook on Industrial Health 2004	¥5,000
House Keeping at Work	¥300
Safety and Health Training for Newcomers	¥630
How to Prevent Lumbago	¥3,500
A Guide to Safety in Press Work for Press Operators	¥1,000
A Guide to Safety in Casting for Foundry Workers	¥1,000

3. Photocopies of Books (¥105 per page)

(1) Manuals on Safety and Health

Safety Assessment
Explanation of Guide for Periodic Voluntary Inspection of Local Exhaust Ventilating Systems and Dust Collectors
How to Establish a Safety and Health Improvement Programme (for Special Guidance on Safety Control)
How to Establish a Safety and Health Improvement Programme (for Special Guidance on Industrial Health Preservation)
Safety Control Handbook
Case Studies of Industrial Injuries and Countermeasures
Fundamental Knowledge of Industrial Hygiene for Working Environmental Experts
Sampling of Harmful Substances
Industrial Hygienist Technical Course (1)–(4)
Practical Handling of Analyzing Instruments for Working Environment Measurement
Examples of Occupational Injury
Text for RST Trainers
Important Points in Drawing Up Guidance Sheets for RST Education
List of RST Sheets for Construction Work
Promoting Safety and Health Education within a Company
Text for Construction Engineers
Report Concerning the Construction Industry
Guidelines for Lining Work in Tunnels; Safety Work Standards Regarding Construction Machinery Used in Tunnels

Work Guidelines for Tunnel Excavation: Rock Tunnels

Work Guidelines for Tunnel Excavation: Shield Tunnels

Tunnel Excavation Safety Guide: Ground Excavation

Tunnel Excavation Safety Guide: Cut and Cover Tunnel

Tunnel Excavation Safety Guide: Earth Support System for Cutting

Information Regarding Work at MRT Construction Sites

Safety and Health Administrative Guidelines in the Shipbuilding Industry

The Ninth Industrial Accident Prevention Plan

(2) Safety and Health Textbooks (Educational Textbooks)

Safety and Health Training of Newcomers: Instructor's Manual

Gas Welding

Safety Manual for Arc Welding

Press Operator's Safety Handbook

Safety Manual for Grinders

Handling Electricity

Necessary Knowledge Regarding Industrial Robots

Health Administration Henceforward

(3) Zero-Accident Books

Identifying Occupational Safety Hazards
—A Compilation of Promotional Methods for Training in Prediction of Potential Hazards with Illustrated Situation Sheets [1]

Identifying Occupational Safety Hazards
—TBM-KY Procedure and Model Sheets Education [2]

Identifying Occupational Safety Hazards
—The Short-Term KY Method and Model Sheets [3]

What Work Instructions Would You Give?
—Work Instructions Training Procedures and Model Sheets [4]

Identifying Occupational Safety Hazards
—New KYT Procedure and Model Sheets Edition [5]

The Story of New KYT

Building The Zero-Accident Campaign with Total Participation
—A Guide for Formulating Plans for Zero-Accidents

Are You Practicing Short-Time Danger Prediction Training?

Are You Practicing Finger Pointing and Call?

The Zero-Accident Campaign: "We Are Glad We Did It!"
—Everyone Takes Part to Achieve Zero-Accidents

New KYT: New Small Group Activities 5 Minute Zero-Accident Meeting

Websites

Japan Industrial Safety and Health Association (JISHA):

<http://www.jisha.or.jp/>

Japan Advanced Information Center of Safety and Health (JAISH):

<http://www.jaish.gr.jp/>

JISHA

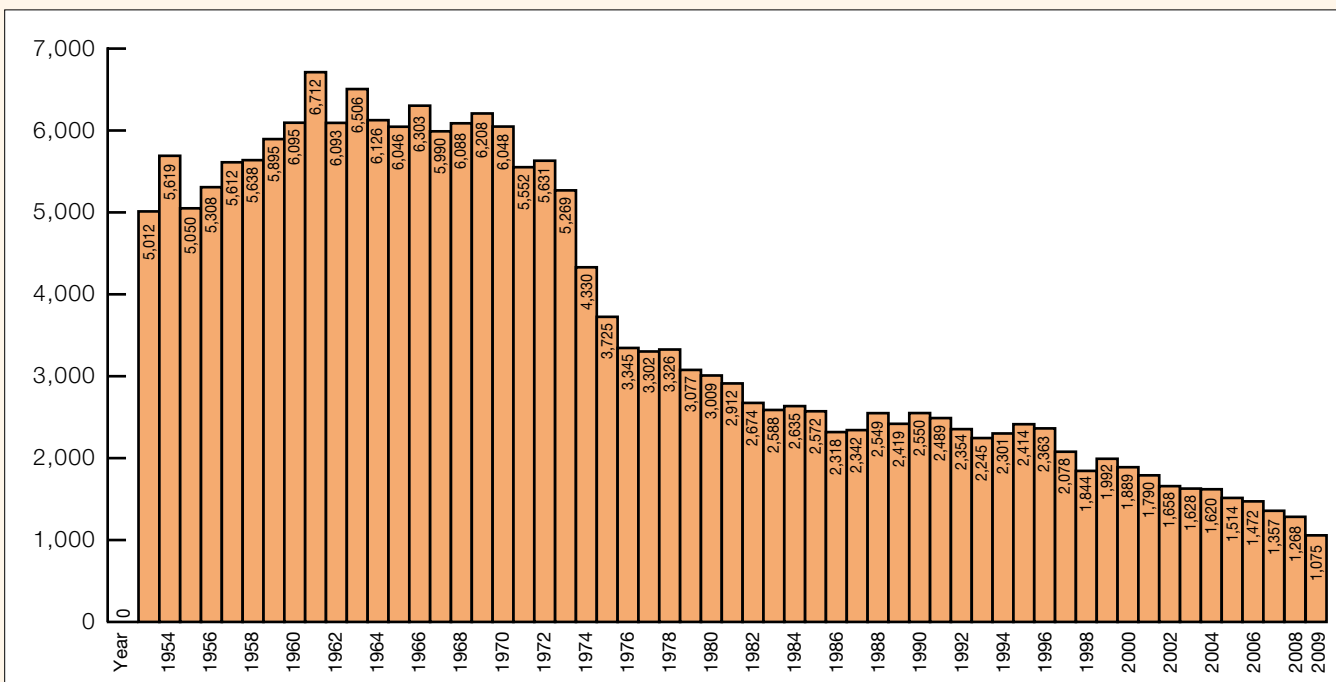


JAISH

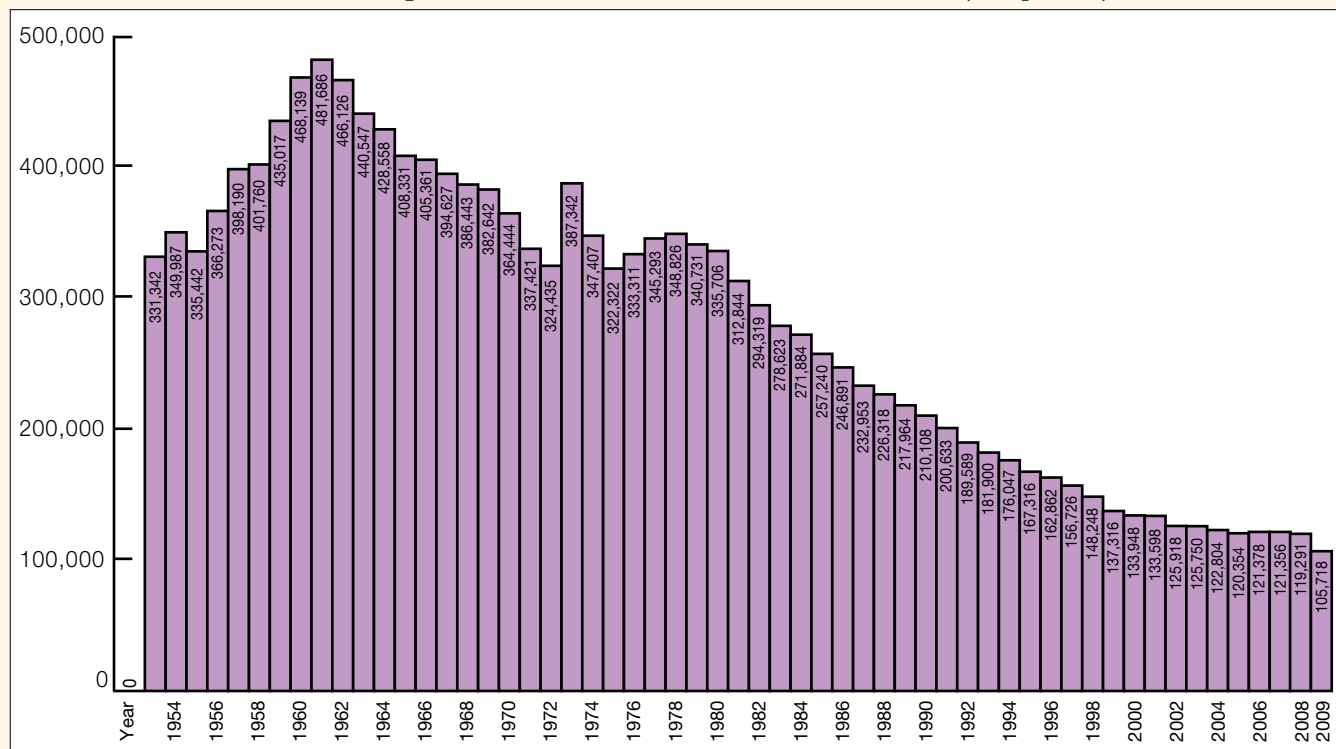


Statistics

Change in Number of Deaths in All Industries (Japan)



Change in Number of Deaths and Injuries Requiring an Absence of 4 Days or More in All Industries (Japan)

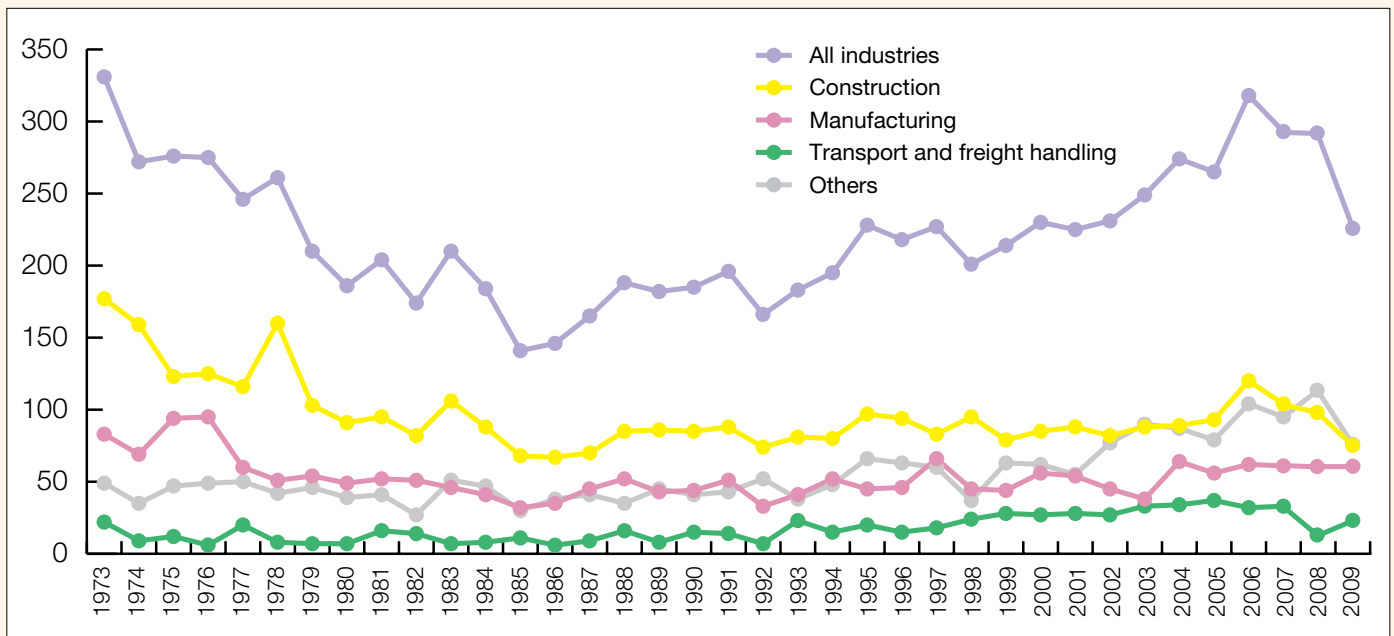


Note: The figures for 1972 and before indicate the number of deaths and injuries requiring an absence of 8 days or more.

Change in Serious Industrial Accidents by Industry (Japan)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
All industries	331	272	276	275	246	261	210	186	204	174	210	184	141	146	165	188	182	185	196
Construction	177	159	123	125	116	160	103	91	95	82	106	88	68	67	70	85	86	85	88
Manufacturing	83	69	94	95	60	51	54	49	52	51	46	41	32	35	45	52	43	44	51
Transport and freight handling	22	9	12	6	20	8	7	7	16	14	7	8	11	6	9	16	8	15	14
Others	49	35	47	49	50	42	46	39	41	27	51	47	30	38	41	35	45	41	43

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All industries	166	183	195	228	218	227	201	214	230	225	231	249	274	265	318	293	281	228
Construction	74	81	80	97	94	83	95	79	85	88	82	88	89	93	120	104	93	75
Manufacturing	33	41	52	45	46	66	45	44	56	54	45	38	64	56	62	61	58	55
Transport and freight handling	7	23	15	20	15	18	24	28	27	28	27	33	34	37	32	33	13	21
Others	52	38	48	66	63	60	37	63	62	55	77	90	87	79	104	95	117	77



Note: "Serious industrial accident" signifies an accident resulting in three or more deaths and/or injuries at a time.

Commissioned Studies and Number of Studies Conducted by the Japan Bioassay Research Center

1) Commissioned studies

<ul style="list-style-type: none"> ● Toxicity studies using rats and mice <ul style="list-style-type: none"> • Single dose toxicity studies (acute toxicity studies) • Repeated dose (28-day, 2-week, and 13-week) toxicity studies • Chronic toxicity studies • Carcinogenicity studies • Combined chronic toxicity/carcinogenicity studies • Reproductive and development toxicity studies <ul style="list-style-type: none"> • Combined repeated dose toxicity/reproductive and development toxicity studies • Single generation reproduction studies • Uterotrophic bioassays in rodents • Hershberger bioassays in rats • Others
<ul style="list-style-type: none"> ● Mutagenicity assays (the technological level applicable for commission for gaseous substances and volatile substances) <ul style="list-style-type: none"> <i>in vitro</i> studies <ul style="list-style-type: none"> • Mutagenicity assays using microorganisms / reverse mutation assays using bacteria / Ames test • Chromosomal aberration assays using cell cultures • Cytotoxicity assays using cell cultures • Mouse lymphoma TK assays • Micronucleus assays using cell cultures • Transformation assays • Others <i>in vivo</i> studies <ul style="list-style-type: none"> • Bone-marrow micronucleus assays using rodents • Liver micronucleus assays using rodents • Testis micronucleus assays using rodents • Transgenic rodent mutation assay

2) Number of studies conducted (fiscal 2009)

<ul style="list-style-type: none"> ● Toxicity studies using rats and mice <ul style="list-style-type: none"> Inhalation toxicity studies <ul style="list-style-type: none"> • Repeated dose toxicity studies • Combined chronic/carcinogenicity studies Oral toxicity studies <ul style="list-style-type: none"> • Single dose toxicity studies • Repeated dose toxicity studies • Combined chronic/carcinogenicity studies Reproductive and development toxicity studies <ul style="list-style-type: none"> • Combined repeated dose toxicity/reproductive and development toxicity studies 	20 13 2 10 11 2
<ul style="list-style-type: none"> ● Mutagenicity assays <ul style="list-style-type: none"> • Mutagenicity assays using microorganisms • Chromosomal aberration assays using cell cultures • Transformation assays using Bhas 42 cells 	24 3 8



Japan Bioassay Research Center



Bioassay operation



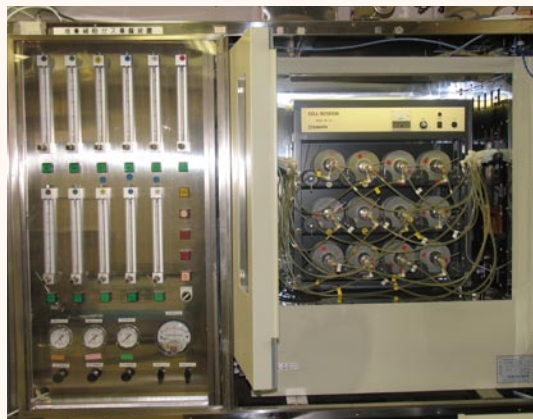
Inhalation Exposure Chamber (Short-term Study)



Inhalation Exposure Chamber (Long-term Study)



Gas Exposure System (Ames-test)^{a)}



Gas Exposure System (chromosomal aberration assay)^{b)}

a) A. Araki, T. Noguchi, F. Kato and T. Matsushima. 1994. "Improved method for mutagenicity testing of gaseous compounds by using a gas sampling bag." *Mutation Research* 307: 35-344.

b) M. Asakura, T. Sasaki, T. Sugiyama, H. Arito, S. Fukushima and T. Matsushima. 2008. "An improved system for exposure of cultured mammalian cells to gaseous compounds in the chromosomal aberration assay." *Mutation Research* 652: 122-130.

MEMO



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