

2011 ——— 2020
*Ten Years of
Dedication to a
Single Mission*



Ten Years of Achievements in the
Development of Occupational Safety
and Health in Taiwan

2011 ——— 2020
*Ten Years of
Dedication to a
Single Mission*



Ten Years of Achievements in the
Development of Occupational Safety
and Health in Taiwan



In Retrospect Protection for All, Yesterday and Today

Nowaday the work environment is remarkably different from it was in the past. The global industrial configuration can change in a swift manner, bringing new challenges and risks in work venues. Today we have a better understanding of dangerous jobs, so that workers today enjoy proper protection than did their counterparts in the past. Dangers are discovered as early as possible, and we have always placed attention on preventing hazards before their occurring.

In this retrospection we look over the efforts made over the course of the ten years 2011-2020, from the concept of “reducing occupational accidents” to the priority of “risk prevention.” Over this period many measures have been promoted, including building of occupational safety and health (OSH) systems, labor supervision and inspection, and protection of workers who have suffered from occupational accidents (including diseases). Through continual refinement and upgrading, we have aimed to improve our performance and stay further ahead of the curve, as only in this way can we enable workers to contribute to work bearing their beloved families at heart in safe workplace environments. The Occupational Safety and Health Administration (OSHA) has promoted a culture of safety and health in order to be able to more comprehensively protect workers and keep them safe from hazards like accidents and diseases. And when accidents do occur unfortunately, workers have been enabled to return to their familiar jobs thanks to proper diagnosis, treatment, consultations, and subsidy arrangement. Besides benefitting from OSH systems, it is hoped that everyone can work together to create a pathway to safe employment, so that workers can leave home everyday with peace of mind and return home in good health to embrace their families.

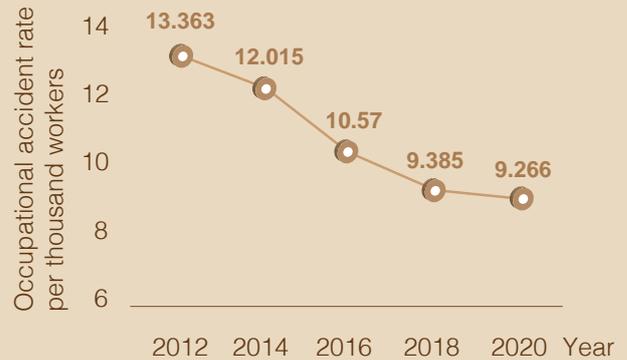
After a long period of great effort focused on one particular missions, over the course of time we have intently developed numerous levels of OSH. This book *The Development of Occupational Safety and Health in Taiwan, 2011-2020: A Record of Ten Years of Achievements*, highlights major measures promoted over the years, including building of OSH systems, labor supervision and inspection, and protection of workers who have suffered occupational accidents, as well as the evolution of relevant policies in progress. Readers are hereby invited to explore this short history in details and understand that OSHA is always there as the protector of every single worker, at the very front lines of defending workers’ rights every day, in the past and present.



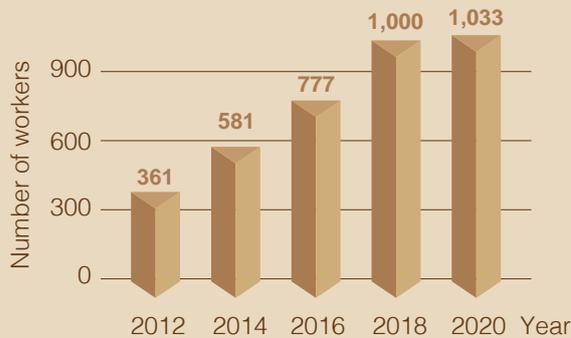
There has been a decline of 39% in the occupational accident rate per thousand workers in all industries.



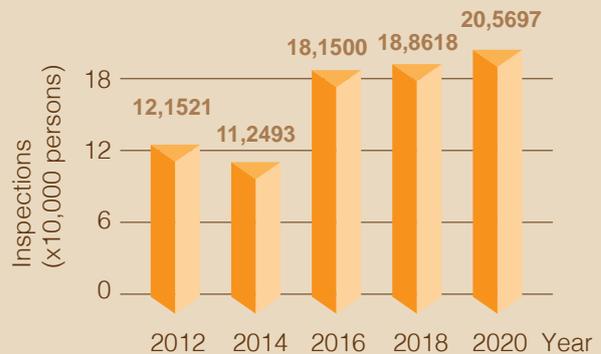
There has been a decline of 31% in the occupational accident rate per thousand workers in the construction sector.



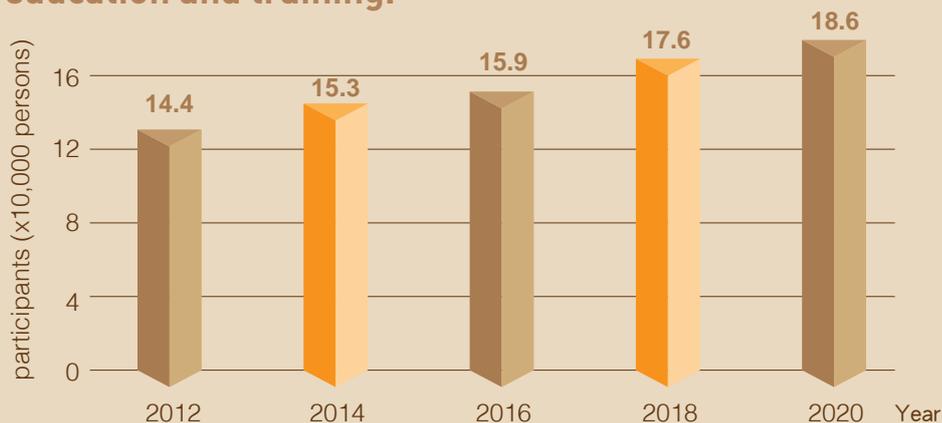
The number of labor inspection personnel has surpassed 1,000.



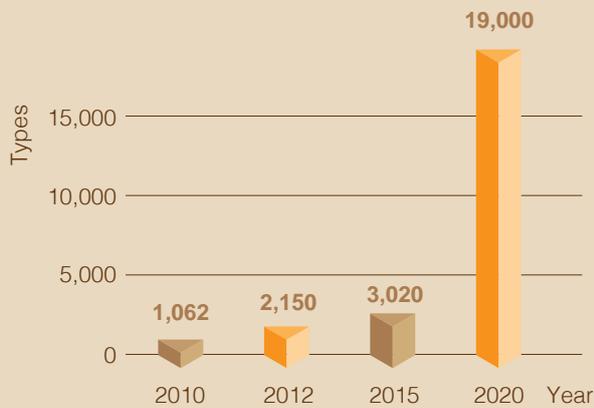
The number of labor inspections per year has reached 200,000.



There has been an increase of 22% in the number of workers completing occupational safety and health education and training.



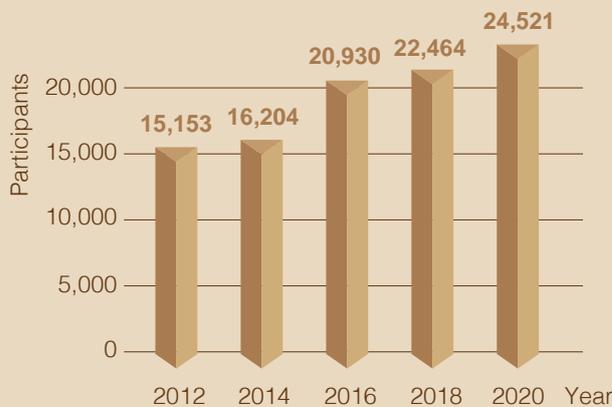
Information has been collected on more than 19,000 hazardous chemicals used in workplaces.



The labor health care coverage rate has increased to 50.4%



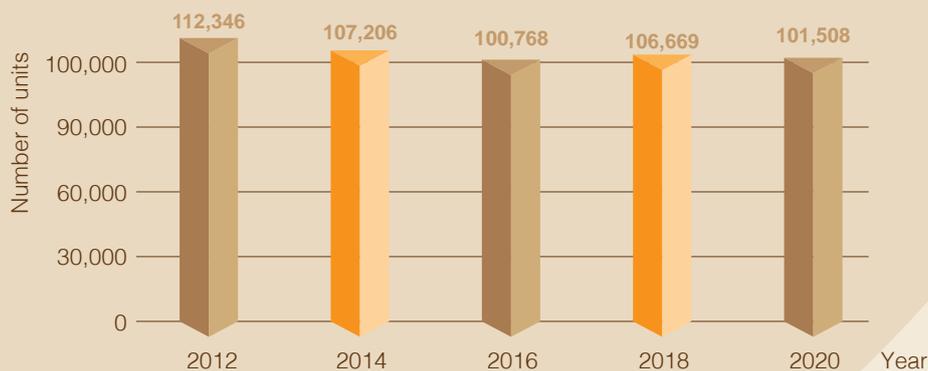
There has been a significant increase in occupational injury and disease service capacity.



There has been a 6.5-fold increase in the provision of case services to workers who have suffered from occupational accidents.



More than 100,000 units of dangerous machinery and equipment have been inspected.



Hsu, Ming-Chun

Minister of Labor

(Term of office 2018.02.26 to today)



Lin, Jin-ji

former Director of the Department of Labor
Inspection, Council of Labor Affairs

(Term of office 2006.8.24~2012.5.22)



Wu, Shih-Hsiung

former Director of
the Department of Labor
Inspection, Council of
Labor Affairs

(Term of office
2012.9.21~
2014.1.16)



Fuh, Hwan-Ran

first Director-General of
OSHA

(Term of office
2014.2.17~2015.1.16)

former Director of the
Department of the Safety
and Health, Council of
Labor Affairs
(Term of office
2006.8.24~2014.2.16)



Chang, Jin-Chung

Interim Director-General
of OSHA

(Term of office
2015.1.16~2015.6.16)



Liu, Chuan-ming

second Director-General of OSHA
(Term of office 2015.6.16~2017.2.24)



Tsai, Tzu-Lien

Current OSHA Director-General
(Term of office 2017.2.24 to today)





Preface by the Minister of Labor

The Ministry of Labor's Occupational Safety and Health Administration (OSHA) was formally established in 2014, marking a new milestone in the standard of occupational safety and health (OSH) in Taiwan. Looking back over the past ten years, there has been a rise in labor consciousness and pro-active adjustment of OSH standards, supervision, inspection, and management policies. OSHA has promoted important work in the areas of OSH systems, labor protection measures, inspections, reducing occupational accidents, and protecting the rights and best interests of workers. Not only has the occupational accident rate fallen to approach the levels of leading countries, there has been major progress in protecting the rights and interests of workers, thanks to increased supervision and inspection capabilities. Here I want to commend all those working at OSHA for their enduring efforts, and hope that in the future OSHA can build on existing achievements, continue to deepen inter-agency cooperation, and exercise diverse measures of enforcement to empower workers in the workplace while also building a culture of safety at enterprises, to enable every worker to enjoy a safer, healthier, and more comfortable work environment.

Laws need to be enforced by actions. The practical environment in Taiwan is one of diverse forms of enterprises and labor, and of a business structure composed mainly of small and medium sized enterprises with only a limited inspection capacity. Given these facts, besides traditional labor inspections, there is an even greater need for diverse measures like awareness-raising, guidance, and legal compliance visits, to assist and supervise enterprises in ensuring compliance with laws. Only in this way can the rights and interests of both workers and employers be effectively guaranteed. The government has already promoted the incorporation of enterprise legal compliance and OSH achievements as items for consideration in government evaluation, subsidy, and incentive mechanisms. OSHA will shift from using the "stick" of enforcement of laws through government action to encourage compliance, as was done in the past, to the use of the "carrot" (an incentive system) to guide enterprises to comply with relevant laws, building a win-win situation for workers and employers. Moreover, public expectations and demands for effective implementation of laws

by the government are continually rising, so I hope that OSHA can continue to refine and optimize supervision and inspection measures and ensure the quality of their services. I believe that OSHA can win the approval and support of the great majority of workers and enterprises.

The COVID-19 pandemic has had a huge adverse impact on the world since 2020. OSHA has already pro-actively engaged in interagency cooperation, set out the “Guidelines for Workplace Safety and Health Protection Measures in Response to COVID-19” in the early stages of the pandemic, and undertaken special-case guidance of high-risk enterprises and inspections of separate-track management of foreign migrant workers. At the same time OSHA has issued regulations including the “Key Guidance of Epidemic Prevention for Food Delivery Personnel” and the “Work-from-home (WFH) Occupational Safety and Health Guidelines,” to assist employers and workers to ensure workplace disease prevention during the pandemic. Looking into the future, OSHA can do even more to manifest its organizational values of “professionalism,” “enthusiasm,” and “service” and continually improve and grow.

Over the last ten years OSHA has been very thorough and grass-roots in terms of OSH, supervision and inspection of working conditions, and related matters. Here I would like to thank all OSHA staff for their tireless dedication and hard work over the years, and encourage them to continue to strive to uphold the rights and interests of labor!

Minister of Labor

Hsu, Ming-Chun



Creating decent working environments, building a sustainable future

In recent years, given the international trends of globalization and regionalization, increasing attention has been given to labor rights and interests. Moreover, given the major impacts of climate change and pathogenic biohazards, greater emphasis has been placed on the safety and health of workers. Whether one is talking about traditional hazards like fire, explosions, falling, electrocution, hypoxia, or poisoning, or new hazards like burnout from overwork, workplace violence, and occupational illness, all are important issues for governmental policy-making. The Occupational Safety and Health Administration (OSHA), pursues the values of “decent working conditions” and “respect for life” through a variety of measures. I and the whole OSHA team are working hard together to assist workers and enterprises to jointly build a sustainable future!

Looking back over a decade: Innovative reform with an international perspective

Looking back over the past ten years, we have stayed in step with the times in promoting many reform programs and ensuring workers’ rights and interests and their well-being. In terms of innovative reforms, I would like to draw attention to the following four areas of success:

1. Pro-active adoption and amending of laws and regulations: In 2014 the original “Labor Safety and Health Act” was formally amended to become the “Occupational Safety and Health Act,” through which protection was extended to all workers. Moreover, in 2021 OSHA participated in the legislative work for the “Labor Occupational Accident Insurance and Protection Act,” integrating “prevention of occupational accidents” and “post-accident rehabilitation” in order to make the occupational accident protection system more comprehensive.
2. Strengthening of guidance mechanisms for enterprises: OSHA has adopted multi-pronged strategies including guidance, awareness-raising, and legal compliance visits, to supervise enterprises in staying in compliance with labor laws and regulations. At the same time it has helped enterprises to understand that only a strong, safe, and healthy labor force can lead to sustainable business development.

3. Promotion of smart safety management: As technology has rapidly developed, the occupational safety and health (OSH) challenge has become more complex. Moreover, in recent years the Executive Yuan has been pro-actively promoting new industries such as “smart production,” “green energy technology,” and “offshore wind power.” With respect to the new risks in these new industries, OSHA has assisted enterprises to promote systematic smart safety management, in order to preemptively reduce workplace hazards.
4. Expanded international exchanges and cooperation: There are no boundaries when it comes to protection of workers and OSH. OSHA actively participates in international activities, and has established safety partnerships and communication channels with OSH agencies across Asia and with the UK Health and Safety Executive, the US OSHA, and the EU OSHA. Taiwan shares our successful stories in OSH work with other countries, and has steadily won international approbation and support.

Cooperation by all parties to build comprehensive protection

Over the past two years, in response to the changing environment and the global COVID-19 pandemic, stakeholders have paid increasing attention to labor issues related to non-traditional workers and people who work from home. OSHA has taken into account the experiences in leading countries and drafted or amended relevant workplace disease prevention regulations and guidelines, in order to strengthen protection of workers' OSH.

Protection of the safety and health of workers is a core value recognized by all sectors of society. Employers should thoroughly implement OSH work in accordance with their legal responsibilities, while workers must also respect relevant safety rules, to jointly achieve the goal of enterprise OSH. OSHA will continue to work hard and pro-actively promote cooperation between management and labor, as well as support from industry, government, and academia, to ensure decent working conditions and move toward the long-term vision of sustainable development.

Current OSHA Director-General

Tsou, Tzu-Lien

2011 — 2020
*Ten Years of
Dedication to a
Single Mission*

Ten Years of Achievements in the Development of
Occupational Safety and Health in Taiwan

CONTENTS



In Retrospect
Ten Years of Major Policy
Accomplishments 02



**Occupational Safety
for All:**
An Overview of the
Development of
Occupational Safety and
Health in Taiwan 12



**Legal Compliance
as the Cornerstone:**
Promoting Supervision and
Inspections and Enhancing
Their Effectiveness 18



3 **Safety First:**
Strengthening
Occupational Safety and
Reducing Occupational
Accidents 26

6 **Working Together
Across the Seas:**
Promotion of International
Exchanges and
Cooperation 50

4 **Protecting Both
Mind and Body:**
Promotion of Labor
Hygiene and Health 34

7 **Moving Forward
Together:**
Building a Culture of
Occupational Safety and
Health 60

5 **Warmth and Support:**
Protecting the Rights
and Interests of Workers
Who Have Suffered from
Occupational Accidents 42

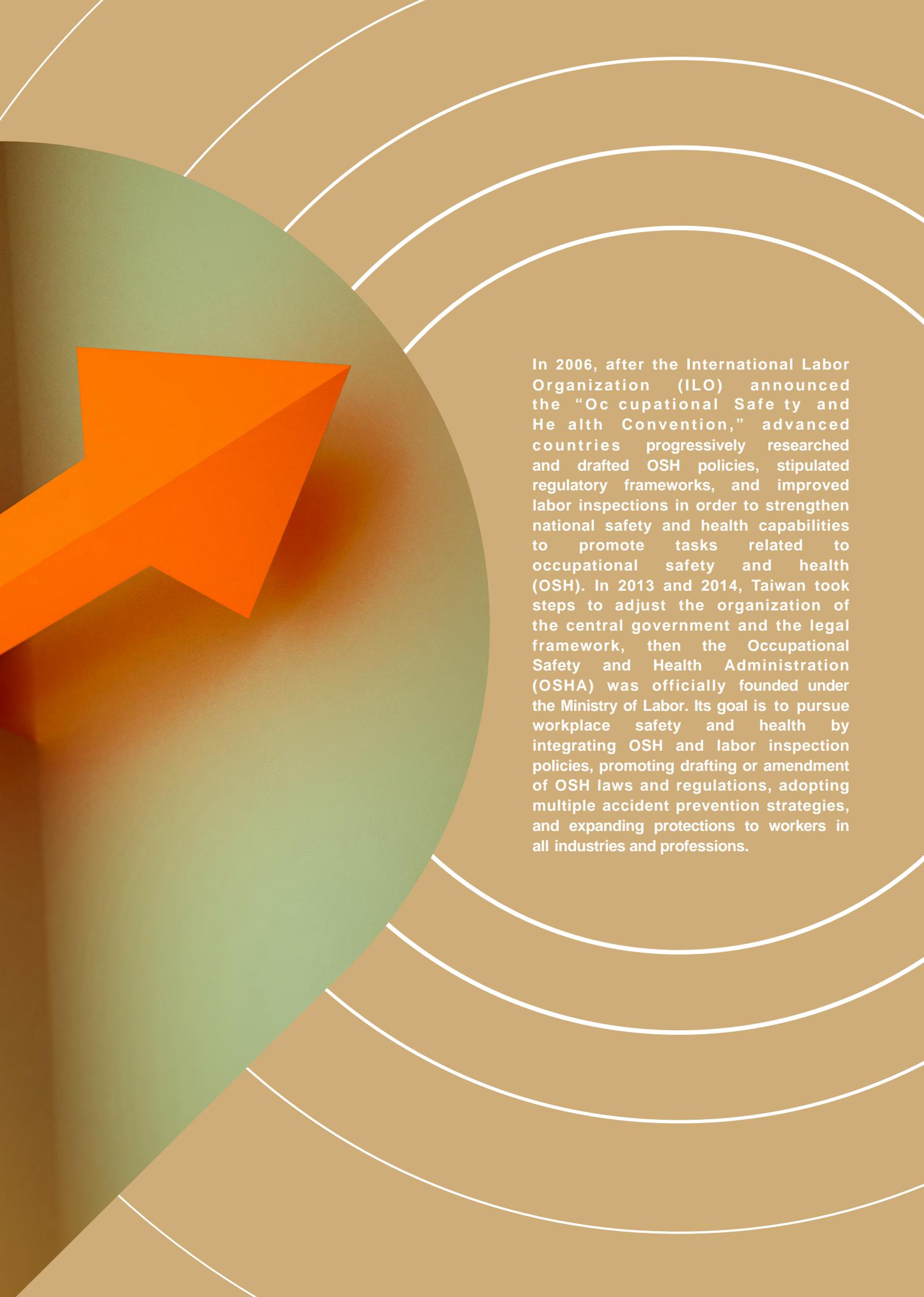
8 **A New Blueprint:**
Looking into the Future
Prospects 70

The background features a large, abstract geometric design. It consists of several interlocking, three-dimensional shapes in shades of orange, teal, and brown, set against a light beige background. The shapes are arranged in a way that creates a sense of depth and movement, with some elements appearing to recede into the distance while others come forward.

1

Occupational Safety for All:

An Overview of the Development of
Occupational Safety and Health in
Taiwan



In 2006, after the International Labor Organization (ILO) announced the “Occupational Safety and Health Convention,” advanced countries progressively researched and drafted OSH policies, stipulated regulatory frameworks, and improved labor inspections in order to strengthen national safety and health capabilities to promote tasks related to occupational safety and health (OSH). In 2013 and 2014, Taiwan took steps to adjust the organization of the central government and the legal framework, then the Occupational Safety and Health Administration (OSHA) was officially founded under the Ministry of Labor. Its goal is to pursue workplace safety and health by integrating OSH and labor inspection policies, promoting drafting or amendment of OSH laws and regulations, adopting multiple accident prevention strategies, and expanding protections to workers in all industries and professions.

● Establishment of an agency specifically responsible for OSH

The former Council of Labor Affairs of the Executive Yuan was established on August 1, 1987, and was put in charge of Taiwan's OSH and labor inspection policies. Subsequently, in coordination with the streamlining of the Taiwan provincial government, three labor inspection offices were set up in northern, central, and southern Taiwan, and new special municipalities and relevant organizations were authorized to set up labor inspection bodies to facilitate implementation of front line inspections of working conditions. Given the significant



In 2013 Pan, Shih-wei, then Minister of the Council of Labor Affairs, attended a meeting of the Legislative Yuan's Judiciary and organic Laws and Statutes Committee to discuss the draft of the new organizational law of the Ministry of Labor and its subsidiary agencies.

progress made in the international development of OSH (such as the announcement by the ILO of the Chemicals Convention and the Promotional Framework for Occupational Safety and Health in 1990 and 2006, respectively, the announcement in 1992 by the Council of the European Communities of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, and the start of the promotion of the Global Plan of Action on Workers' Health by the World Health Organization in 2008), in 2014, the former Council of Labor Affairs (CLA) , as part of the restructuring of the Executive Yuan, was transformed into the Ministry of Labor. In addition, the CLA's Department of Safety and Health, Department of Labor Inspection and three regional labor inspection offices, and the Occupational Accident Labor Protection Office of the Bureau of Labor Insurance (which was in charge of subsidies and rehabilitation for workers who suffered occupational accidents) were amalgamated on February 17 to form OSHA. This provided vertical integration of policy making and implementation, strengthened occupational accident prevention, and enabled horizontal integration of the tasks of "prevention, compensation, and rehabilitation," in order to accelerate the reduction in the occupational accident rate and increase the occupational healthcare coverage rate.

When OSHA was first set up, it had three operational units: the Planning and Occupational Health Division, the Occupational Safety Division, and the Occupational Accident Labor Protection Division. However, with steadily growing

attention being given to new occupational disease and injury issues (including burnout from overwork, musculoskeletal problems, workplace illegal infringement, and exposure to hazardous chemicals), and given the trend toward protection of the physical and mental health of workers arising from the low birthrate and aging of the workforce, the original organization of OSHA was no longer adequate. Therefore the Ministry of Labor, after getting approval from the Executive Yuan, restructured OSHA on December 5, 2019 to add the new Occupational Hygiene and Health Division. At present OSHA has four operational units: the Planning Division, the Occupational Hygiene and Health Division, the Occupational Safety Division, and the Occupational Accident Labor Protection Division. There are also three regional Occupational Safety and Health Centers, one each in northern, central, and southern Taiwan, as well as five support units: the Secretariat, the Information Management Office, the Accounting and Statistics Office, the Personnel Office, and the Civil Service Ethics Office.

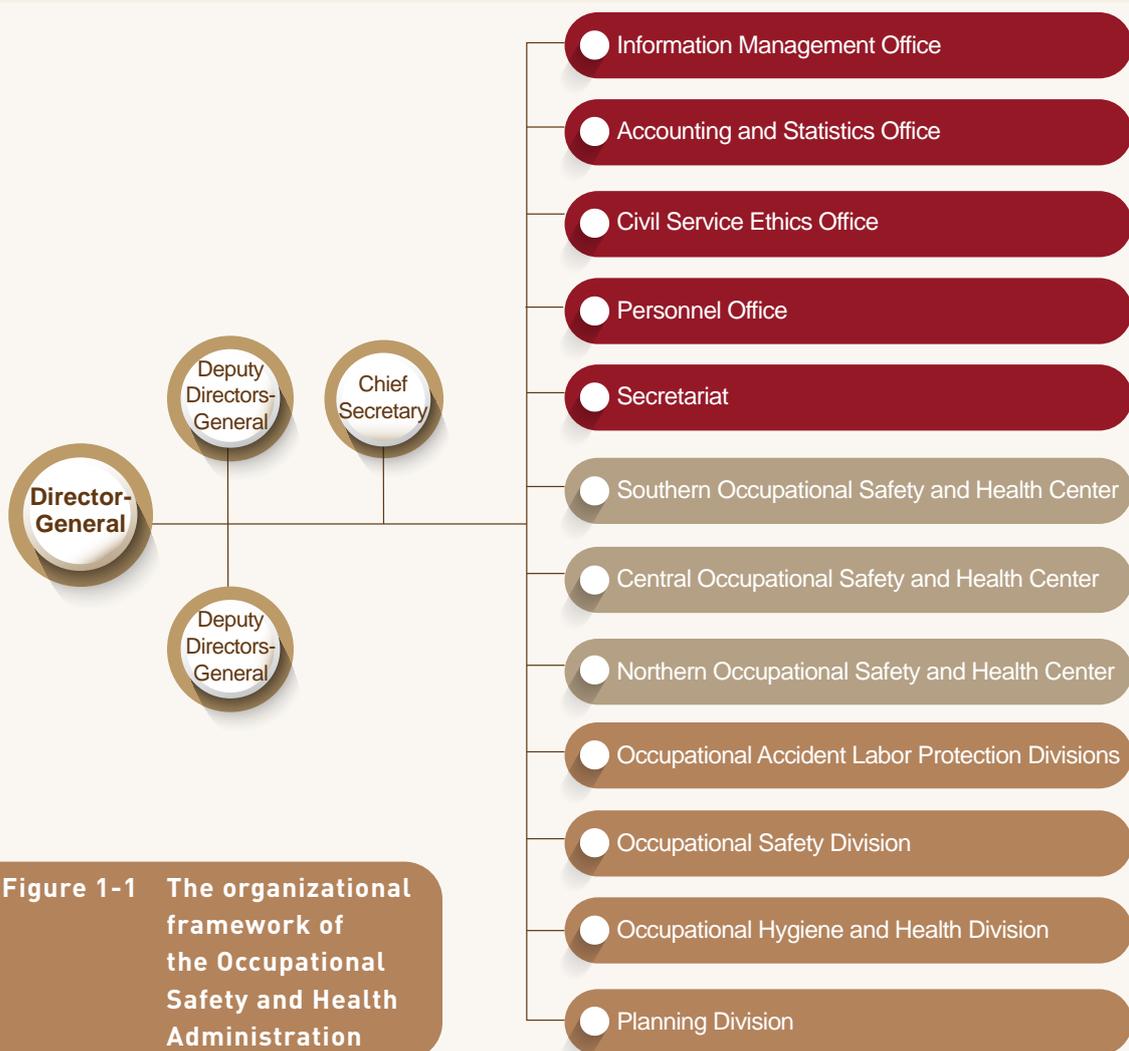


Figure 1-1 The organizational framework of the Occupational Safety and Health Administration



This is a group photo of Fuh, Hwan-Ran, former director-general of OSHA, and other officials at the ceremony marking the start of operations of OSHA in 2014.

● Creation of an OSH regulatory foundation

On April 16, 1974, Taiwan promulgated the “Labor Safety and Health Act,” (the Act) which was state-of-the-art legislation in the era of the 1970s. Although the Act was extensively amended in 1991, compared to leading countries the coverage of the Act was limited only to relatively high-risk industries, and not all workers received protection.

In 2009 Taiwan adopted the “Act to Implement the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights” and in 2012 passed the “Enforcement Law for the Convention on the Elimination of All Forms of Discrimination against Women.” To conform to the requirement of international conventions that “everyone has the right to a safe and healthy work environment,” take into account maternal protection of women workers and equal rights in the workplace, and strengthen prevention of occupational accidents and OSH protections for workers, after many years of effort the “Labor Safety and Health Act” was amended and promulgated by the President as the “Occupational Safety and Health Act” on July 3, 2013. This marked an important milestone in the reform of OSH standards in Taiwan.

The main focus of amendments to the “Occupational Safety and Health Act” was to expand coverage of the Act to all industrial sectors. It extended protection to employed workers in all industries, self-employed workers, and other people engaged in work and directed or supervised by the responsible people in



In 2012 Council of Labor Affairs Minister Wang, Ju-hsuan (Jennifer Wang) attended a meeting to explain amendments to the "Labor Safety and Health Act."

workplaces. The number of people covered by the Act was expanded from 6.7 million to 10.67 million. Moreover, because the Act called for 60 sets of subordinate legislation, the Ministry of Labor received permission from the Executive Yuan to undertake the relevant regulatory work in stages. In the first stage, the Ministry amended 41 sets of regulations that had existed under the former "Labor Safety and Health Act," and these came into effect on July 3, 2014. The second stage involved the adoption of 19 new sets of regulations governing supervisory mechanisms for matters such as certification of machinery, equipment, and tools; registration and risk banding management systems for chemicals; maternal health protection measures; and regular evaluations of the safety of production processes in high-risk enterprises. These new regulations came into effect on January 1, 2015. As of the end of 2020 the number of workers covered by the "Occupational Safety and Health Act" had increased to 11.52 million.



2 **Legal Compliance as the Cornerstone:**
Promoting Supervision and Inspections and Enhancing Their Effectiveness

Innovat
Brandin
Solution
Marketi
Analysis
Ideas
Success
Manage

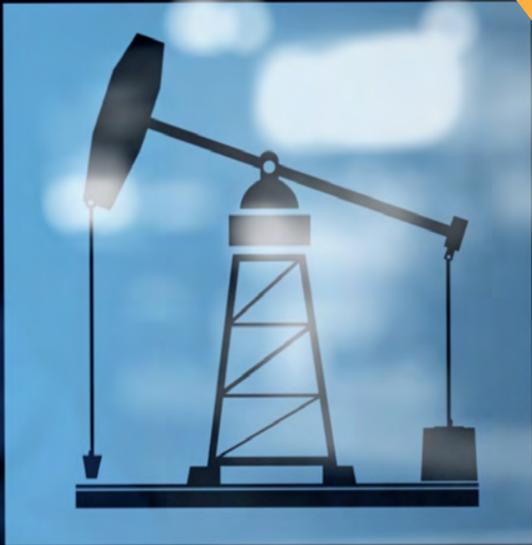
INDUSTRI

Man
Supp
Proc
Carr
Cu
Deliv
Inve
Man
Frei

ion
g
n
ng
s

s
ement
RY

ufacturing
oly chain
duct
go
tomer
very
ntory
agement
ght



In order to provide workers with a safe and healthy working environment, as well as protect the physical and mental health of workers and their basic labor rights and interests, the government has adopted relevant labor laws and regulations to regulate these matters and to assign responsibilities to employers. "Labor inspections" are an important means by which the government enforces labor laws and regulations. Prior to 2002, inspections of working conditions and occupational safety and health (OSH) were all conducted by inspection institutions at the central government level and authorized to be set up by special municipalities. Thereafter, to enhance the effectiveness of hazard prevention by inspection institutions, a share scheme of labor was created under which the central government conducted OSH inspections while local governments conducted inspections of working conditions. Given the limited inspection capacity, a strategy of graded management was adopted based on the size and degree of potential risk at enterprises. In addition to conducting inspections, the government has strengthened awareness-raising and guidance, to enable all enterprises to comply with the regulatory system and exercise self-management properly, in order to achieve the goals of protecting the lives and safety of workers and their rights and interest.

- **The current situation of labor inspection agencies and the authorized division of labor**

During the era of the former Council of Labor Affairs of the Executive Yuan, the central government authorized the Export Processing Zone Administration (of the Ministry of Economic Affairs), the Taipei municipal government, the Kaohsiung municipal government, the National Science Council (now the Ministry of Science and Technology), and the management offices of various science-based industrial parks to undertake labor inspections. In December of 2012, taking into account Taiwan's status of political and economic development, the reorganization of some cities and counties into special municipalities, and the lack of efficiency of labor inspectors at the central government level, and in conformity with the principle of localization in reorganization efforts, the government reevaluated its labor inspection authorization policy and authorized the additional new special municipality governments to take charge of some or all labor inspection tasks.

For historical reasons, the Taipei and Kaohsiung municipal governments continued to be fully authorized to conduct all labor inspections. As for the area that was originally Kaohsiung County where there was incorporated into Kaohsiung City's jurisdiction, because the Kaohsiung municipal government had already added sufficient new manpower to the Labor Standards Inspection Office of the municipality's Labor Affairs Bureau, it was announced on January 11, 2013 that the Kaohsiung municipal government received its authorization order to extend their



In 2019 Deputy Minister of Labor Shih Keh-her led a team to conduct an inspection at an enterprise.

Labor inspection agencies established by special municipalities and special zones with authorization from the Ministry of Labor and the scope of their labor inspection work

Authorized labor inspection agency	Areas of responsibility for inspections
Taipei City Labor Inspection Office	All enterprises within the jurisdiction of Taipei City
New Taipei City Labor Inspection Office	<ol style="list-style-type: none"> 1. Inspections of working conditions: All 2. OSH inspections: Except for investigations and inspections of hazardous workplaces and inspections of hazardous machinery or equipment, authorization is granted for all other areas.
Office of Labor Inspection, Taoyuan City	<ol style="list-style-type: none"> 1. Inspections of working conditions: All 2. OSH inspections: Except for investigations and inspections of hazardous workplaces and inspections of hazardous machinery or equipment, authorization is granted for all other areas.
Taichung City Labor Inspection Office	<ol style="list-style-type: none"> 1. Inspections of working conditions: All 2. OSH inspections: Public infrastructure projects handled by any agency of the Taichung municipal government as well as the nine industrial parks and one innovative technology park in Taichung's jurisdiction; all lines of business outside of industrial parks, except the construction sector.
Occupational Safety and Health Department, Tainan City Government	<ol style="list-style-type: none"> 1. Inspections of working conditions: All 2. OSH inspections: Labor inspection tasks in the three industrial parks set up by the Tainan City government and the five industrial parks set up by the Ministry of Economic Affairs within Tainan's jurisdiction (not including investigations and inspections of hazardous workplaces, hazardous machinery or equipment, or construction projects)
Labor Standards Inspection Office, Labor Affairs Bureau, Kaohsiung City Government	All enterprises within the jurisdiction of Kaohsiung City
Export Processing Zone Administration, Ministry of Economic Affairs	All technology industrial parks, software parks, and logistics parks set up by the Ministry of Economic Affairs
Hsinchu Science Park Bureau, Ministry of Science and Technology	Enterprises within the Hsinchu Science Park
Central Taiwan Science Park Bureau, Ministry of Science and Technology	Enterprises within the Central Taiwan Science Park
Southern Taiwan Science Park Bureau, Ministry of Science and Technology	Enterprises within the Southern Taiwan Science Park

labor inspections in the former Kaohsiung County, to avoid the issues of having two different systems in one city. As for the new special municipalities of New Taipei City, Taoyuan City, Taichung City, and Tainan City, before they had established adequate funding or manpower, there was a share program to divide duties between the central and municipal governments, with authorization for them to exercise labor inspection tasks being given in stages. Authorization was extended in stages to the New Taipei City government on February 1, 2013 and July 1, 2015; to the Taoyuan City government on February 1, 2017 and January 1, 2019; to the Taichung City government on March 15, 2013, May 1, 2015, and January 1, 2020; and to the Tainan City government on September 1, 2017 and August 7, 2019.

● Increase in the number of labor inspectors

In recent years there has been a lot of attention given to labor standards matters like wages, working hours, and time off. In 2015 OSHA drafted a plan for hiring more labor inspectors and pro-actively sought approval for it from the Executive Yuan. The Executive Yuan permitted OSHA to use the Labor Insurance Fund for funding to subsidize various local governments in hiring an additional 325 working conditions inspectors to handle relevant tasks, in order to raise the level of overall working conditions in industries, advance labor welfare, avoid having companies compete to force down labor costs, and conform to the principles of fairness and justice.



Figure 2-1 Increase in labor inspection manpower over the last ten years

In addition, in response to the extension of coverage of the “Occupational Safety and Health Act” to all industries and the addition of burdensome new tasks like source management and protection of the physical and mental health of workers, the Executive Yuan agreed to the addition of 177 new safety and health inspectors. This raised the total number of inspectors in Taiwan to 1,000 in 2017 (see Figure 2-1), greatly helping deal with the shortage of labor inspectors in the country.

In 2020 the total number of labor inspectors in Taiwan reached 1,033. This made the national ratio of inspectors to workers 1:11,100, approaching the suggested ILO standard for developed countries of 1:10,000, and effectively enhancing Taiwan’s human rights image.

- **Adoption of multiple measures for graded management based on risk**

- A. Awareness-raising, guidance, and inspections: three stages of assistance in complying with the law**

In 2017, in response to the extensive amending of the “Labor Standards Act” (LSA), OSHA not only offered information and guidance in the first half of the year to increase enterprises’ legal awareness, but also on June 30, 2017 announced the “Labor Standards Act Continued Guidance and Graded Inspections Implementation Program.” For this program enterprises with previous violations of the LSA and



In 2018 Minister of Labor Hsu Ming-Chun led a team to inspect a drinks shop in the Ximending Shopping District and exchanged concerns about working conditions.

industries with relatively long average working hours were selected for step-by-step implementation of inspections and active supervision to ensure legal compliance. As for enterprises that had used relevant channels to report difficulties in complying with the law, especially small (micro) enterprises with less than 30 employees, OSHA continued to provide necessary administrative assistance including awareness-raising and guidance to preventing these SMEs from noncompliance and possible fines due to lack of understanding of the labor laws and regulations.

In 2017 OSHA held over 900 awareness-raising events, with nearly 80,000 attendees. Guidance was offered on over 40,000 occasions. As for high-risk enterprises with relatively long working hours, high numbers of noncompliance, or that are the subject of widespread attention in society and that more severely impact the rights and interests of workers, OSHA conducted more than 1,700 special-case inspections to supervise them in complying with labor laws. In addition, with respect to complaints from concerned citizens, there was discrepancy between high- and low-risk enterprises, and OSHA conducted more than 15,000 inspections in response to complaint cases. There was no derogation of the overall supervision of enterprises and protection of workers' rights and interests.

B. Paid site visits to raise legal awareness at low-risk micro enterprises

In 2018, provisions of the LSA related to “flexible adjustment measures” were amended. OSHA adopted strategic approach of “equal importance of inspections and guidance” as to promote the LSA, continuing to convene seminars and group guidance activities on promotion of labor rights and interests in order to advance enterprises' legal awareness. In 2019, OSHA began promoting the “Enforcement Program to Ensure Legal Compliance,” providing on-site “legal compliance support visit” services by specialized personnel. In addition to distributing self-inspection forms and guidance materials to inform businesses of major compliance issues, these personnel also help enterprises to examine data and conduct comprehensive check-ups basing on the nature of the work and the



In 2018, Deputy Minister of Labor Su, Li-Chiung and OSHA Director-General Tzou Tzu-Lien visited the Taipei Bus Station to conduct an inspection of working conditions.

needs of the enterprises, to assist them in adopting feasible practices for legal compliance.

Statistics show that in 2019 and 2020 there were a total of 49,953 legal compliance-check visits. It was found that 50.4% of enterprises had areas in need of improvement, of which over half have already been confirmed as completing these improvements. In this way OSHA has effectively assisted enterprises to ensure legal compliance and improved actual working conditions.

- **Optimizing labor inspections**

Since the Ministry of Labor began to subsidize local governments in 2015 to hire more labor inspectors, there has been a significant upgrading of capabilities to conduct inspections of working conditions. In order to upgrade the quality of services for inspections of working conditions, in June of 2019 OSHA launched the “Implementation Strategies for Optimizing the Quality of Labor Inspections” Besides requiring that inspections to be conducted by two-person as a team, audio recordings of the entire inspection process was exercised. This program also established a reporting mechanism for abnormal situations, set up a new labor inspection response hotline, and created education and training classes for subjects including “handling of emergency situations” and “interviewing and communications skills,” in order to upgrade the quality of on-site visit services.

In order to increase the flexibility of implementation of inspections of working conditions, in September of 2019, OSHA, based on feedback received from local governments, approved the idea that if there is no need to have an inspection carried out by a two-person team subject to case-by-case conditions, the inspection can (with approval from the competent authority) be carried out by one individual personnel only. However, inspections was better carried out by two-person teams in principle. A survey conducted by a professional public opinion polling company of the degree of satisfaction with inspectors’ “professional service attitude” among enterprises that had undergone inspections showed that since the implementation of the program for optimizing inspection quality was launched, there has indeed been a steady upward trend in the degree of satisfaction. This indicates that implementation of this program has been helpful in improving inspectors’ professional service attitude.



3

Safety First:

Strengthening Occupational Safety and Reducing Occupational Accidents



In order to prevent the occurrence of occupational accidents (including illnesses) and protect the lives and health of workers, the Occupational Safety and Health Administration (OSHA) has adopted multiple hazard prevention strategies including awareness-raising, guidance, inspections, and subsidies. OSHA has also (a) built an occupational safety and health (OSH) system for the construction industry and assisted enterprises to implement construction work risk evaluations; (b) strengthened safety management in high-risk enterprises; (c) implemented programs related to production process safety to upgrade process safety management proficiency at enterprises; (d) used measures including guidance and subsidies to assist small and medium sized enterprises (SMEs) to improve their work environments; and (e) upgraded the quality of outsourced inspections of dangerous machinery and equipment and implemented source management of machinery and equipment. In response to the development of emerging new industries, OSHA has amended relevant laws and regulations, issued coordinated administrative directions, and assisted enterprises that use collaborative robots to conduct safety evaluations and manufacturing safety evaluations. These measures have all enhanced safety management capabilities, effectively strengthened workplace safety, and reduced the incidence of occupational accidents.

● Promotion of intrinsic safety in industry

The “Occupational Safety and Health Act” clearly stipulates that those involved in the design, manufacture, or importation of items such as machinery, equipment, tools, raw materials, and materials, as well as those engaged in the design and construction of engineering projects, shall carry out risk assessments during the design, manufacturing, importation, or construction planning phase, and endeavor to prevent the occurrence of occupational accidents during the usage of such items, or during the process of engineering and construction. The purpose of this provision is to introduce the notion of intrinsic safety into preliminary planning stages and conduct safety evaluations to eliminate potential hazards during future working stages.

In 2019, OSHA produced a technical handbook with standards for self-management of industrial machinery and equipment and instructions for risk assessments. The contents cover the risk assessment practices that should be used, standard operating procedures, and equipment validation procedures. The goal is to assist industries to develop common safety standards and rules for machinery and equipment, to encourage them to promote and implement independent machinery and equipment source management, to strengthen intrinsic safety in industries. In 2019, OSHA invited the ROC National Federation of Industries and the industrial associations for seven major types of manufactured products (including metal manufactured goods, electronic parts, machinery and equipment, food, plastic manufactured goods, base metals, and electrical equipment) to form the “Industrial Intrinsic Safety Promotion Alliance” (with Minister of Labor Hsu, Ming-Chun and Ministry of Economic Affairs Chief Secretary Chen, Yi-Ling in attendance). Through the Alliance’s cooperation scheme, these industries have been assisted to develop self-management standards as well as a validation mechanism for machinery and equipment. By the end of 2020, safety standards were completed for etching equipment as well as lamination and overlay equipment. In this way



The founding of the “Industrial Intrinsic Safety Promotion Alliance” in 2019.

industries have strengthened intrinsic safety, introduced the concept of intrinsic safety into the machinery and equipment design and planning stage, conducted risk assessments, and controlled risk from the source, thereby strengthening the safety protection of workers.



A guidance team of experts visits an enterprise to conduct on-site guidance of process safety management.



In 2018 the American process safety expert Dr. Sam Mannan was invited to participate in the “2018 International Process Safety Conference” to speak about the latest international trends in process safety management.

● Hazard prevention at emerging new industries

Given the development of smart high-tech industries and in order to diminish the impact of the aging of the labor force, the Executive Yuan has promoted a variety of programs to encourage industries to become “smart.” Of these, the application of industrial-use robots has been a main focus. The use of collaborative robots, with workers and machines working together, is the main trend in industries becoming smart, and they are widely used in industries including the semiconductor, printed circuit board, electronics assembly, machine tool, and automobile sectors.

In response to the potential hazards posed by the trend towards collaboration between workers and machines, in 2018 OSHA amended the “Standards for Hazard Prevention of Industrial Robot” to add a provision requiring that when employers use collaborative robots, they must conform to the national standards CNS 14490, the international standards ISO 10218, or equivalent standards; they must also write up and retain reports of assessments of relevant data and of manufacturing safety. In addition, in order to assist enterprises to conduct assessments, in the same year OSHA issued the “Directions for Work Safety Assessment for Collaborative Robots,” which stipulate the detailed items and contents of such assessments, in order to ensure safety in the use of collaborative robots.

In order to continue to strengthen the ability of enterprises to conduct safety assessments of the use of collaborative robots, in 2019 OSHA began offering guidance in the handling of such assessments to assist enterprises that use

collaborative robots to complete reports of safety assessments and manufacturing safety assessments. This measure increases the capabilities of relevant safety management, protects the safety of workers connected with collaborative robots, and prevents the occurrence of accidents such as being pinned or struck.



In 2018 OSHA held a hands-on demonstration of best practices in use of collaborative robots; the event was held at the Taiwan Semiconductor Manufacturing Company.



A hands-on demonstration of best practices in use of collaborative robots held in 2020.

● Reduction of accidents in the construction sector

In order to upgrade the effectiveness of construction site labor inspections conducted by labor inspection institutions and ensure thorough implementation of labor laws and regulations, OSHA adopted the “Principles for Risk-graded Labor Inspections at Construction Sites” and the “Main Points and Directions for Inspections of High-risk Operations in the Construction Industry.” OSHA has also mapped out a program of special OSH inspections for the construction industry and worked to strengthen inspections, implementing the use of mobile communications technology, setting up systems for construction-in-progress maps and digitallized occupational accident reporting, to reduce serious occupational accident reductions. Following the implementation of various programs to reduce the occupational accident rate in Taiwan’s construction industry, continual analysis of the causes of occupational accidents and reassessment of strategies for reducing such accidents demonstrated that the rate of occupational accidents per thousand workers in the construction industry has been on a downward trend over the past ten years (see Figure 3-1).



Figure 3-1 Occupational accident rate per thousand workers in the construction sector over the last ten years

The construction industry is characterized by a variety of factors, including that most projects with customized designs, subcontracting involving a large variety of specialized occupations, workers from different professions working together, the use of large machinery, a large number of uncertainties in the outdoor working environment, high labor turnover, and a low rate of pre-work orientation. These elements add numerous variables to the problem of safety concerns in the construction industry and require reliance on effective preliminary planning and control. To improve the OSH management system in the construction industry, since 2010 OSHA has implemented an occupational accident reduction program and developed technical teaching materials for operational safety for this industry. OSHA also invited experts from the Japan Construction Occupational Safety and Health Association to share Japan's experience with promoting "Construction Occupational Health and Safety Management Systems." Subsequently, OSHA has set up the "Construction Occupational Safety and Health Management Systems Information Platform," to provide firms in the construction industry with resources to build and exercise OSH management systems.

Statistics on serious occupational accidents in Taiwan indicate that the incidence of serious and fatal occupational accidents at small and medium sized construction projects accounts for 60 to 70% of all serious accidents in the construction sector. The main cause of these accidents is that the managers and workers at such projects lacked OSH knowledge, were unable to identify potential hazards, and had not adopted effective accident prevention strategies. Therefore, since 2014 OSHA has been doing labor safety supervision and guidance for micro and temporary work in the construction sector; has produced a handbooks, pamphlets, and posters regarding standard operating procedures for temporary work in this industry; and has expanded OSH awareness-raising. Moreover, OSHA

has worked together with personnel from the OSH promotion associations for the construction industry in regions of northern, central, and southern Taiwan to make efforts to improve guidance of small and medium sized construction projects through experience sharing and mutual learning from other firms in the same industry, in order to raise OSH standards at such projects.

- **Source management for intrinsic safety of machinery, equipment, and tools**

To prevent unsafe machinery, equipment, or tools from posing a hazard to workers in the workplace, and to ensure the safety of workers on duty, OSHA first studied the “CE mark” source management system promoted by European Union governments for intrinsic safety of machinery and then in 2013 amended the “Occupational Safety and Health Act,” adding Articles 7, 8 and 9 to serve as the legal basis for promoting source management of the intrinsic safety of machinery and equipment in Taiwan.

In 2015 OSHA, acting on the basis of the provisions of the “Occupational Safety and Health Act” and the “Enforcement Rules of the Occupational Safety and Health Act,” launched a “Registration System of Safety Information” for 10 specified types of machinery, equipment, or tools (including power driven punching-shearing machinery, hand-feed planers, woodworking circular saw machinery, power-driven forklift trucks, grinding machinery, grinding wheels, explosion-proof electrical equipment, photoelectric-type safety devices for power-driven punching-shearing machinery, blade shields for hand-feed planers, and kickback prevention devices and sawtooth shields for woodworking circular saw machinery). In 2019 this system was extended to cover non-numerically controlled traditional lathes and milling/boring machines, and in 2023 OSHA expects to further extend the program to cover numerically controlled lathes and milling/boring machines as well as machining centers. Under the system,



An inspector conducts a type certification inspection of a forklift.



An inspector conducts a type certification inspection of power driven punching-shearing machinery.

manufacturers or importers of machinery, equipment, and tools are required to verify that their products conform to safety standards, register them on the Information Reporting Website, and attach a “TS” Safety Label on each product. In addition, based on Article 8 of the “Occupational Safety and Health Act,” OSHA has been promoting a “Type Certification System” for designated machinery, equipment, and tools. Since July of 2018, domestically manufactured or imported voltage reduction devices for AC arc welding equipment that have not passed type certification conducted by an accredited certification body or have not received the certification marks that they have passed by type, are not allowed to be shipped by the manufacturer or imported by the importer.

Cases for which the “Registration System of Safety Information” and the “Type Certification System” apply, 2015 to 2020

Type of machinery, equipment, or tool		2015	2016	2017	2018	2019	2020	Total
Registration of safety information	Power driven punching-shearing machinery, Hand-feed planers, Woodworking circular saw machinery, Power-driven forklift trucks, Grinding machinery, Grinding wheels, Explosion-proof electrical equipment, Photoelectric-type safety devices for power-driven punching-shearing machinery, Blade shields for hand-feed planers, Kickback prevention devices and sawtooth shields for woodworking circular saw machinery, Traditional milling/boring machines for processing of metal materials, Numerically controlled milling/boring machines for processing of metal materials, machining centers, machining systems	6,631	5,239	6,753	6,376	8,246	7,275	40,520
Type certification	Voltage reduction devices for AC arc welding equipment	-	-	-	11	3	0	14
Total		6,631	5,239	6,753	6,387	8,249	7,275	40,534

A woman with long dark hair, wearing a white lab coat, safety goggles, and a white face mask, is shown in profile, looking towards the right. The background is a blurred laboratory setting with windows. The image is overlaid with a large, semi-transparent orange shape on the left side.

4

Protecting Both Mind and Body:

Promotion of Labor Hygiene and
Health



Following the progress of technology and the rise of labor consciousness, there has been a continual evolution regarding the issue of occupational hygiene and health worldwide. To ensure the safety and health of workers, OSHA has continued to cooperate with other countries and international organizations and studied the strategies adopted in other leading countries to continuously reform and improve Taiwan's policies related to management of occupational hygiene and labor health. OSHA has endeavored to promote a variety of major policies including source management and key management of chemicals, workplace health services, and protection of the physical and mental health of workers. OSHA has even used digital technology to raise labor health awareness and improve the effectiveness of administrative management.

● Promotion of source management and hazard identification of chemicals

The International Labor Organization estimates that 60% of occupational diseases are related to hazards posed by chemical substance exposures. International organizations have continually promoted sound chemical management measures to ensure labors' safety and health. To stay in line with international standards and improve the chemical management system, Taiwan's Ministry of Labor in 2006 drafted the "Program for Promotion of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" and in 2009 drafted the "Program for National Chemical Substances Registration Management and Information Application Mechanism," which were promoted cooperatively by inter-ministries following the approval from the Executive Yuan's order. In addition, at the end of 2008, OSHA began phased implementation of the GHS system, which was fully in effect as of January 1, 2016. (For the progress of GHS implementation see Figure 4-1). Moreover, in 2013 the "Occupational Safety and Health Act" was amended to establish evaluation, permit, and record keeping mechanisms for new chemical substances designated controlled and priority management chemicals, as well as to add obligations for manufacturers, importers, and employers involved with hazardous chemicals to provide safety data sheet (SDS), prepare and keep inventories, and adopt hazard communication measures. A list of Taiwan Chemical Substance Inventory (TCSI) was first publicly announced on December 31, 2014.

As of the end of 2020, OSHA had produced labeling and "Safety Data Sheet" (SDS) template samples for over 5,800 substances, developed the "GHS Hazard Classification Experts System IT Tool," and set up the GHS websites in



Figure 4-1 The process of Taiwan's implementation of GHS for hazardous chemical management

both Chinese and English, receiving more than 800,000 hits per year. Moreover, OSHA has obtained information on about 100,000 chemical substances. At the same time OSHA works with inter-agencies including the Toxic and Chemical Substances Bureau of the Environmental Protection Administration (EPA). Through a single-window set-up operated by interagency, about 700 to 1000 new chemical substances were registered and reviewed.

● Strengthening exposure assessments and Chemical Control Banding

In order to establish a complete exposure assessment and risk banding management system, in 2013 the Ministry of Labor amended the “Occupational Safety and Health Act” to require enterprises to adopt monitoring plans as well as reporting obligations. As for hazardous chemicals, enterprises are required to assess the level of risk based on the hazards they pose to health and undertake risk banding management for mitigation. Based on this, in 2013 OSHA amended the “Regulations on Working Environment Monitoring,” in order to keep track of national work environment monitoring results. These Regulations require monitoring organizations to have their own occupational health laboratory accredited by a third party as part of their conditions for applying for accreditation, and undertake evaluations of their operations in order to improve the service quality of analysis. In 2014, with reference to the ILO Chemical Control Banding (CCB) tool, OSHA adopted the “Regulations on Risk Ranking, Exposure Assessment and Management for Hazardous Chemicals.” In addition, considering the different needs of variously sized enterprises with respect to CCB and exposure assessment needs, OSHA also developed an interface tool with the local language for using the European ECETOC Targeted Risk Assessment (TRA) tool, to provide enterprises with diverse advanced exposure assessment tools for reference and use.

In addition, from 2015 through 2020 OSHA promoted the “The Key Management of Chemicals On-site Factory Visits Program.” Through various measures including on-site visits, a website, awareness-raising events, and voluntary reporting, OSHA collected information on chemical management



Chemical Control Banding toolbox and reference materials published over the years.

implementation at, and received feedback from, over 12,500 enterprises. The outcomes had a coverage rate of approximately 58% of small and medium sized enterprise (SME) factories with chemical operations nationwide. In addition, call-back surveys and follow-up visits have discovered that through guidance visits under the Program, over 84% of enterprises have improved their risk assessments and CCB implementation, an increase of over 50% compared to the early visits. Over 87% of participating enterprises agreed that on-site visits are valuable and helpful to the promotion and implementation of chemical safety management in factories.

● Working together to combat the COVID-19 pandemic

In 2020 the COVID-19 pandemic swept the globe resulting in enormous adverse impacts and effects. To prevent the spread of the pandemic, OSHA worked closely with other government agencies including the Ministry of Health and Welfare and the Industrial Development Bureau of the Ministry of Economic Affairs. In the early stage of the outbreak, OSHA immediately issued the “Guidelines for Workplace Safety and Health Protection Measures in Response to COVID-19” with timely rolling amendments in response to the COVID-19 situation in Taiwan. At the same time OSHA swiftly set up a designated area for workplace epidemic prevention on its official website, providing epidemic prevention information and data, easy-to-understand materials, guidance, and relevant up-to-date resources for reference and use by everyone affected in and around workplaces, in order to ensure the safety and health of workers.



Labor inspection institutions and enterprises have worked together to offer demonstrations of workplace COVID-19 prevention at construction sites.

In response to the impact of COVID-19 on safety and health at the enterprise level, OSHA supervised and strengthened workplace epidemic prevention measures based on the size and types of various enterprises. This included case-by-case guidance of high-risk enterprises affected by the pandemic, inspections of workforce division management at enterprises employing foreign migrant workers, surveys and supervision of the effectiveness of epidemic prevention plans at large enterprises, and the integration into general labor inspections of guidance of enterprises in implementing workplace epidemic prevention and worker health management. In addition, given that food delivery platforms were frequently used by citizens during the pandemic lockdowns, to ensure that their employees did not become a weak point for securing prevention work, in April of 2020 OSHA issued the “Key Guidance of Epidemic Prevention for Food Delivery Personnel,” providing food delivery personnel with information about protecting their own safety and health and that of citizens while at work.

In addition, to provide stimulus to SMEs affected by COVID-19, OSHA inventoried all subsidy measures and supported enterprises affected by COVID-19 by giving them priority in handing out subsidies. OSHA has also encouraged enterprises to replace old workplace equipment or purchase new equipment so that they can, at the same time as engaging in epidemic prevention, improve occupational safety and health (OSH) in their work environments and upgrade international competitiveness to provide more job opportunities for citizens.

● **Improvement of the workers’ health services system**

In response to the trends of low birthrates, aging of workers, changing types of work as well as the emerging new work related diseases, including burnout from overwork, musculoskeletal disorders, and psychological stress, since 2011 Taiwan’s workers’ health services system has required enterprises with a specified number of employees to hire or sign contracts with medical personnel to provide on-site workers’ health services. (For the workers’ health services framework, see Figure 4-2.)

To build up the resources and relevant accompanying measures required for promotion of workers’ health services, OSHA has pro-actively trained health services personnel and set up units responsible for overall planning and management of workers’ health services as well as regional Workers’ Health Services Centers. These efforts provide enterprises with guidance and consultation services for establishing a cooperation mechanism with the Health Promotion Administration of the Ministry of Health and Welfare. In addition, OSHA has developed guidelines in the use of relevant tools (including the “iCare” personal health management tool, the “weCare” occupational health services management IT tools, and the Key Indicator

Method for human factors hazard risk assessment checklist) and provided these to enterprises for reference and use. Since the initial stage of workers' health services in 2011 through 2020, the workplace healthcare coverage rate for workers in Taiwan has increased from 16% to 50.4%, and the training in the provision of labor health services has been provided to 1,740 doctors and 19,475 nurses and related personnel.

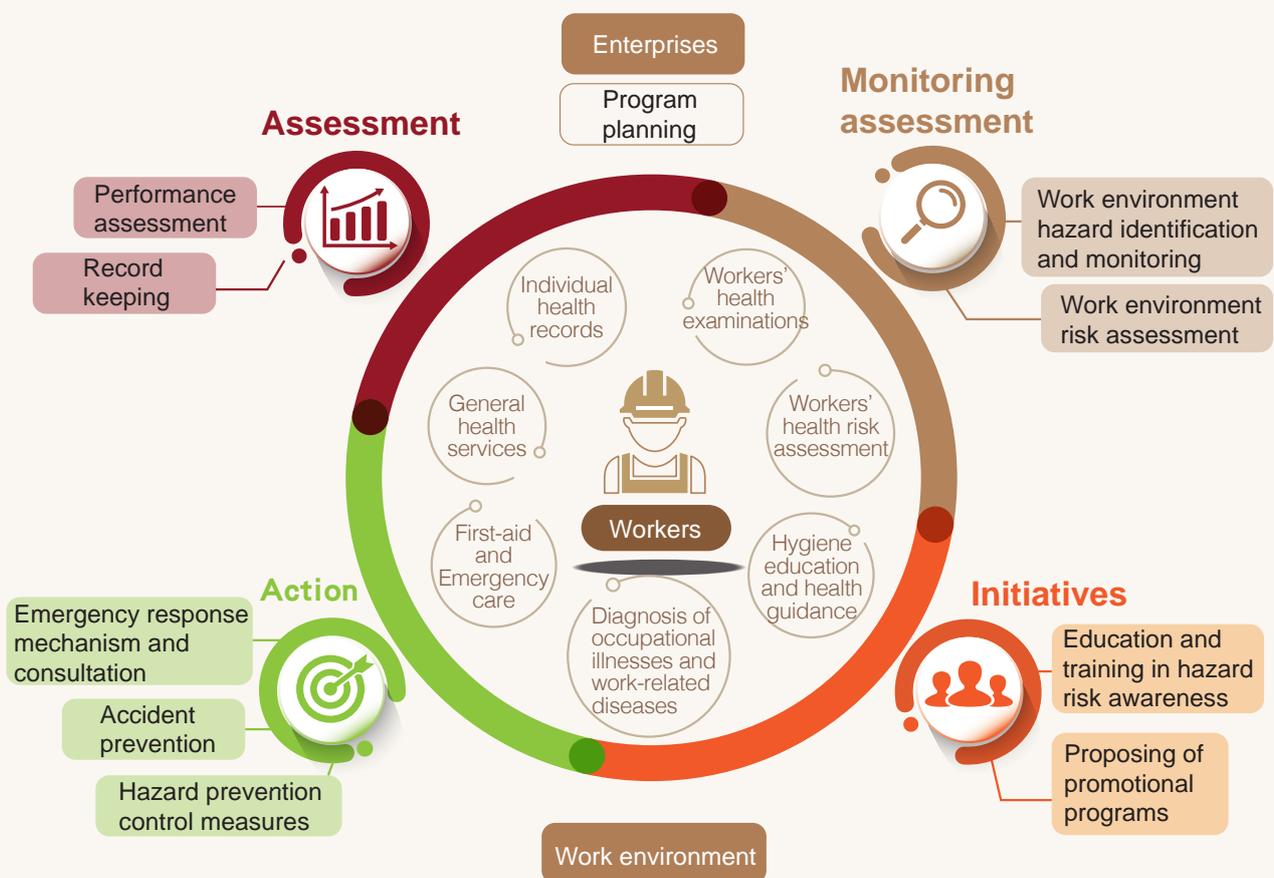


Figure 4-2 Workers' health services framework and scopes of service

- **Complete protection of workers' physical and mental health**

Statistics on payouts for occupational illnesses by the Labor Insurance Fund showed that most common occupational health problems in recent years are musculoskeletal disorders caused by repetitive working postures and cardiovascular and cerebrovascular disease or psychological illnesses caused by exceptional workloads such as shift rotations, night shift work, and long working



In 2015 OSHA former Director-General Fuh, Hwan-Ran and New Taipei City Labor Affairs Department Commissioner Hsieh, Cheng-ta attended the opening ceremony for the northern region Workers' Health Services Center.



OSHA's Workers' Health Services Centers provided health consultation services to workers.

hours. This is the primary reason why in 2013 the Ministry of Labor, after taking into account domestic and international standards, amended the "Occupational Safety and Health Act" to require employers to adopt relevant hazard prevention measures and take steps to protect workers' physical and mental health with respect to socio-psychological and human factors hazards, and also to require employers to draw up relevant prevention programs. This was an example of progressive legislation in line with international standards.

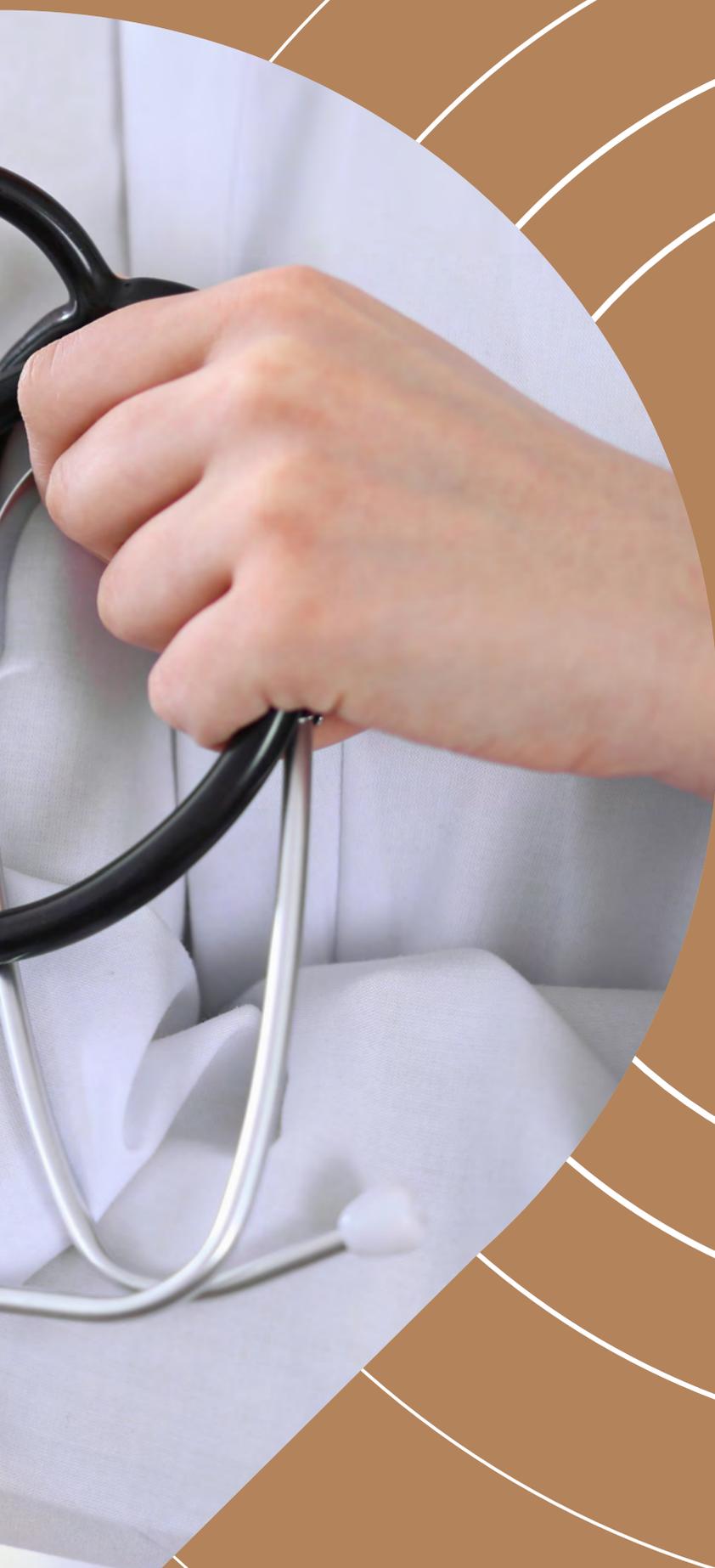
To assist employers to implement this new regulatory regime of health promotion, OSHA announced the "Guides to Prevent Workers Suffering from Unlawful Physical or Mental Assault While Performing Duties," the "Guides to Prevent Diseases Induced by Exceptional Workload," and the "Guides for Prevention of Ergonomic Hazards," and provided these to enterprises for reference and use. OSHA also implemented the "Special-case Inspection Program to Protect Workers' Physical and Mental Health" to strengthen effective supervision and guidance. In addition, employers have been assisted to promote health protection measures by various expertise. Besides doctors and nurses, in 2017 OSHA amended the "Regulations of the Labor Health Protection" to include psychotherapists, physical therapists, and occupational therapists into the services of those dealing with occupational musculoskeletal disorders and psychological illnesses. Also, through diverse methods including development of tools, awareness-raising, guidance, education, and training, OSHA has assisted the relevant supervisory personnel in enterprises to enhance their competency in order to ensure the rights and interests of workers.

5

Warmth and Support:

Protecting the Rights and Interests of Workers Who Have Suffered from Occupational Accidents





In order to protect the rights and interests of workers who have suffered occupational accidents (including diseases), in April of 2002 the “Act for Protecting Worker of Occupational Accidents” entered into effect. It provides for various kinds of subsidies and allowances for workers (both covered by labor insurance or not covered by it) and their families, and for diagnosis and rehabilitation services for occupational injuries and diseases offered by authorized specialty institutions. Since its founding in 2014, OSHA has undertaken horizontal integration of the tasks of (i) prevention of occupational injuries and diseases and (ii) investigations and appraisals of occupational diseases which were formerly handled by the Council of Labor Affairs, as well as incorporated subsidy and rehabilitation services to workers who have suffered occupational accidents (hereafter “affected workers”) formerly handled by the Occupational Accident Labor Protection Office of the Bureau of Labor Insurance (BLI), and the “Family Assistance Program” (FAP) of the Department of Labor Welfare, to establish the Occupational Accident Labor Protection Division. The goals have been to construct comprehensive integrated services for affected workers, to provide tailored and in-depth services for these workers and their families, to strengthen referrals to various kinds of assistance resources offered by government labor and social agencies, and to assist workers to overcome hard times and start anew.

- **Promotion of occupational disease and injury diagnosis, treatment, and reporting, as well as popularization of services**

In 2003 OSHA began setting up Occupational Disease and Injury Prevention Service Centers (ODIPSCs) in regional medical centers across Taiwan (in northern, central, southern, and eastern Taiwan). These brought together the service capabilities of departments of occupational medicine at hospitals in each region to provide diagnosis, treatment, and referral services for occupational diseases and injuries. Following the addition in 2016 of the Yunlin Branch of National Taiwan University Hospital as the site of an ODIPSC, by the end of 2020 Taiwan had 10 ODIPSCs and 87 network hospitals, and there had been a steady increase in the number of clinical sessions, while the number of workers making clinical visits for the first time exceeded 90,000 cases (see Figure 5-1 and Figure 5-2).



In 2012 then Council of Labor Affairs Minister Jennifer Wang visited a northern region Occupational Disease and Injury Prevention Service Center (at National Taiwan University Hospital).



In 2020 former OSHA Deputy Director-General Chou Deng-Chun visited a central region Occupational Disease and Injury Prevention Service Center (at China Medical University Hospital).

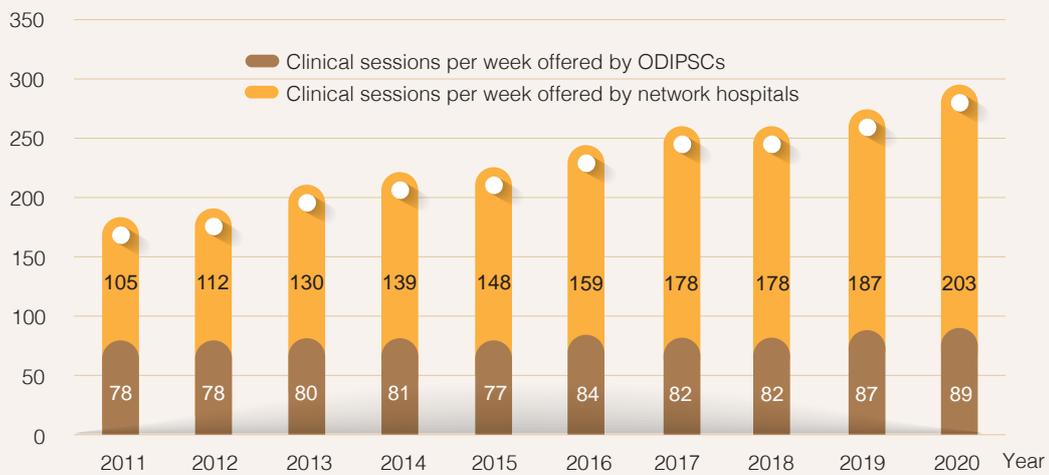


Figure 5-1 Clinical sessions offered by ODIPSCs and network hospitals over the years

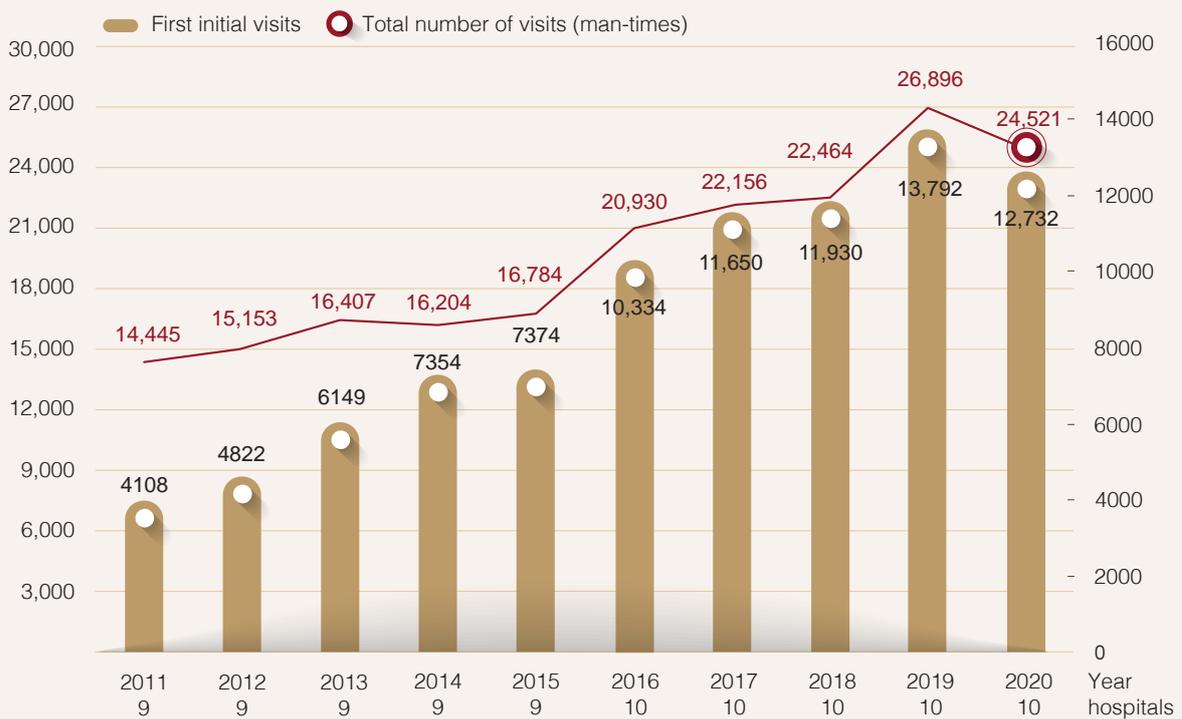


Figure 5-2 Number of persons served by ODIPSCs and network hospitals over the years

In order to rationalize the rate of reporting of occupational disease cases, OSHA adopted the “Subsidy Directions for Medical Institutions to Provide the Diagnostic Services of Occupational Disease and Injury.” In 2008 there were 1,600-plus report cases of occupational diseases, and the number rose to an average of 2,500 reports per year for the last three years. From 2011 to 2020 the single most

frequent diagnosis of workers with occupational diseases was for noise-induced hearing loss, with 10,594 cases. In second place was musculoskeletal disorders in the upper limbs (including carpal tunnel syndrome) with 4,565 cases. There were also noted increases in other diseases including pneumoconiosis, work-related cerebrovascular and cardiac disease, and cancer.

In order to enable workers to get access to top quality of occupational disease and injury services, OSHA has actively urged each ODIPSC to develop services that meet the special needs of their region. As of the end of 2020 OSHA had held 113 education and training sessions, with more than 20,000 participants. OSHA also amended the reference guidelines for determination of 91 types of occupational diseases (there are 169 recognized diseases listed on the official OSHA website) to provide objective and uniform standards for occupational medicine assessments. Since 2020 services have been extended to areas relatively lacking in occupational medicine clinical services, including remote areas (such as indigenous communities and offshore islands) and fishing harbors, to further upgrade the effectiveness of occupational disease and injury prevention.

● Occupational disease investigations, appraisals, and assistance

A. Occupational disease investigations and appraisals

Diagnosis of occupational diseases requires systematic professional assessments by doctors specializing in occupational medicine. Such assessments include on-site inspection examining working environments and operation processes as well as gathering of exposure data to evaluate whether there is any causal co-relationship between a disease suffered by a worker and his/her job conditions, as well as reference to the “Reference Guidelines for Diagnosis of Occupational Diseases” to make a final confirmation. Therefore, since 2007 OSHA has, through the Occupational Disease and Injury Management Service Center, organized occupational disease appraisal and investigation teams to undertake occupational exposure investigations and assessments. Moreover, depending on the nature of each individual situation, occupational safety and health experts can conduct work environment monitoring, or doctors specializing in psychiatry can undertake assessments of work-related stress. When necessary, these experts can accompany local labor inspection institutions to visit the workplace conducting on-site investigations, in order to collect evidence of occupational exposure of workers as objectively as possible.

Considering that in the practice of appraisal of occupational diseases, in individual cases there was often incomplete exposure data or insufficient epidemiological research data, but the possibility of a causal relationship between the disease and work cannot be excluded. As the result, there was a low rate of



affirmative outcomes when it came to appraisal of occupational diseases. On October 27, 2008 OSHA convened the “Expert Consultation Meeting on Options for Outcomes in the Appraisal of Occupational Diseases.” to address such issues. In order to protect the rights and interests of labor, and taking into account Article 20 of the “Regulations of the Examination of Injuries and Diseases Resulting from the Performance of Duties by the Insured Persons of the Labor Insurance Program,” the Meeting resolved that options for appraisal of occupational diseases would be changed from the original two choices--“occupational disease” and “non-occupational disease”-- to three options: “occupational disease,” “disease resulting from the performance of duties,” and “disease not belonging to the above two categories.” Adding the option “disease resulting from the performance of duties” has advanced the flexibility of occupational disease payments under Labor Insurance scheme.

Statistics indicate that from 2011 to 2020 there were a total of 259 cases of appraisal of occupational diseases. Of these, 214 (82.6%) were referred from the Bureau of Labor Insurance, while the competent authorities at the municipality, city, and county level accounted for 45 cases (17.4%). By analyzing the types of diseases in these cases, the most common type was “musculoskeletal disorders” (47.5%), followed by “cerebrovascular and cardiovascular disease” (22%), and “psychological illnesses” (9.3%). Of cases in which there has already been an appraisal outcome, there were a total of 11 cases (4.4%) found to be “occupational disease,” 121 (48.4%) to be “disease resulting from performance of duties,” and 118 (47.2%) to be “disease not belonging to the above two categories.” In the future, in coordination with the “Labor Occupational Accident Insurance and Protection Act” soon to be in effect, the authority will continue to systematically refine the quality of occupational disease diagnosis and optimize appraisal processes to enhance the efficiency of appraisals and assure the quality of the system.

B. Investigations to assist workers with work-related cerebrovascular and cardiovascular disease

Given the pressure of industrial competition in a globalized economy, workloads for labor have remarkably extended. Looking at the occupational accidents payment situation for labor insurance, through 2010 there were only 30 or so cases per year of payments for cerebrovascular and cardiovascular disease (see Figure 5-3). The difficulty workers had in providing proof of workload exposure compromised the outcomes of occupational accident payment cases. Taking this into account, OSHA not only amended the “Reference Guidelines for Determination of Work-related Cerebrovascular and Cardiovascular Disease (Excluding That Resulting from External Injury),” in 2011 OSHA launched an investigation and assistance mechanism in suspected cases of burnout from overwork. Labor inspection institutions took the initiative to conduct investigations of work environments and

working hours, and then turn the investigation results over to a doctor specializing in occupational medicine to assist in evaluating the co-relationship between the occurrence of a disease and the working history, serving as reference for occupational disease payments decision by labor insurance.

Analyzing the functioning of the investigation and assistance mechanism in suspected cases of burnout from overwork from 2011 through 2020, there has been a steady increase in the number of cases handled each year (see Figure 5-4). A total of 432 occupational medicine assessment reports have been completed, and the number of payouts for cerebrovascular and cardiovascular disease under labor insurance has been increased by 2 to 3 folds comparing to the period throughout 2010.



Figure 5-3 Payments for cerebrovascular and cardiovascular disease under labor insurance over the years



Figure 5-4 Number of cases of investigation and assistance in situations of suspected burnout from overwork over the years

- **Comprehensive services: Assisting workers who have suffered from occupational accidents to return to work as quickly as possible**

Once a worker suffers from an occupational injury or disease, their ability to work may have declined due to physical damage or psychological problems. Delivery of appropriate and timely post-accident rehabilitation services can assist workers to return to work as quickly as possible, which not only lightens the economic burden on workers' families. At the same time it restores the confidence of workers who have suffered from occupational accidents (including illnesses). It can also reduce losses to employers, lower expenditures for labor insurance, and reduce the burden on government assistance resources. The "Regulations on Rehabilitation Subsidy for Occupational Accidents Workers" issued on October 20, 2004, provide for subsidies for psychological guidance and social adjustment, evaluations and strengthening of ability to work, job accommodation, occupational guidance assessments, and other types of post-accident occupational rehabilitation, and comprehensively ensure the quality of life of workers after suffering occupational injury or disease. At present more than 20 organizations offer rehabilitation services, assisting 400 to 600 workers who have suffered from occupational accidents (hereafter "occupational accident workers") to return to work each year. Thanks to strengthened job trainings, over 80% percent of affected workers are able to return to their original workplaces.



Strengthened job training for workers who have suffered occupation accidents.

Since the launch of the "Occupational Competency Rehabilitation Services Guidance Program" in 2016, OSHA has guided all rehabilitation organizations to provide uniformed services and devised systematized rehabilitation services standards for affected workers. In addition to continue delivering guidance of services provided by rehabilitation organizations, at present OSHA is planning to found a "Return-to-Work Services Management Center for Occupational Accident Workers" and integrate services for affected workers provided by local governments, in order to provide optimal programs for them to return to work, and to ensure the quality of services provided by return-to-work personnel. In the future, in coordination with the new "Labor Occupational Accident Insurance and Protection Act," OSHA will provide such workers with more optimal rehabilitation services and extended service capabilities.



6

Working Together Across the Seas:

Promotion of International Exchanges
and Cooperation



In order to enable Taiwan's occupational safety and health (OSH) strategies to stay in line with international standards, OSHA has embraced the ideal of "international cooperation, sharing expertise and experiences with all." Through strategies including "promoting bilateral exchanges," "participating in international activities," and "building a friendship league," OSHA stays up-to-date on international practices for occupational accident and disease prevention to enhance the quality of Taiwan's OSH policies and the protection of labor rights and interests. In this way OSHA can realize the long-range goal of "a safe and healthy work environment for everyone." By pursuing opportunities for international cooperation and building up a network of overseas allies, OSHA can also enhance Taiwan's international profile.

● Participation in international meetings

From 2006 through 2020, OSHA participated in international events including relevant meetings of the Asia-Pacific Economic Cooperation (APEC) forums, the annual convention of the International Association of Industrial Accident Boards and Commissions (IAIABC), and the World Congress of Safety & Health at Work. By participating in international events, OSHA acquires new knowledge and stays up-to-date on global OSH development trends and the latest strategies, and also showcase Taiwan's labor policies and legal system to others for promoting bilateral and multilateral exchanges.

A. The APEC Senior Officials Meeting and Chemical Dialogue

APEC is a major economic and trade forum with 21 economic entities from the Asia-Pacific region as members, and is one of the few international multilateral organizations in which Taiwan can exercise a full membership. Over the past decade OSHA has continually attended the APEC Chemical Dialogue meetings, and contributed the GHS Reference Exchange and Tool (GREAT) information website since 2009, providing member economies with GHS labeling elements in foreign official languages. The website also includes information related to the implementation of GHS in member economies, schedules, and GHS resource links, providing this information to member economies for facilitating trade and workplace uses. As of 2020 the website had already provided labeling elements with over 38 national languages (including those from Asian-pacific regions and the European Union).



In 2018 OSHA dispatched staff to attend the APEC Senior Officials Meeting.

Through participation in the Chemical Dialogue in recent years, Taiwan has continued to share our experiences in implementing GHS and has promoted relevant capacity building work. Taiwan demonstrates its contributions to APEC members through concrete achievements, and in the future will actively expand international exchanges and cooperation through the APEC platform.

B. The annual convention of the IAIABC

The former Council of Labor Affairs of the Executive Yuan formally joined the International Association of Industrial Accident Boards and Commissions (IAIABC) on September 26, 1998, in order to leverage the experiences of other countries and

engage in international exchanges to serve as reference for future policy making and implementation for protecting the welfare of workers who have suffered occupational accidents. Since the founding of the Ministry of Labor in 2014, OSHA has continued to participate in the IAIABC as an international member.



In 2019 OSHA dispatched staff to attend the 105th annual convention of the IAIABC.

From August 30 through September 4, 2015 and from October 21 through 24, 2019, OSHA attended the 101st and 105th IAIABC annual conventions. Issues related to labor compensation systems, disability insurance, and return-to-work strategies were explored, and OSHA was able to acquire advanced international regulations and practices related to the protection of the rights and interests of workers who have suffered occupational accidents; this knowledge has been useful in promoting rehabilitation service for affected workers in Taiwan.

C. The World Congress of Safety & Health at Work

The World Congress of Safety & Health at Work is the biggest international event in the field of OSH. It is jointly organized once every three years by the UN International Labor Organization, the International Social Security Association, and the host country. Taiwan attended the 18th and 19th Congresses from June 29 to July 2, 2008 and September 11 to 14, 2011, respectively. After the founding of OSHA, representatives were dispatched to attend the 20th and 21st Congresses from August 24 to 27, 2014 and September 3 to 6, 2017. In 2020, as a result of the impact of



In 2014 former OSHA Director-General Fuh Hwan-Ran led a delegation to Frankfurt, Germany, to attend the 20th World Congress of Safety & Health at Work.

the COVID-19 pandemic, a special online meeting was convened from October 5 to 6. There were discussions of OSH and operational continuity and flexibility under pandemic conditions as well as the relationship between employment and labor rights. OSHA engaged in exchanges with scholars, experts, and officials from various countries and learned more about overseas OSH development experiences and accessed the latest information and trends, to serve as reference for OSH policy making.

● Hosting of international conferences and forums

There has been more than 40 years history of OSH work in Taiwan, from the original “Factory Act,” “Factory Inspection Act,” and “Labor Safety and Health Act” in the early days to the most current “Occupational Safety and Health Act”, facing the rise of emerging occupational hazards on top of the traditional ones. In order to stay up-to-date on emerging OSH challenges, OSHA hosted conferences and forums to engage in dialogue with international experts in the fields and draw on the diverse views of foreign experts to reassess Taiwan’s OSH-related systems, keep track of the latest development in OSH worldwide, and assist enterprises to enhance their OSH competency.

A. International Conference on Occupational Health Services

In order to learn from the occupational health management strategies and methods used in other countries, since 2013 OSHA has held the International Conference on Occupational Health Services annually. Experts and scholars have been invited from the US, Germany, Finland, Italy, Japan, Korea, Singapore, and Malaysia, among others, to share their policies and practices with respect to emerging issues including: (i) new strategies for occupational hygiene and health, (ii) their national experiences with promoting workers’ health services centers, (iii) health services models for middle-aged and elderly workers, (iv) health services for specified groups, (v) prevention of burnout from overwork, (vi) prevention of



In 2016 former Deputy Minister of Labor Liao Huey-Fang and former OSHA Director-General Liu Chuan-Ming attended the International Conference on Occupational Health Services and took this group photo with participating experts from Taiwan and overseas.

musculoskeletal disorders, and (vii) dealing with workplace psychological stress. The knowledge shared during the events serves as reference for Taiwan's labor health services policy making and systems.

B. Annual Seminar on Explosion Prevention and Industrial Safety

Because incidents of fires and explosions at domestic and overseas petrochemical and chemical factories often lead to serious loss of life and property, in order to enhance certification practices and the technology of explosion prevention of electrical equipment in Taiwan and prevent hazards, from 2014 through 2020 OSHA invited experts in the fields of explosion prevention technology for electrical equipment and certification from Europe, the US, and Japan as well as relevant domestic business entities and experts to jointly discuss related forward-looking and practical issues. These events have served as a platform for building a certification system for explosion prevention of electrical equipment and for technical communication and exchanges on occupational safety issues, as participating countries have shared their successful practices. These seminars have improved the competent level of explosion prevention and safety technology, enhanced safety awareness among businesses, and strengthened Taiwan's international integration in the field of explosion prevention and safety.



In 2017 OSHA Director-General Tzou Tzu-Lien attended the Annual Seminar on Explosion Prevention and Industrial Safety and took this group photo with participating experts from home and abroad.

C. International Conference on Occupational Hygiene and Health— Round Table on Industrial Hygiene and Occupational Health Practices

On March 7, 2018 and March 6, 2019 OSHA held the International Conference on Occupational Hygiene and Health for two consecutive years. Experts and scholars from the US, Japan, Korea, Singapore, and other countries were invited to attend, as were Taiwanese experts in the field of occupational hygiene and health from business, government, and academia. Issues discussed included “improving the effectiveness of exposure assessments and risk management,” “psycho-

physiological well-being and burnout prevention at work,” “how to combine the resources of all stakeholders to improve the effectiveness of occupational hygiene and health,” and “the feasibility of introducing labor exposure risk assessments into the production process safety assessment system.” All foreign experts shared their insights on international trends with local labor inspection institutions and experts business community in Taiwan, and they exchanged best practices, experiences, and methodology.



In 2018 OSHA Director-General Tzou Tzu-Lien attended the International Conference on Occupational Hygiene and Health and exchanged views with Harvard University Professor Thomas H. Gassert.

D. International Symposium on Diagnosis and Reporting of Occupational Diseases and injuries

In order to draw attention to Taiwan’s successes with offering diagnostic and treatment services for occupational disease and injuries over the previous decade and to promote international exchanges, from May 31 to June 1, 2018 OSHA held the International Symposium on Diagnosis and Reporting of Occupational Disease and Injuries: Ten Years of Achievements in Occupational Disease and Injury Diagnosis and Reporting in Taiwan and Prospects for the Future. At the event there was in-depth exploration of issues related to occupational disease and injury diagnosis in leading countries as well as of occupational disease and injury reporting systems and their methods. This information has been served as reference for the refining of Taiwan’s occupational disease and injury prevention policies and its reporting systems, in order to protect the rights and interests of labor.



In 2018 Minister of Labor Hsu Ming-Chun, Control Yuan President Chang Po-ya, and OSHA Director-General Tzou Tzu-Lien attended the International Symposium on Diagnosis and Reporting of Occupational Disease and Injuries and took this group photo with participating experts from home and abroad.

E. Conference on Offshore Wind Power Safety Technology

Given Taiwan's proactive development of offshore wind power, in order to strengthen the hazard identification, assessment, and control capabilities of offshore wind power enterprises, on

November 7, 2018 OSHA held a conference and invited international safety experts with hand-on experience of offshore wind power to discuss international technology applications and practices related to its field operational safety as well as to present case studies and analysis of accidents and prevention strategies overseas. Through international exchanges of technology, knowledge, and experiences, OSHA raised safety awareness in the business community and gathered information for reference in formulating the "Safety Guidelines for Offshore Wind Farm Operations" that are best suited to domestic conditions.



In 2019 Minister of Labor Hsu Ming-Chun attended the International Conference on Improving the Work Environment and Industrial Upgrading in the Printing, Dyeing, and Finishing Industry and took this photo with participating experts and guests.

F. International Conference on Improving the Work Environment and Industrial Upgrading in the Printing, Dyeing, and Finishing Industry

In 2018 OSHA launched the "Counseling the Printing and Dyeing Finishing Industry to Improve the Safety and Health Work Environment Plan." A major problem in Taiwan is that most printing, dyeing, and finishing businesses are in small and medium sized enterprises, and the traditional equipment they use is outdated and not designed to protect labor safety and health. On June 12, 2019 OSHA organized a conference to invite outstanding international scholars and elite textile professionals from Japan and Korea to deliver lectures on subjects that included smart manufacturing technology for the industry; sustainable development of dyeing and finishing auxiliaries; and occupational safety and health strategies in this profession. Attendees introduced smart production monitoring and control equipment and production line, dye, and auxiliary information, as well as multiple technology applications that take into account production, energy use, workplace safety and health, and environmental sustainability. These international interactions created a new opportunity for production process transformation and upgrading and helped build a safe and healthy workplace environment.

G. International Conference on Occupational Safety and Health Management Systems

In order to draw on international experiences and help domestic enterprises to implement OSH management, in September of 2014 OSHA held an international conference to which experts were invited from Japan and Korea to share the operations and best practices of their OSH management systems. Another international conference was held in October of 2019, to which experts were invited from the UK, Spain, and Taiwan to share the background to the promotion of standards for OSH management systems, including international standards ISO 45001 and national standards CNS 45001. They also discussed successful technologies and keys related to the organizational functions of systems, risk strategies, and use of management systems. Through these events OSHA encouraged enterprises to pro-actively develop OSH management systems and continued to upgrade OSH management standards in all industries.



In 2019 Deputy Minister of Labor Lin Ming-yu and OSHA Director-General Tzou Tzu-Lien attended the International Conference on Occupational Safety and Health Management Systems and took a photo with participating experts from home and abroad.

● Bilateral meetings and cooperation

In order to strengthen the OSH environment in Taiwan's industries, OSHA has arranged bilateral meetings and cooperation. These include the signing of a "Memorandum of Understanding on Information Exchange (MOU) and Cooperation for Workplace Safety and Health" with the UK Health and Safety Executive (HSE) and the holding of the 1st Taiwan-UK Occupational Safety and Health Summit with the HSE. These activities promote systematic bilateral interactions and lay the foundations for substantive bilateral cooperative relations.

A. The signing of an MOU on cooperation with the HSE

In response to the development of offshore wind power in Taiwan and the rise of associated operational hazards/risks, OSHA organized a delegation to visit offshore wind power-related organizations in the UK, including the Ørsted UK. Moreover, on June 10, 2019 OSHA Director-General Tzou Tzu-Lien and UK HSE Chief Executive Dr. David Snowball signed a “MOU on Information Exchange and Cooperation for Workplace Safety and Health” at the London offices of the HSE. Its aim is to serve as the basis for a cooperative partnership with mutual sharing of OSH information related to offshore wind farms and holding of bilateral visits, conferences, and other international activities.



In 2019 OSHA Director-General Tzou, Tzu-Lien and UK HSE Chief Executive David Snowball signed an MOU.

B. The Taiwan-UK OSH summit

In order to promote bilateral exchanges and cooperation between Taiwan and the UK, on September 24, 2020 OSHA and the HSE held the “1st Taiwan-UK Occupational Safety and Health Summit.” Via a videoconference format, the two sides shared their OSH information and promotional strategies. Moreover, at the meeting OSHA Director-General Tzou Tzu-Lien and HSE Chief Executive Sarah Albon signed a cooperation confirmation document and mutual agreed areas of future cooperation between the two OSH agencies, deepening the cooperative partnership between Taiwan and the UK.



In 2020 OSHA Director-General Tzou Tzu-Lien and UK HSE Chief Executive Sarah Albon signed a cooperation confirmation document.

7

Moving Forward Together:

Building a Culture of Occupational Safety and Health





Each worker represents a family. Ensuring that each worker is unharmed at work and can return home safely is merely the most basic form of decent treatment for labor. In order to cultivate better understanding of, and expertise in, occupational safety and health (OSH) among enterprises and workers, OSHA has worked to strengthen enterprise OSH self-management capabilities, establish best practice benchmarks for industries to learn from, and upgrade workers' OSH competency. Therefore, OSH can become part of corporate cultures. This can ensure the safety and health of labor in the workplace and create a foundation for the sustainable operations of enterprises.

● Promotion of the Taiwan Occupational Safety and Health Management System

In 1999 the British Standards Institution (BSI) and other international certification institutions began to promote the Occupational Health and Safety Assessment Series (OHSAS 18001) certification around the world. Taiwan aimed to keep up with international standards and adopt a systematic method to improve OSH management at domestic enterprises. In 2008 OSHA began promoting the “Taiwan Occupational Safety and Health Management System” (TOSHMS) certification system. This initiative enabled enterprises to acquire an internationally recognized OSH management system certification and the TOSHMS certification together with one single audit. In October of 2020, OSHA signed a MOU with the Taiwan Accreditation Foundation (TAF) to jointly promote the TOSHMS 2.0 certification system. In terms of the regulatory system, amendments to the “Regulations of Occupational Safety and Health Management” requires enterprises of a certain scale, with moderate risk or above, to establish an OSH management system, based on national standards CNS 45001 to meet their needs. Since promotion of the TOSHMS began, by the end of 2020, over 960 enterprises had received TOSHMS certification (see Figure 7-1), covering near one million workers. Enterprises that received certification had been assisted to form regional promotional associations in northern, central, and southern Taiwan.

Besides the TOSHMS, OSHA has also promoted a “Performance Recognition System for Occupational Safety and Health Management Systems.” Through policy incentives such as public recognition and relaxing restrictions on organizations specifically responsible for OSH, OSHA encourages enterprises to continue to



Figure 7-1 Number of enterprises received TOSHMS certification, 2008 to 2020



In 2020 OSHA Director-General Tzou, Tzu-Lien and Taiwan Accreditation Foundation President Lien, Ching Chang signed a MOU to cooperate in promoting the TOSHMS.

upgrade the performance of their OSH management systems. By the end of 2020, there are 146 enterprises had received OSH performance recognition as rewards.



In 2016 former OSHA Director-General Liu, Chuan-Ming attended an activity of the TOSHMS northern promotional association and handed out certificates of appreciation.

● Refinement of the OSH education and training system

Most occupational accidents are caused by unsafe environments, unsafe equipment, or unsafe behaviors. This is why OSH laws require employers to ensure that their workers undergo necessary OSH education and training. Because there are 63 categories of OSH education and training, there is demand for training courses to be offered by non-governmental training institutions. Statistics show that in 2011 the number of workers who completed OSH education and training (or received certification that they had completed training courses) was 152,000, whereas in 2020 that number increased to 186,000 (see Figure 7-2).

The quality of training in OSH offered by training institutions is mainly affected by four factors: qualifications for offering training, class management, training materials, and completion-of-training testing.



Figure 7-2 Number of people who completed OSH education and training (or received certification that they had completed training courses)

In terms of completion-of-training testing, OSHA has promoted a multiple-track exam system. There are 14 occupational categories (including OSH managers and jobs involving operating skills) for which completion-of-training testing is used to verify that people have certain technical skills. Moreover, since 2011, OSHA have been successively shifting completion-of-training testing from paper exams to computerized exams, and have set up a large number of computerized testing venues. Over the last ten years the number of computerized testing venues has increased from 13 to 52, and computerized testing now covers 11 occupational categories. As of the end of 2020, a total of 235,000 people had passed computerized exams to get their completion-of-training certifications, with an average pass rate of 82.38%



Students at an occupational training institution participate in training in the operation of forklifts.

In terms of qualifications for offering training, institutions have been conducted covering their teaching, instructors, teaching materials, environment and equipment, administration, and information management. Over the last ten years a total of 151 evaluations have been completed, with about 30% of training institutions being considered “excellent.” Altogether there are about 150 training institutions in Taiwan that offer regular classes. Moreover, since 2015 OSHA has promoted a certification system for education and training institutions that offer training for OSH managers, and as of 2020 a total of 41 training institutions had received certification that remained valid.

In terms of training materials and class management, OSHA uses the “Occupational Safety and Health Education and Training Information Website” to make educational and training materials announced by the Ministry of Labor available to the general public. OSHA has also successively set up information systems for management of guidance personnel and other matters (see Figure 7-3) through which personnel at OSH education and training institutions are brought

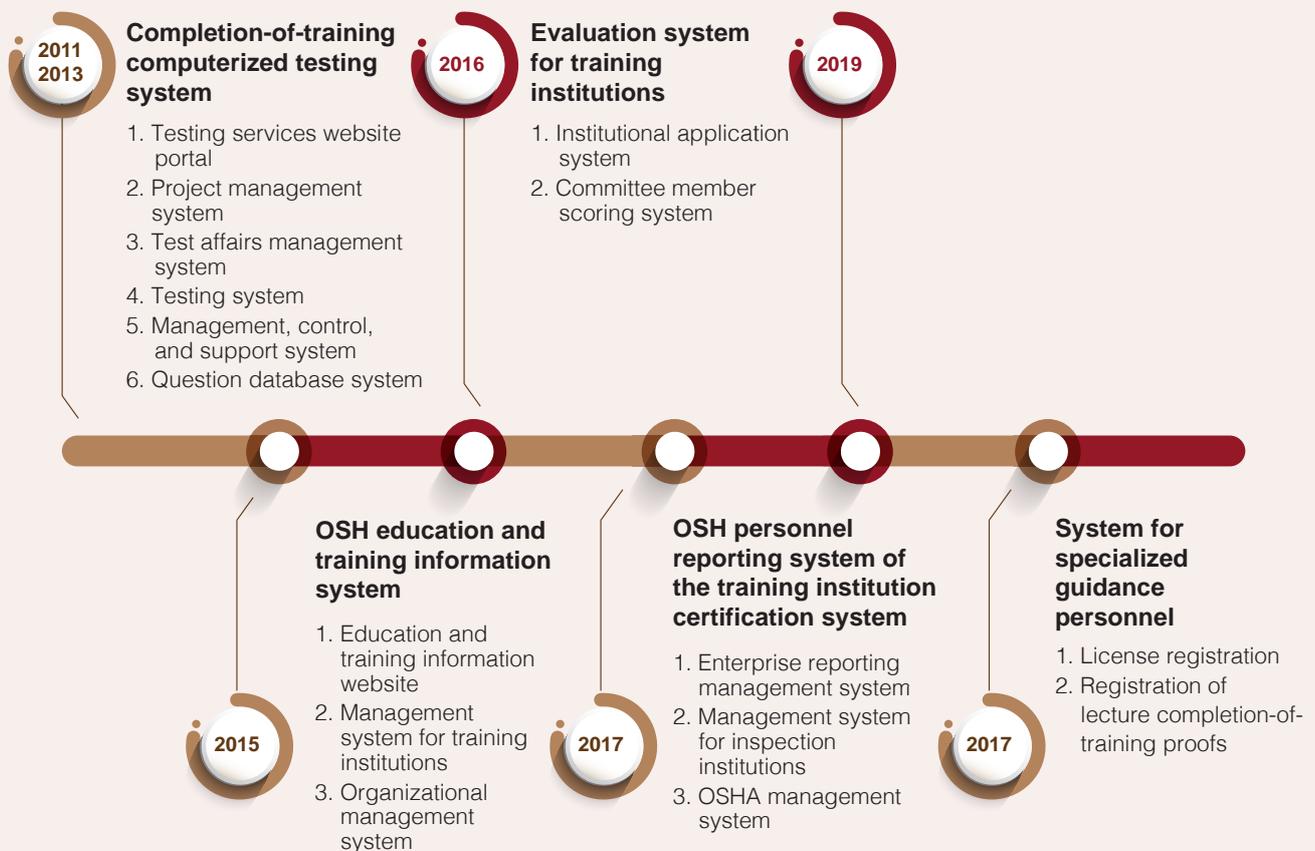


Figure 7-3 The development of information management systems for OSH education and training

under management. In the future OSHA will continue to use information technology to strengthen management of OSH education and training.

- **Promotion of the “Taiwan Occupational Safety and Health Card” system**

The “Occupational Safety and Health Act” stipulates that “Employers shall provide laborers with all necessary safety and health education and training to perform duties and prevent accidents.” However, particularly in the construction industry there is a complex division of labor and often there are many layers of subcontracting arrangement. Often elementary workers are employed on a short-term or temporary basis. Because of the high turnover of workers who have no single fixed employer, they often do not receive necessary OSH education and training before going to job, causing them to carry limited awareness of potential on-site hazards, thereby making them vulnerable to occupational accidents. In order to increase the willingness of workers in the construction industry to undergo OSH education and training, some special municipalities including Taipei City, New Taipei City, and Taichung City began in 2016 to promote occupational or work safety cards and lay out OSH education and training for the construction industry. After completion of such training, workers could receive their “occupational safety cards,” which allowed them to carry their training record to any construction projects within the municipality’s jurisdiction and avoid repeating worker training.

Because there was no commonality among the “occupational safety cards” promoted by local governments, each card was only valid at projects within the jurisdiction of the issuing city. In order to expand the “occupational safety card” concept to national-wide level of construction site accident prevention, in 2017 OSHA began promoting the “Taiwan Occupational Safety and Health Card” (TOSHC) system and planning general OSH education and training for the construction industry. As end of 2020, 772 classes had been offered and 31,792 people had completed education and training (see Figure 7-4).

The TOSHC has already integrated the relevant information from the Taipei City and Taichung City occupational safety card systems in order to simplify administration and make things easier for citizens. The TOSHC system reduces the burden on enterprises and secure job opportunities for workers, and puts in place a management mechanism for entering a construction sites.

Number of classes offered, 2018-2020



2018: 60 classes offered
2019: 161 classes offered
2020: 551 classes offered

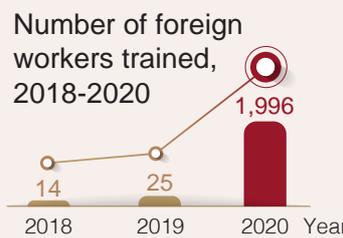
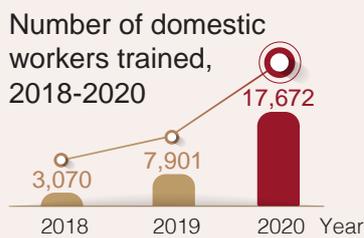


Figure 7-4 Performance statistics for the Taiwan Occupational Safety and Health Card

• The “National Occupational Safety and Health Awards”

In order to encourage enterprises to actively promote OSH and establish models to learn from, in 2008 OSHA founded the “National Labor Safety Awards.” Initially these awards had only two categories: benchmark enterprise awards and individual contribution awards. However, to encourage small and medium sized



In 2014 former Vice President Wu, Den-Yih accompanied former Minister of Labor Pan, Shih-wei in meeting with representatives of receivers of the “benchmark enterprise award” of the “National Occupational Safety and Health Awards.”



In 2020 Vice Premier Shen, Jong-chin and Minister of Labor Hsu, Ming-Chun took this photo with representatives of enterprises winning a “National Occupational Safety and Health Award.”

enterprises (SMEs) with only 200 or fewer employees and traditional manufacturing firms to improve their OSH, in 2013 anew special awards were added for SMEs and firms investing in traditional industries. In 2014, in coordination with the coming into effect of the “Occupational Safety and Health Act,” the names of the awards were changed to the “National Occupational Safety and Health Awards.” In addition, in 2018 a new special award was added for labor health promotion.

The “National Occupational Safety and Health Awards” are handed out to enterprises with performance excellence. Nominated enterprises must all have established and promoted OSH management systems, and cannot have had any serious occupational accidents within the past five years. From 2011 to 2020 a total of 29 enterprises won “benchmark enterprise awards,” while 13 experts with track-record experience in the field of OSH won “individual contribution awards.”

● The “Excellent Construction Safety Awards”

The construction industry accounted for more than half of all industrial accidents each year. Using government infrastructure projects as models to guide private sector projects in striving to achieve the goal of zero occupational accidents, in 2007 the Ministry of Labor began to hand out the “Public Construction Golden Safety Awards” to recognize public infrastructure projects and personnel with outstanding OSH performance. In order to win one of these awards, projects must have a comprehensive OSH management and supervision system in place, from risk assessments conducted during the project planning phase, use of safe construction methods, and planning for relevant OSH facilities or equipment through to the actual construction phase.

Starting in 2020, in order to continue to upgrade safety and health facilities and equipment as well as management standards at domestic construction projects, OSHA not only continued to present awards to public construction projects, but also expanded the awards to cover private sector projects by offering the “Excellent Construction Safety Awards.” OSHA publicly presents awards in cases of excellent performance in the implementation of OSH management during construction, to make the activities inclusive and complete.



In 2017 Minister of Labor Lin, Mei-chu attended the ceremony to present the “Public Construction Golden Safety Awards.”



8

A New Blueprint:

Looking into the Future Prospects



The performance of occupational safety and health (OSH) is not only a basic human right, it is also an indicator of a country's development and progress. To deal with the hazards posed by emerging industries in the future, cultivate a healthy labor force in Taiwan, and build up capabilities to protect workers who have suffered from occupational accidents, OSHA will pro-actively undertake all kinds of OSH tasks. OSHA will adopt the initiatives of providing innovative services and technological transformation, strengthening multilateral international exchanges and bringing together the resources of all stakeholders in Taiwan. All these efforts will promote sustainable development of OSH in Taiwan and join the leagues of countries that are advanced in the practices of labor safety.

● Improvement of safety management in the green energy industry

Given that offshore wind-mill power generation is a new type of industry in Taiwan and is subject to the effects of weather, sea conditions, and platform movements, in 2018 OSHA invited the Ministry of Economic Affairs, the Ministry of Transportation and Communications, offshore wind-mill power firms, and relevant experts to operate the “Interdepartmental Technical Platform for Offshore Wind Farm Operational Safety” and formulate strategies for labor inspection institutions to conduct supervision and inspection during the construction and operational phases at offshore wind farms. OSHA also issued the “Safety Guidelines for Offshore Wind Farm Operations” and the “Reference Handbook for Essential Data for Supervision and Inspection of Wind Power Enterprises,” for offshore wind power developers to implement safety management, and for labor inspection institutions as the basis of guidance.

In order to pro-actively assure the safety of workers at offshore wind farms, implement our national offshore wind power policy and OSH supervision move forward in concert, and to promote the environmentally positive development of the industry, OSHA drew on the UK’s OSH system and organized a supervisory and inspection team to undergo specialized training to strengthen supervisory and inspection skills.

As of 2020 OSHA had organized nine meetings of the Interdepartmental Technical Platform and arranged for 13 members of the supervisory and inspection team to receive specialized training from the Global Wind Organization (GWO) in the areas of “Working at Heights” and “Sea Survival.” OSHA also issued the “Offshore Wind Power Labor Supervision and Inspection Guidelines,” which includes items for supervision and inspection related to at-sea operations as well as inspection procedures in details. OSHA implemented its program for supervision and inspection of at-sea operational safety at offshore wind farms, under which priority will be given to at-sea operations in the construction phase, to oversee that enterprises delivering construction work to practice self-auditing and risk assessments.

● Strategies to enhance the safety of “gig economy” workers

The catering delivery service industry has been expanded significantly in recent years. The general public has turned to food delivery platforms in large numbers because they offer the convenience of rapid delivery and a wide variety of food options to choose from. With the nature that food delivery staff, aiming to



earn income from more deliveries and limited by delivery time constraints set by delivery platforms, workers have frequently been involved in vehicular accidents. As a result, society has given more attention to the issue of assuring workers' safety. Food delivery work poses physical and mental health hazards not only because it can lead to traffic accidents or exposure to hazards related to high and low outdoor temperatures, but also because of the pressure on workers resulting from excessive workloads and delivery time limits.

In order to enhance OSH measures for delivery personnel, in 2019 OSHA issued the "Food Delivery Operational Safety Guidelines version 1.0." These guides require businesses to implement safety management tasks including prevention and handling of traffic accidents and prevention of heat stress, and to suspend food delivery operations when there is extremely bad weather (such as typhoons). In order to further strengthen the operational safety of food delivery and protect the rights and interests of workers, in the same year OSHA amended the original guidelines and announced the "Food Delivery Operational Safety Guidelines version 2.0." These amendments incorporated requirements for reasonable workloads, types and amounts of insurance, and measures to avoid hazards to workers' physical and mental health posed by excessive workloads. In 2020 OSHA announced amendments to the "Regulations for the Occupational Safety and Health Equipment and Measures" to stipulate that employers must provide protective equipment (such as safety helmets, reflective signs, and communications equipment for emergency use) for food delivery operations. In coordination with the amending of these Regulations, on the same day OSHA issued the "Food Delivery Operational Safety and Health Guidelines version 3.0," based on which businesses can set and implement food delivery hazard prevention plans and implement safety management tasks such as traffic accident prevention and handling and prevention of heat stress while meeting requirements for reasonable workloads, insurance types and amounts, and measures to avoid hazards to workers' physical and mental health posed by excessive workloads.

- **Improvement of the protection of the health and safety of specified groups (young people, the middle-aged and elderly, women, indigenous people, and foreign migrant workers)**

In recent years there has been a shift in the demographic structure of Taiwan's labor population. Given the trends of low birthrates and aging of the population, the workforce is even more valuable. But there still remain gaps in terms of OSH for specific groups. For young people, the Ministry of Labor (MOL) has formed the "Task Force on the Workplace Safety and Health Rights and Interests of Pupils

and Young People,” inviting relevant ministries and groups concerned with the welfare of pupils and youth to collectively discuss OSH for children and youth and protection of their labor rights and interests. As for middle-aged and elderly workers, following promulgation of the “Middle-aged and Elderly Employment Promotion Act,” OSHA issued the “Guidelines for the Safety and Health of Middle-aged and Elderly Workers,” and has continued to guide employers to improve work environments, operating procedures and provide labor health consultations, to overcome the barriers for entering new jobs for the middle-aged and elderly. OSHA has also used guidance and education to pro-actively implement matters related to maternal protection stipulated in the “Occupational Safety and Health Act.”

With respect to indigenous people, OSHA has worked with the MOL’s Institute of Labor, Occupational Safety and Health to take advantage of traditional festivals and other passions when indigenous people return to their hometowns to actively hold educational activities and strengthen their OSH competency. As for foreign migrant workers, OSHA coordinated with the airport services offered by the Workforce Development Agency and used management at the source to provide foreign migrant workers with OSH educational materials, as well as continued to supervise employers in implementing OSH education and training for migrant workers.



Participants in a 2016 safety and health educational camp for university and college students visited a construction site.

● Promotion of sustainable development of OSH

Looking into the future of 2030, Taiwan faces challenges of physical and psychological diseases for workers related to stress, new operational forms, and suitability for work for middle-aged and elderly workers given the aging of the workforce and low birthrates in society, as well as health risks posed by harmful and carcinogenic substance exposures in factories. In November of 2019 the Executive Yuan announced the “Taiwan Sustainable Development Goals,” which include clear goals for strengthening industrial safety and health and decent working conditions as well as upgrading the productivity of the workforce. In order to ensure national competitiveness, it is necessary to promote OSH sustainable development. OSHA will strengthen labor health, safety, and well-being and lead enterprises to promote preventative forward-looking OSH measures with leading indicator and ensure that all workers, including those in medium and large sized enterprises and their industrial chains, long-neglected workers in micro enterprises and who are self-employed, workers in new emerging industries, and middle-aged and elderly workers. These are the challenges faced by OSHA in the future and will be the focus of our continued efforts and pursuit.

● A comprehensive occupational accident protection system

In order to comply with the norms set out in instrument such as the International Labor Organization’s 1964 Employment Injury Benefits Convention (No. 121) and the United Nations’ 2006 Convention on the Rights of Persons with Disabilities, leading countries have adopted effective measures to prevent occupational accidents and diseases. They have primarily emphasized on taking appropriate steps, including early intervention and provision of cross-specialization services programs, to provide the disabled with rehabilitation services and assist them to return to the workplace. At the same time they have blended in the principles of preventive investment in social insurance emphasized by the United Nations’ International Social Security Association (ISSA) to reduce work injuries and diseases as well as enhance labor health and productivity, which will be beneficial for all of society.

The Ministry of Labor worked to promote the approval of the “Labor Occupational Accident Insurance and Protection Act.” The new Act not only expands the scope of insurance coverage, integrates the various allowances and subsidies in the “Act for Protecting Worker of Occupational Accidents,” and increases payment levels and protections. It also provides subsidies for affected workers who have not joined this insurance, with needed funding coming from

the insurance fund. Even more importantly, it integrates occupational accident prevention and post-accident rehabilitation work in order to effectively expand accident prevention and rehabilitation services, with the primary mission of building a comprehensive system of pre-accident prevention, adequate compensation, and post-accident rehabilitation. The plan for the new Act includes appropriating a certain proportion of annual premiums to undertake tasks including occupational accident prevention, rehabilitation, and health check-ups to prevent occupational diseases. Moreover, the new law sets up a specialized institution to exercise the government's occupational accident prevention strategies and promote OSH measures, as well as assist with case management and rehabilitation of affected workers. Besides making it possible to compensate for the current shortage of personnel for occupational accident prevention and rehabilitation systems, it will also be possible to integrate relevant service resources to make the occupational accident protection system more complete.

The Ministry of Labor worked to promote the approval of the "Labor Occupational Accident Insurance and Protection Act" to adopt a specialized law that combines the relevant provisions of the "Labor Insurance Act" and the "Act for Protecting Worker of Occupational Accidents." The new Act not only expands the scope of insurance coverage, integrates the various allowances and subsidies in the "Act for Protecting Worker of Occupational Accidents," and increases payment



levels and protections. It also provides subsidies for affected workers who have not joined this insurance, with needed funding coming from the insurance fund. Even more importantly, it integrates occupational accident prevention and post-accident rehabilitation work and sets up a comprehensive system of pre-accident prevention, adequate compensation, and post-accident rehabilitation, in order to effectively expand prevention and rehabilitation services. A certain proportion of annual premiums will be appropriated to undertake tasks including occupational accident prevention, rehabilitation, and health check-ups to prevent occupational diseases. Moreover, the new law sets up a specialized institution to exercise the government's occupational accident prevention strategies and promote OSH measures, as well as assist with case management and rehabilitation of affected workers. Effective supervisory executive and legislative mechanisms will be used to assist the government to enhance the administrative effectiveness of occupational accident prevention and rehabilitation systems. The occupational accident insurance and protection systems will be combined, and professional service providers will do early intervention to provide timely and comprehensive rehabilitation services to affected workers. These steps will give such workers comprehensive protection and will be of enormous benefit to Taiwan's OSH development and protection of these workers.



In April of 2021 the "Labor Occupational Accident Insurance and Protection Act" received the third reading of final approval by the Legislative Yuan.

2011 — 2020

*Ten Years of
Dedication to a
Single Mission*



Ten Years of Achievements in the
Development of Occupational Safety
and Health in Taiwan

Ten Years of Achievements in the Development of Occupational Safety and Health in Taiwan,
2011-2020: Ten Years of Dedication to a Single Mission

Publisher: Occupational Safety and Health Administration, Ministry of Labor

Publisher: Tzou, Tzu-Lien

Editor: Occupational Safety and Health Administration, Ministry of Labor

Convener: Lin Yu-Tang

Editorial committee: Liu, Yue-Se; Peng, Feng-Mei; Yang, Chung-Cheng; Chiang, Yen-Ping;

Chiu, Chi-Hsien; Lin, Ching-Yu; Tsai, Chia-Hsuan; Chang, Kuang-I; Chen Hui-Chun

Address: No. 439, Zhongping Road, East Building, 11F, Xinzhuang District, New Taipei City, Taiwan

Telephone: (02) 8995-6666

Website: <https://www.osha.gov.tw/>

Layout and design: WISH CREATIVE DESIGN CO., LTD.

Address: No. 108, 8F, Minquan West Road, Datong District, Taipei City, Taiwan

Telephone: (02) 2553-6152

Date of publication: December, 2021

Price: NT\$350

Available at the following bookstores: Wunan Wenhua Guangchang (Wunan Culture Plaza)

Address: No. 6, Zhongshan Road, Taichung City, Taiwan, 400

Telephone: (04) 226-0330 ext. 27

San Min Book Co., Ltd.

Address: No. 61, Chongqing South Road, Section 1, Taipei City, 100

Telephone: (02) 2578-1515 ext. 643

Government Publications Bookstore, Songjiang Branch

Address: No. 209, 1F, Songjiang Road, Taipei City, 104

Telephone: (02) 2518-0207

Copyright management information

The Occupational Safety and Health Administration of the Ministry of Labor owns all copyrights under law for this book. Any person or persons who wish to reproduce, alter, edit, or publicly read out all or any part of this book must first seek consent of authorization from the intellectual property rights management organization (please contact the Occupational Safety and Health Administration, Ministry of Labor at 8995-6666).

GPN: 1011002189

250 copies published in December of 2021

ISBN: 9789865466947



勞動部職業安全衛生署

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, MINISTRY OF LABOR

Address: 242030 No.439, Zhongping Rd., Xinzhuang Dist., New Taipei
City 242, Taiwan (R.O.C.)

Service Time: Monday to Friday : 08:30-12:30 , 13:30-17:30



Website



ebook



ISBN-13: 978-9865466947

00350



9 789865 466947

GPN: 1011002189

Price: NT\$ 350