



Occupational Safety and Health Profile of Taiwan



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Taiwan is situated in the West Pacific between Japan and the Philippines. The territory includes the main island of Taiwan, the archipelagoes of Penghu, Kinmen and Matsu, as well as numerous other islets—together covering an area of 36,191 square kilometers.



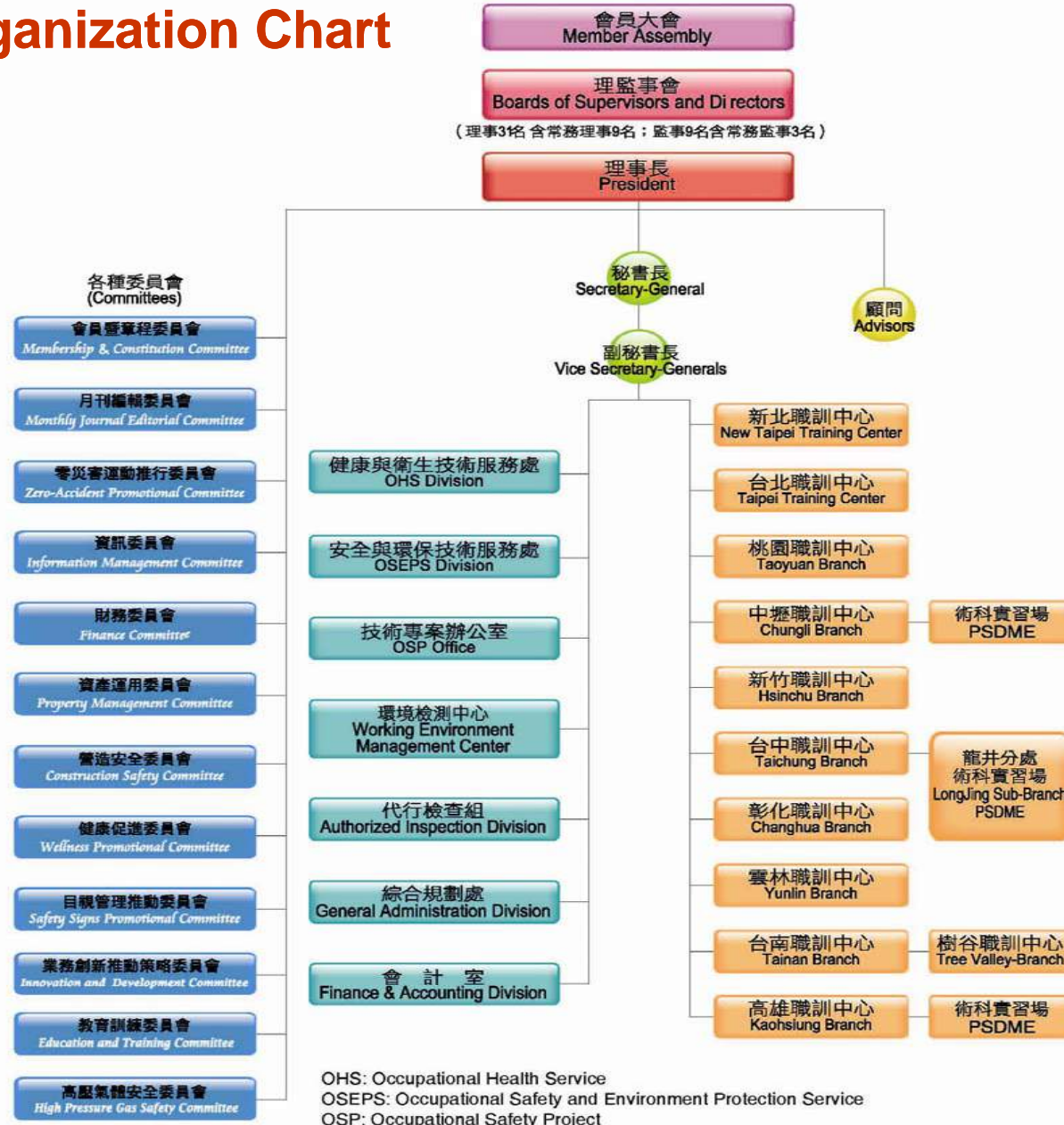


Area	36,191 sq. kilometers (13,973 sq. miles)
Population	23.32 million (as of 2012.02)
Ethnicity	Han Chinese 98% (including Holo, Hakka and other groups which originated from mainland China); indigenous Austronesian peoples 2%
Government	Multiparty democracy
Capital	Taipei City
Other major cities	New Taipei City, Taichung City, Tainan City, Kaohsiung City
Monetary unit	New Taiwan Dollar (NT\$)
Official language	Mandarin (Chinese)
Other important languages	Taiwanese, Hakka, Austronesian languages, English, Japanese
Major religions	





Industrial Safety and Health Association, Taiwan Organization Chart





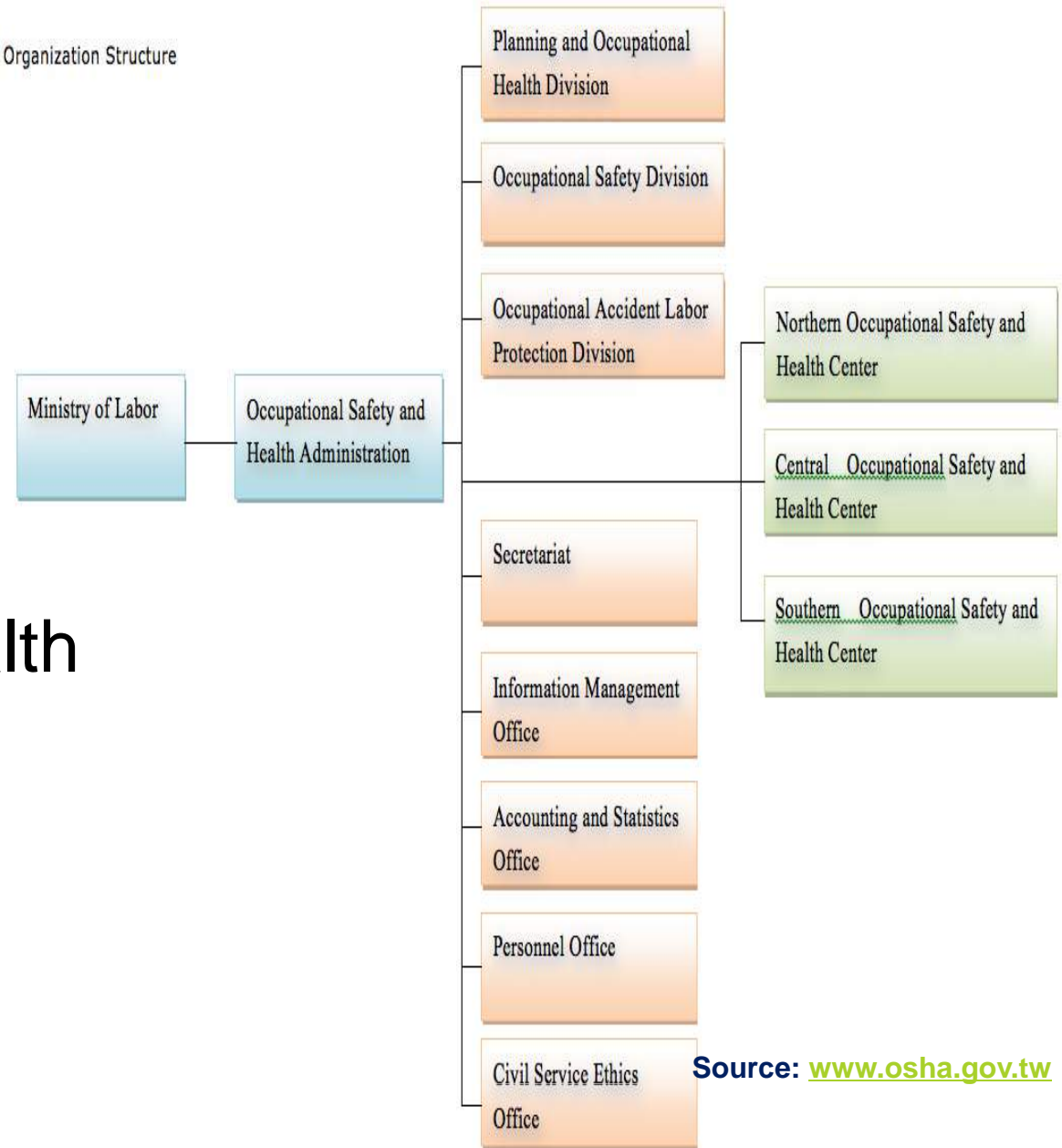
Occupational Safety and Health Administration, Taiwan

- The Labor Safety and Health Act has launched in 1974.
- The Act is amended as the Occupational Safety and Health Act on the July 3rd, 2013 so as to expand the coverage and protection for the labor force.



- The Ministry of Labor (MOL) establishes the Occupational Safety and Health Administration (OSHA) to plan and manage all Taiwan's OSH affairs.

Organization Structure



Source: www.osha.gov.tw



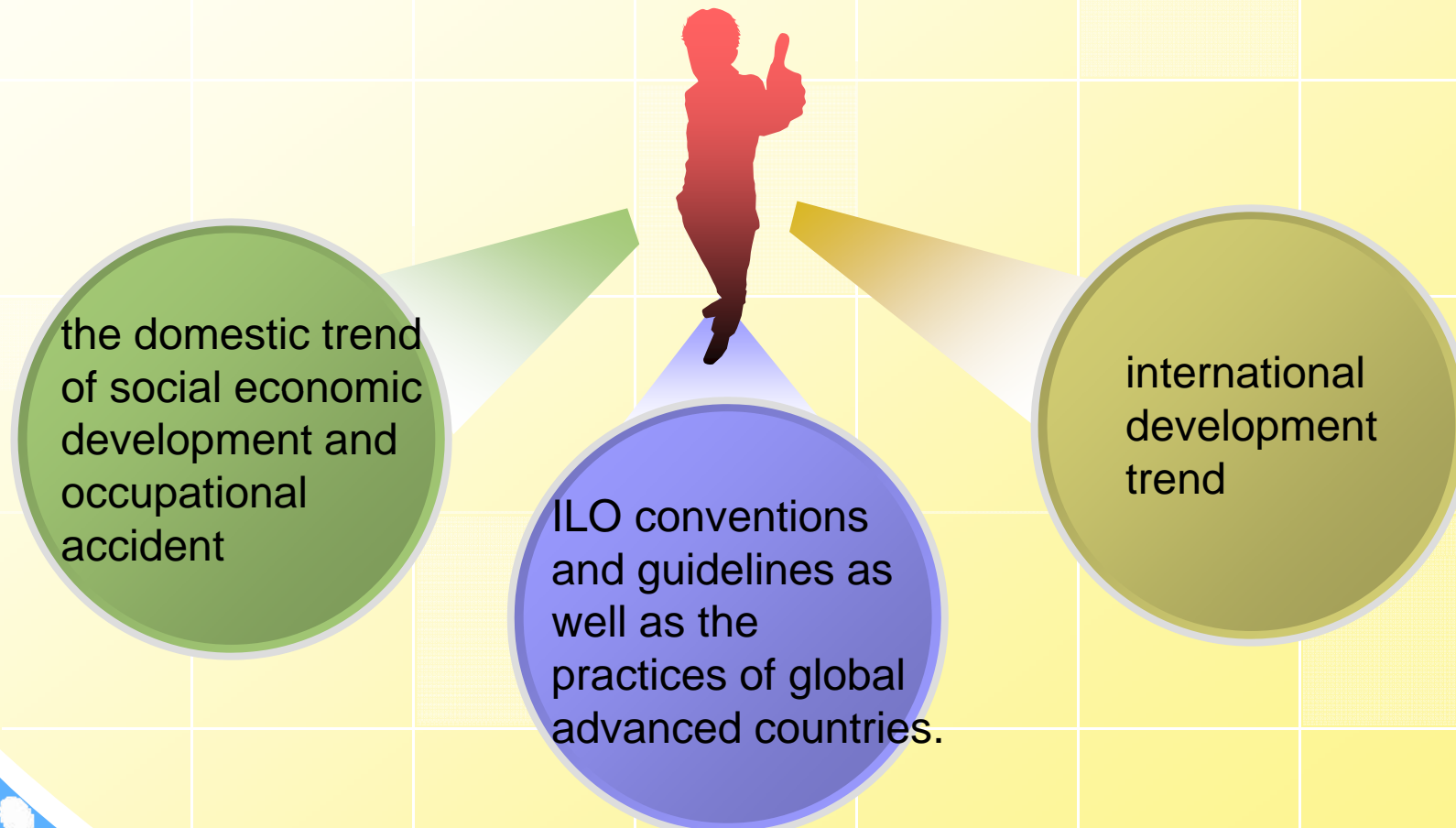
Occupational Safety and Health Profile of Taiwan

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1.1 Taiwan's OSH Policy and Trend

The setting of Taiwan's Occupational safety and health policy is based on





1.1 Taiwan's OSH Policy and Trend

The main focuses of Taiwan's OSH policies (1/3)

- (1). to **protect the safety, health and well-being** of all workers at work, including employed workers in all industries, the self-employed and all others whose labor is directed or supervised by a workplace responsible person.
- (2). to **making clear the OSH responsibilities** of the employers, designers, manufacturers, importers, suppliers and other related parties.
- (3). to **enhance social dialogue** and collaboration among government, employers and workers, and to facilitate social participation of business entities and relevant organizations.



1.1 Taiwan's OSH Policy and Trend

The main focuses of Taiwan's OSH policies (2/3)

- (4). to enhance **OSH source management** of machinery, equipment, appliances and chemicals.
- (5). to build a complete occupational disease prevention and occupational health **service system**, especially strengthening the protection of physical and psychosocial health of workers.
- (6). to enhance the **health protection** of maternity, youth and ageing workers.
- (7). to enhance the capacity of labor inspection, increase the inspection of high-risk business entities, and impose penalties consistent with the severity of violation.



1.1 Taiwan's OSH Policy and Trend

The main focuses of Taiwan's OSH policies (3/3)

- (8).to enhance occupational safety and health **research** so as to response emerging risks.
- (9).to implement systematic OSH **risk management and trainings**, and to foster OSH culture of all citizens and the development of commercial OSH consultation service sector.
- (10).to assist vulnerable small and medium-sized enterprises **improving work environment**.
- (11).to facilitate the assistance and return-to-work rehabilitation of **occupational accident workers**.



1.2 Regulatory and Standards Setting

- MOL invites employees, employers, public agency representatives, academic experts, and occupational accident labor organizations to convene occupational safety and health consultative committees to examine and discuss Occupational safety and health policies and provide recommendations.



1.2 Regulatory and Standards Setting

- Taiwan Occupational Safety and Health Administration (**OSHA**) deliberates upon the Taiwan's OSH conditions, occupational accidents, scientific evidence and advanced international trends, to timely compile relevant laws and regulations.



1.3 Law Enforcement Practices

- MOL strongly enforces labor inspection. Violator could be subjected to shut-down, limited term of imprisonment, criminal detention, or/and fines, in which fines could be up to **3 million** New Taiwan Dollars (NTD).



1.4 Economic Models of Regulating Employers' Activities

- In addition to mandatory **labor insurance** (including general insurance, pension insurance and occupational accident insurance), employer usually will take in additional **employee insurances**, such as group insurance, medical and hospitalization insurance, accident insurance, to pay possible additional compensation or condolence.



1.4 Economic Models of Regulating Employers' Activities

- MOL provides numerous technical **assistance** and partial **subsidies** of OSH installations for SME. Ministry of Economic Affairs (MOEA) also provides low-interest replacement loan for safer processes, machineries, or installations.



1.5 National Awards and Activities

- MOL regularly holds national level activities to **encourage** business entities and related groups to **implement OSH**, such as national safety day, Occupational health week & safety week, zero accident certificate, advanced OSH awards, excellent public construction OSH award, five star award, national safety award, etc.



2 Statistics on Occupational Injuries and Diseases

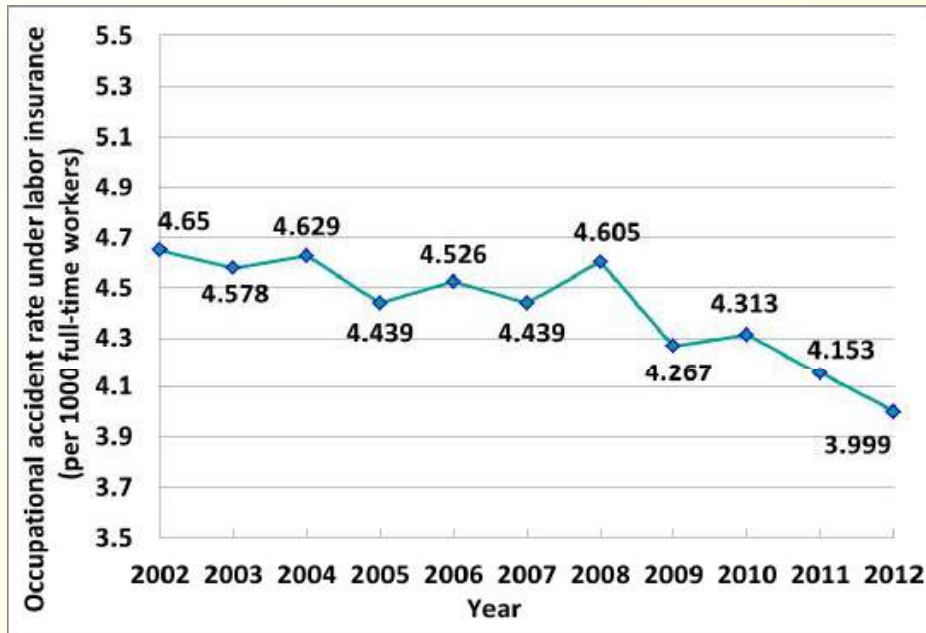


Figure 2.1 Occupational accident rate per thousand full-time equivalent

workers in Taiwan (2002~2012) (Source: Labor Insurance Statistics.)

Occupational accident: over three day off-work due to occupational causes, this figure does not include occupational diseases and traffic accidents.)

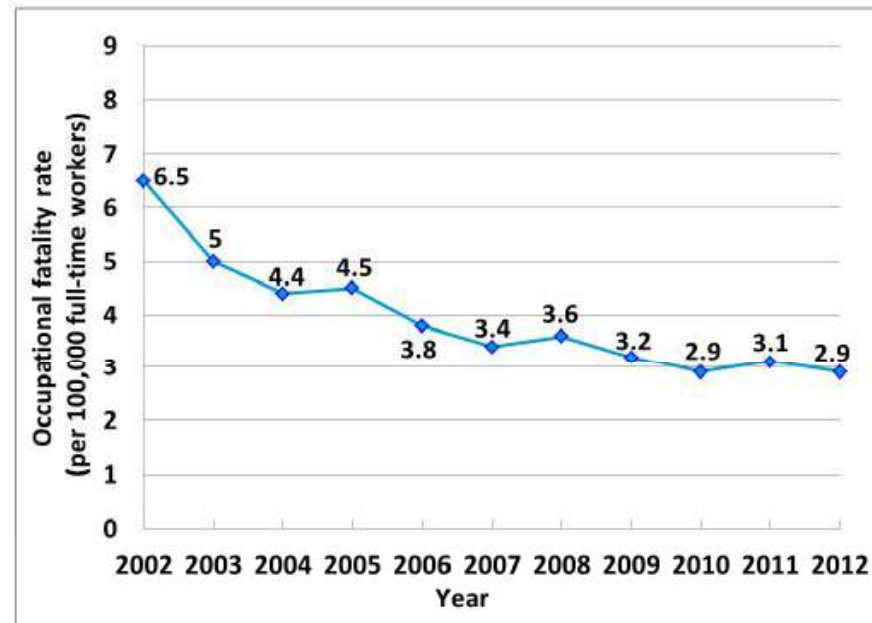


Figure 2.2 Occupational fatality rate per 100,000 full-time equivalent workers in Taiwan

(2002~2012)

(Source: Labor Insurance Statistics.)

This figure does not include occupational diseases and traffic accidents.)



2 Statistics on Occupational Injuries and Diseases

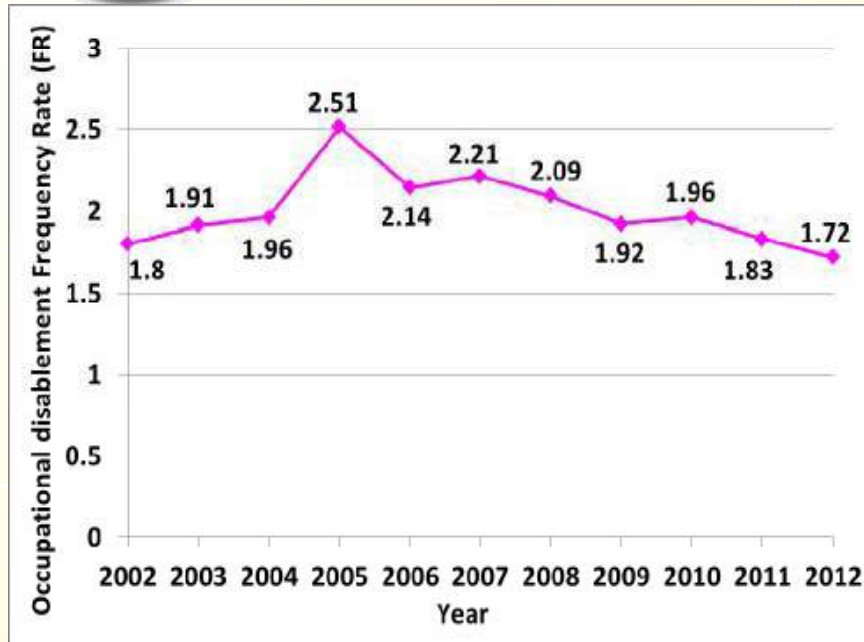


Figure 2.3 Occupational disablement frequency rate (2002~2012)

Frequency Rate (FR) = (number of disablement x 1,000,000) / total work-hours

(Source: Labor Statistics Annual Report, including the business entities hiring 50 labors or more as well as entities designated and notified by labor inspection agencies.)

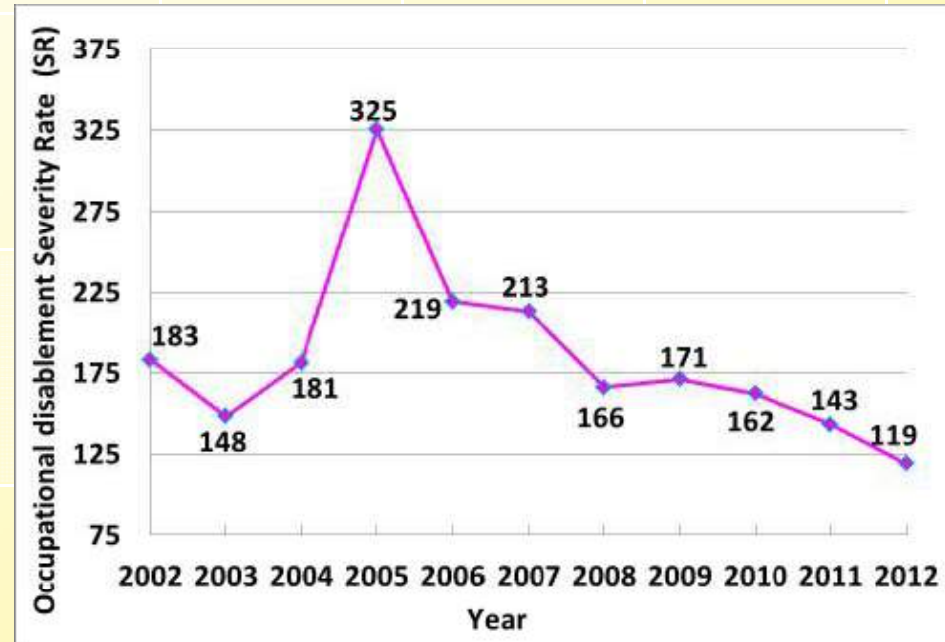


Figure 2.4 Occupational disablement severity rate (2002~2012)

Severity Rate (SR) = (lost days x 1,000,000) / total work-hours

(Source: Labor Statistics Annual Report, including the business entities hiring 50 labors or more as well as entities designated and notified by labor inspection agencies.)



2 Statistics on Occupational Injuries and Diseases

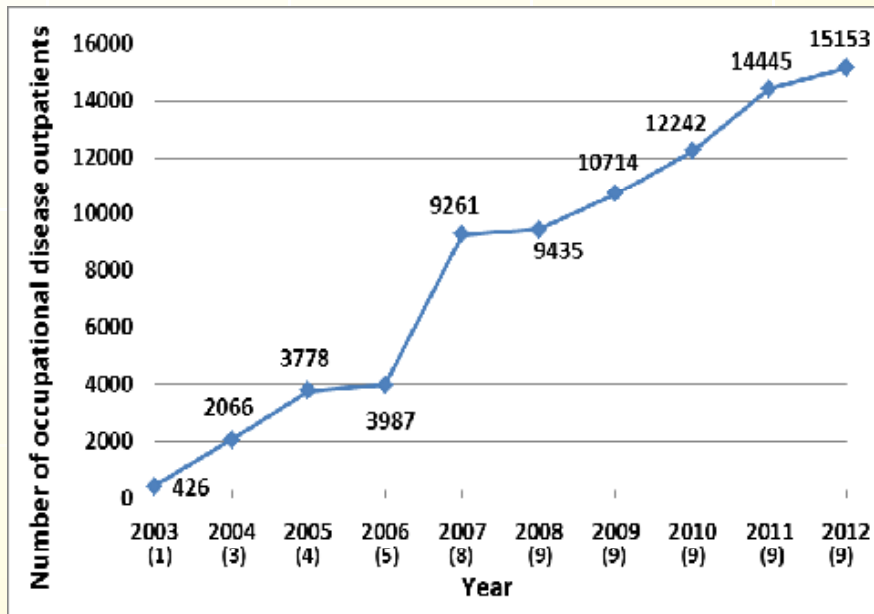


Figure 2.5 The number of occupational disease outpatients
(Source: Statistics of Centers for Prevention and Treatment of Occupational Injury and Disease, MOL. () denotes the number of OIDPT center. The data excludes the services of general diseases and injuries, occupational needle stick and blood pathogens infection treatment, labor physical and health examination.)

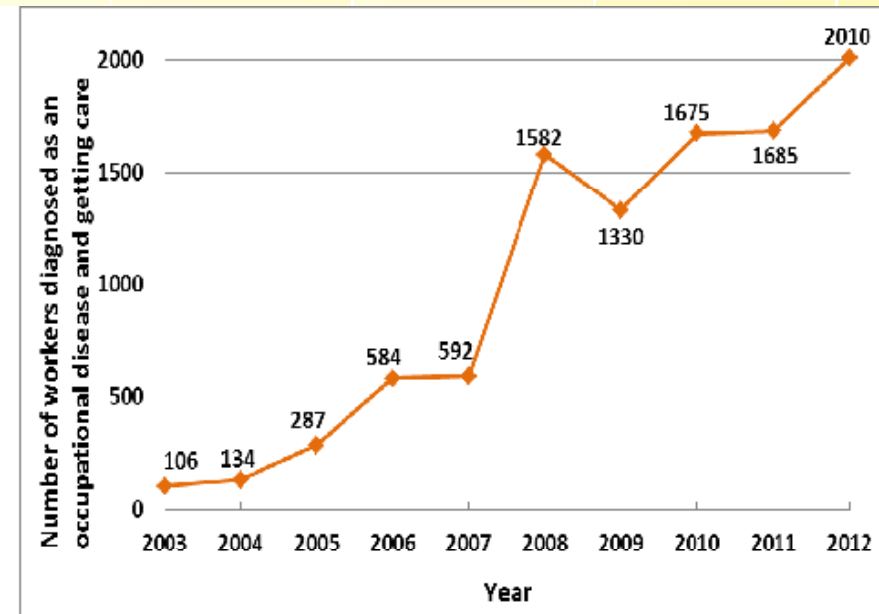


Figure 2.6 Occupational diseases diagnosed and cared by OLDPT centers (Source: Statistics of Centers for Prevention and Treatment of Occupational Injury and Disease, MOL. () denotes the number of OIDPT center. The data excludes the services of general diseases and injuries, occupational needle stick and blood pathogens infection treatment, labor physical and health examination.)



2 Statistics on Occupational Injuries and Diseases

Labor coverage of OSH relevant acts

Item	Labor ₁ Coverage
Occupational safety and health act ₂	-95%
Labor insurance act	-95%
Basic occupational health service ₃	-20%
National health insurance ₄	95-99%

₁ total labor force -10.98M by 2013.09. (Partial labor force is covered by other special acts)

₂ The OSH Act will take effect in 2014; labors covered by Labors Safety and Health Act or Labor Standards Act are - 8.4 M in 2013.

₃ Coverage of regular worker health examination required by LSH act (old version of OSH Act) is 95-99%.

₄ If paid insurance fee, all citizens and people live in Taiwan are covered by national health insurance program.



2 Statistics on Occupational Injuries and Diseases

Industry Sector	Occupational Accident ₁ Rate	Fatality Rate ₂	Disablement Rate ₃	Other Injury Rate ₄
All industries	3.467	0.027	0.229	3.211
Agriculture, forestry, fishing and animal husbandry	1.310	0.049	0.137	1.124
Mining and quarrying	6.129	0.766	0.766	4.597
Manufacturing	3.885	0.023	0.368	2.494
Electricity and gas supply industry	1.386	0.041	0.326	1.019
Water supply and remediation services	5.661	0.056	0.487	6.185
Construction	12.015	0.136	0.565	11.315
Wholesale and retail trade	2.844	0.012	0.167	2.666
Transportation and warehousing	4.726	0.058	0.220	4.437
Accommodation and hospitality	4.175	0.004	0.093	4.007
Information and communication	0.490	0.008	0.041	0.441
Finance and insurance	0.215	-- ₅	0.011	0.204
Real estate	1.333	0.014	0.063	1.255
Professional, science and technical services	1.269	0.017	0.070	1.182
Support services	2.559	0.022	0.092	2.444
Public administration, defense; compulsory social security	0.882	0.022	0.154	0.706
Educational services	0.058	0.007	0.022	0.479
Medical insurance and social work services	0.767	0.002	0.020	0.745
Art, entertainment and leisure services	2.385	0.011	0.032	2.342
Other services	2.523	0.012	0.136	2.375

List of occupational accident rate by industry sectors in 2014

Source: Labor Statistics Annual Report, MOL, 2014; occupational diseases and traffic accidents were not included.

₁ The term "occupational accident" as used in this Profile shall mean any worker injury, disability, or death caused by buildings, equipment, raw materials, materials, chemicals, gases, vapors, dusts, etc., in the place of employment, or as a result of the performance of duties, or due to other occupational causes.

₂ The rate unit of this table is per 1,000 full-time equivalent workers.

₃ Disablement denotes as permanent disablement.

₄ Other injuries denotes as at least three day off-work due to occupational injury.

₅ -- : denotes as 0.000



3.1 Main Laws on OSH





3.2 Key OSH by-laws

Key Phrases of relevant OSH regulations

Category	Key Phrases of Regulations, Rules and Standards
1. General occupational safety and health	OSH enforcement, safety and health installations, OSH management, risk assessment, self inspection, pregnancy workers, female workers after giving birth less than a year, youth workers, female worker working in night shift, incentives and awards for promoting OSH, etc.
2. General workplace management	process safety management, workplace monitoring, oxygen deficiency prevention, OSH labelling, etc.
3. High pressure gas	worker safety for handling high pressure gases.
4. Health management	health examination body management, worker health protection, occupational disease prevention, etc.
5. Education and trainings	worker OSH education and trainings
6. Chemical substances	hazard labelling and communication, permissible exposure levels, intoxication prevention, specific chemical substances, organic solvents, lead, tetra alkyl lead, dusts, etc.
7. Mechanical safety	general safety protection of machine and equipment, type inspection and verification, dangerous machinery and equipment inspection, designated inspection agency, crane, lift, boiler, pressure vessel, industrial robot, etc.
8. Specific operations	abnormal atmosphere pressure, work at height, work at high temperature, precision vision work, etc.
9. Targeted industrial sectors	construction, harbor loading and unloading, ship tanker cleaning and dismantling, forestry, mining, etc.
10. Occupational accident protection	occupational accident labor protection enforcement, subsidy and granting, labor insurance during medical care, occupational accident prevention, worker rehabilitation, return to work, etc.
11. Others	labor inspection enforcement, factory act enforcement, imminent dangers, work related injuries and diseases, etc.



3.3 Other Laws or Standards relevant to OSH

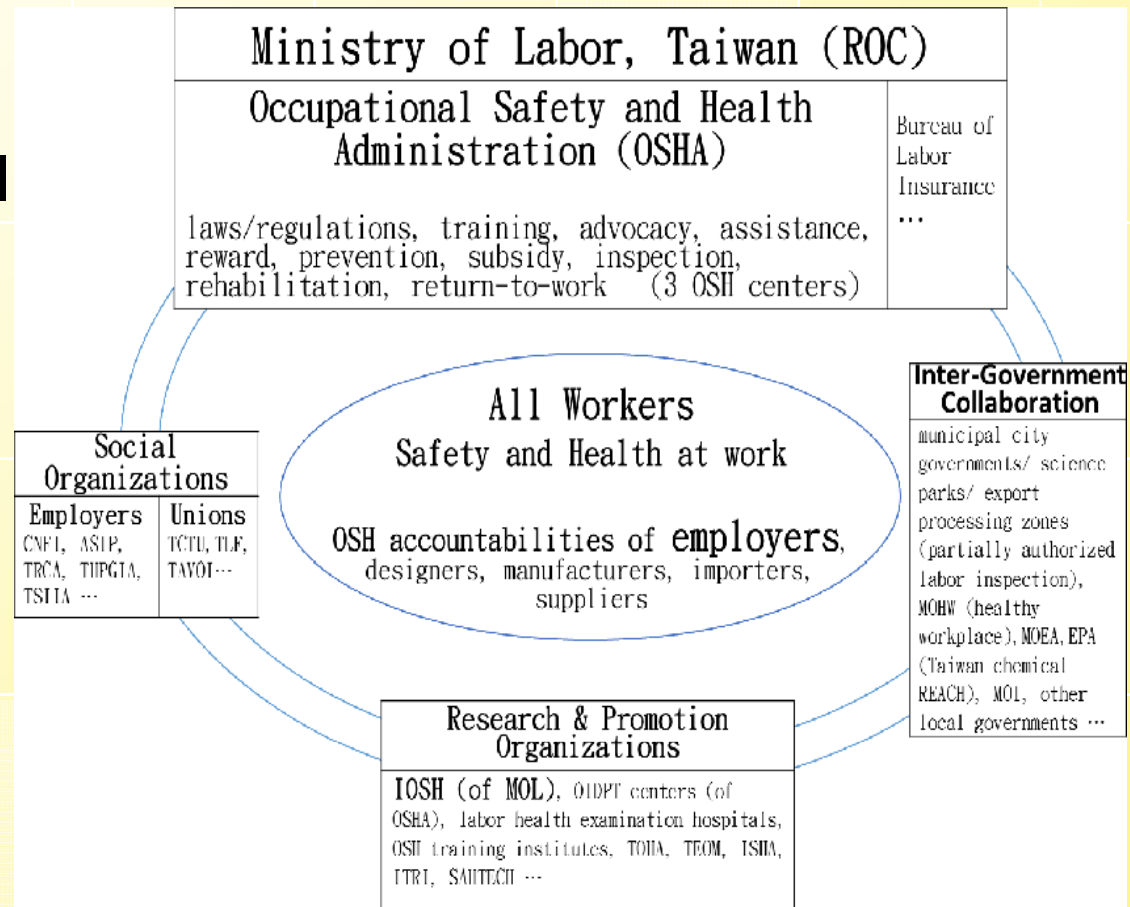
OSH related laws of other ministries

Laws or Standards	OSH Related
1.National Standards & Commodity Inspection Act (MOEA)	The national Standards include standards, testing protocols and/or certification requirement for personal protective equipment, machinery, electricity, chemical labeling and classification, laboratory management, OSH management system, risk assessment, etc. The BSMI of MOEA also utilizes the Commodity Inspection Act to ensure compliance of commodities with the requirements set out in the safety, health, environmental protection, and other technical regulations or standards; to protect consumers' rights and interests; and to promote sound development of economic activities. Some OSH equipment and appliances are inspected by the Commodity Inspection Act.
2.Electricity Act (MOEA)	The electric material, part, equipment, system and their wiring of workplace must follow this Act, especially the house cable wiring rules.
3.Fire Services Act & Firework and Firecracker Management Act (MOI)	The Act includes fire prevention, rescue operation and first aid. Public hazardous substances, fireworks and flammable pressurized gases shall be safely handled including the storage and disposal once reached specified quantities. Fire doors and fire escapes of workplace should follow the regulations of building codes and fire codes.
4.Toxic Chemical Substances Control Act (EPA)	The Act includes the emergency response for chemical accident, and toxic chemical inventory and reporting. Seven national emergency response teams are operated. The chemical classification and labeling of this Act also harmonizes with MOL and follows national GHS standards (of BSMI, MOEA). The Act also strengthens the cooperation of EPA and MOL to implement national chemical management scheme.
5.Indoor Air Quality Control Act (EPA)	The concentration of air pollutants and air humidity of indoor workplace must also follow the Act.
6.Tobacco Hazards Prevention Act (MOHW)	Indoor workplaces are mandated to completely prohibit smoking if jointly used by three or more persons. The Health Promotion Administration of MOHW also works with OSHA of MOL collaboratively to promote healthy workplace and occupational health.
7.Ionizing Radiation Protection Act (AEC)	Ionizing radiation workers or self-employed persons who frequently engage in practice and are aware that they may be subject to exposure should follow the Act.
8.Mine Safety Act (MOEA)	The Act includes mine safety management, investigation and inspection.



4 Competent Authorities on Occupational Safety and Health

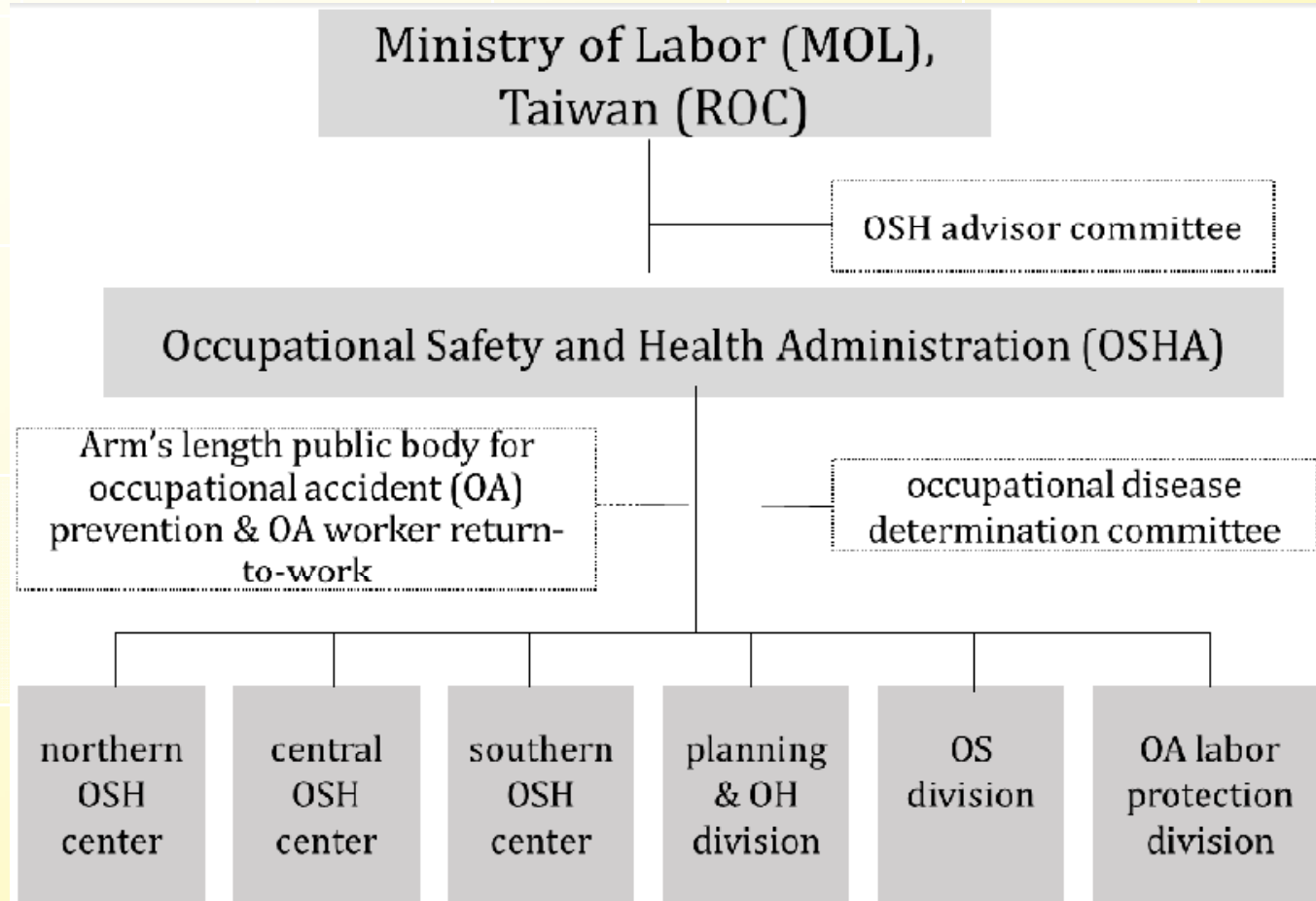
- The Ministry of Labor (1987~2013 as Council of Labor Affairs; 1949~1987 as the Labor Department, Ministry of the Interior) is the central competent authority of Occupational safety and health.



Taiwan Taiwan's OSH collaboration scheme



4 Competent Authorities on Occupational Safety and Health



Organization chart of MOL OSHA



4 Competent Authorities on Occupational Safety and Health

The primary functions of OSHA are:

1. Plan occupational safety and health policy; formulate, amend, repeal, and interpret related regulations.
2. Plan labor inspection policy; formulate, amend, repeal, and interpret related regulations.
3. Plan occupational accident worker protection policy; formulate, amend, repeal, and interpret related regulations.
4. Plan, implement, and manage occupational safety and health system.
5. Promote, implement, and oversee inspections of occupational safety and health and labor conditions.
6. Advance and manage the promotion of worker health, the investigation and evaluation of occupational diseases, and the prevention and treatment of occupational injuries and diseases.
7. Advance oversee, and manage occupational management prevention; assist and rehabilitate workers affected by occupational accidents.
8. Other matters related to occupational safety and health, labor inspections, and the protection of workers involved in occupational accidents.



5 Occupational Safety and Health Programs



Taiwan's OSH major programs



6 Institute of Labor, Occupational Safety and Health

- The IOSH of MOL is the Taiwan's OSH dedicated research institute.

IOSH conducts researches regarding

(1)

labor market, human resource and employment security

(2)

labor relations, labor conditions and labor wellbeing

(3)

Occupational safety & health technology and management

(4)

hazard assessment and management of occupational injuries and diseases

(5)

Occupational accident prevention and return-to-work rehabilitation of occupational accident workers

(6)

application and dissemination of researches



7 Emerging OSH Challenges

- From 2010 to 2014 the occupational fatality rate per 100 thousands workers has been significantly reduced over 11% (from 3.0 to 2.7), and the rate of 2014 is 3.467 per 100 thousands workers.
- The total occupational accident rate per 1,000 workers slowly decreases by 25% over 5 years (from 4.333 to 3.467).

However as benchmarking with the fatality rate of United Kingdom, Japan, Germany and the United States, Taiwan still has space for continuous improvement.



Table SWOT analysis of Taiwan OSH

Strength	Weakness
<ul style="list-style-type: none"> • Occupational Safety and Health Act has been launched since 1974. • All workers are covered by the OSH laws and regulations • Sound separate system for labor trainings and certificate examination. • Sound system for the OSH design, manufacturing, installation, operation and regular inspection of dangerous machinery and equipment. • Relevant unions and labor groups carefully monitor the Taiwan's OSH policies and performance. • Many OSH academic institutes provide high quality professionals. • Good collaboration mechanisms of public agencies. • Risk-based labor inspection strategies continue improving. • Municipal governments increase numerous inspectors to strengthen the enforcement. 	<ul style="list-style-type: none"> • OSH public administration resources are limited. • Coverage of occupational health service is low (~20%). • Occupational accident workers return-to-work need further facilitate. • No OSH public arm's length body. • OSH public servants need to continuously improve inspection practices and quality • Smart inspection for high risk operations need further improve. • Assistance coverage of SME and other vulnerable need further improve. • OSH mutual aid among business entities or associations need to enhance. • OSH social participation need further involve.



Table SWOT analysis of Taiwan OSH

Opportunity	Threat
<ul style="list-style-type: none"> • The focuses of newly amended Occupational Safety and Health Act, including source management of machinery, equipment & chemicals, female worker health protection, physical & psychological health, OSH accountability of employer, designer & manufacturer, will enable the OSH performance of Taiwan in line with international level. • OSH awareness of workers increases • Severe accidents and occupational health cases bring public concerns. • OSH is an essential indicator of international trade and basic human right. • Source companies of international supply chain and factory insurance companies also require business entities to fulfill local and interTaiwan's OSH regulations, which impose primary supply companies to ask their sub-contractors also to follow. 	<ul style="list-style-type: none"> • Trend of ageing labor force & low birth rate, structural change of industrial sectors, increase of service industries, and increase of self-employed workers results to the increment of overtime, fatigue, mental and physical stress, musculoskeletal disorders, etc. • OSH training and compliance assistance for hard-to-reach business entities need further widespread. • Aging facilities and equipment generally found in high risk entities, pose OSH potential threats. • Citizens lack of risk awareness and safety culture. • Entity management usually lack of OSH concerns. • OSH management personnel lack of channels to upgrade capacity and experience heritage. • Taiwan's OSH research and application need further enhancement to cope with the drastic change of economic and industry. • Central government lack of international exchange channels, difficult to assess latest OSH policies and trends.



8 OSH Vision and Strategy

Vision

- 1.Ensure the health, safety and dignity of everyone at work.**
- 2.Provide comprehensive services for prevention, compensation and rehabilitation of occupational injuries and diseases.**
- 3.Secure workforce safe and healthy so as to facilitate national competitiveness.**

Goal:

- 1.Continue mitigating occupational accident rate, and safeguard basic human right of every worker.**
- 2.Build a sound inspection system for working conditions so as to safeguard workers' rights and their physical-mental-health, and create dignity workplaces.**
- 3.Develop source management scheme of machinery and chemicals, and be in line with international advanced level.**
- 4.Foster business entities to conduct safety and health self-management, and implement risk management.**
- 5.Strengthen the prevention, compensation and return-to-work schemes of occupational accident workers so as to care for less-privileged labors and safeguard workers' rights.**
- 6.Assist industry improving and transforming work environment, provide occupational health service, and facilitate the employment of youth, ageing and local workers.**



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Thank you for listening