

Original Research Article

# The Current Status of Occupational Disease Prevention

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**Abstract:** Occupational diseases are disorders of health resulting from conditions related to the workplace. There are 2.3 million deaths annually for reasons attributed to work globally, primarily to chemicals or dust. China has the largest working population in the world, with 776 million employed in 2018. According to the National Health Commission, about 12 million companies were found to have occupational-disease-inductive factors and at least 200 million people are exposed to occupational disease hazards. Preventing occupational diseases is a serious worldwide challenge. On the other hand, many developed countries already have rich experience in the prevention and treatment of various occupational diseases. They have set up various occupational disease prevention agencies and formulated strict occupational disease prevention systems. It is necessary for developing countries to learn from their advanced control measures.

**Keywords:** Worker; Occupational Disease; Occupational Health; Occupational Hazard

## 1. Current status of occupational health in China

Since the implementation of the Occupational Illnesses Prevention Act on May 1, 2002, the National Administration of Work Safety and local governments increase efforts to carry out the standard of occupational health management. In large and medium-sized enterprises, occupational health conditions have been greatly improved and the high incidence of occupational illnesses had already been curbed. However, the current prevention and treatment of occupational illnesses in China is also facing many problems and challenges.

Occupational hazards are still serious. According to the 2019 annual occupational illnesses report by the National Health Commission, at the end of 2019, a total of 994 thousand cases of occupational diseases have been reported. There are 889 thousand cases of occupational pneumoconiosis, accounting for about 90% of the total number. Due to the low coverage of occupational health examinations and the imperfect employment system, the actual number of cases is much higher than the number of reported cases.

Some employers cannot implement their responsibility. While China is introducing foreign capital and advanced technology, some risky products are transferred from abroad to domestic, from cities and industrial areas to rural areas, from economically developed areas to underdeveloped areas, and from large and medium-sized enterprises to small and medium-sized enterprises. Those employers do not have a good understanding of the law, the investment to improve the operating environment, to provide protective equipment and the occupational health examination in their companies is highly lack and the workers cannot get enough effective protection.

Occupational health supervision and occupational illnesses prevention and control service capacity are insufficient. According to the survey of occupational health investment in China, the investment of governments at all levels in occupational health has been increasing year by year since 1999. However, due to the low base, per capita investment in occupational health is obviously insufficient, which is not suitable for the level of economic development, resulting in occupational health supervision and technical services that cannot be guaranteed. In addition, some local government officials do not know enough knowledge about the occupational illness hazards and how to monitor them.

The new occupational hazards cannot be ignored. With the widespread use of new technologies, new processes, new equipment, and new materials, the occupational-disease-inductive factors are more diverse and complex, new occupational hazards continue to emerge and present new challenges to occupational illnesses prevention and control. In 2008, China appeared the first occupational illness caused by indium. In a production business of mobile phone LCD display in Jiangsu province, a staff who uses indium to spray the mobile phone LCD screen often feels his breathing is difficult, he was diagnosed with indium poisoning which is very rare.

China's Occupational Disease Classification and Catalogue only involves 132 kinds of occupational diseases in 10 categories, including occupational pneumoconiosis and respiratory diseases, occupational skin diseases, occupational eye diseases, occupational

otolaryngological and oral diseases, occupational chemical poisoning, etc. The occupational Health Protection Action has been listed as one of the 15 special actions under the Healthy China Action (2019-2030), and the impetus will undoubtedly be greater than ever before. More importantly, the concept of “protection” is also being updated. Wu Zongzhi, director of the National Health Commission’s occupational health department, said that in the new era, the government will expand the scope of occupational disease prevention from blue-collar, high-risk industries and high-risk jobs to teachers, police, doctors, and all legitimate workers will be covered. At the same time, the mental health will also be a priority.

## 2. Occupational illness control measures in some developed countries

According to the estimate of the World Health Organization, the work-related health problems result in an economic loss of 4–6% of GDP for most countries<sup>[1]</sup>. However, in some developed countries, this rate is much lower. In the United States it is 1.8%, Italy 3.2%, Denmark 2.7%, New Zealand 3.4%<sup>[2]</sup>.

### 2.1 The United States

The United States has passed legislation to put the diagnosis and treatment of occupational illnesses into the medical insurance system and supervised by the Department of Labor and the Department of Justice. Health professionals are able to get relevant information and guidance from the health sector during the diagnosis of occupational illnesses.

On the other hand, through administrative measures to prevent occupational illnesses. The United States Congress passed the Occupational Safety and Health Act in 1970 with the aim of ensuring employers provide employees a harmless working environment. According to this Act, the United States Department of Labor established the Occupational Safety and Health Administration with the aim of preventing work-related injuries, illnesses, and occupational fatality by issuing and enforcing standards for workplace safety and health at the federal level<sup>[3]</sup>.

The Occupational Safety and Health Administration will track employers who have intentional or repeated violations of the relevant regulations and focus on the workplace with the highest incidence rate of injury and occupational illnesses. They have several branches all over the country and have their inspection plans.

### 2.2 Germany

The occupational disease prevention, identification, and compensation in Germany are included in the insurance system compulsively and providing floating insurance rates to enterprises according to the occurrence of work-related accidents, so as to encourage them to improve the safety situation and reduce the occurrence of occupational hazards. Health professionals and employers are obliged to notify the Injury Accident Insurance Association if a suspected case of occupational illnesses is detected. If the insured person thinks that he or she is suffering from an occupational illness, he may apply directly to the underwriter for a claim. Some illnesses not identified by Occupational Illnesses Ordinance, as long as they meet certain prerequisites, can also be recognized as an occupational disease. In Germany, new workers are required to have a medical examination, and workers who work under the special environment must have medical examinations regularly. If an employee is under suspected occupational illness, the employer has the responsibility to provide him or her a new job.

German coal mining enterprises are equipped with advanced equipment, such as CO testing equipment, underground fire extinguishers and professional dust removal equipment. They attached great importance to the self-rescue of the miners and provide training. Each mining company has an ambulance team and ambulance equipment is advanced. In Germany, each coal miner must receive at least three years of training before they go to work. If there is any violation of safety regulations during the work, the police have the right to stop all production activities. In general, advanced technology equipment and personnel training are essential to prevent the occurrence of accidents.

## 3. Conclusion

The number of occupational hazards, the number of occupational diseases, and the number of deaths due to occupational diseases in China are among the highest in the world. A study by Fudan University in 2015 showed that the direct economic losses and indirect economic losses caused by occupational diseases are very high, causing heavy economic burdens to the society, laborers, and their families. The indirect economic loss of occupational disease is 6 times of direct economic loss. Occupational diseases are not only an important factor endangering the health and safety of workers but also a serious obstacle to China’s coordinated and sustainable economic and social development. The prevention and treatment of occupational diseases should be attached to importance by enterprises and governments. We need to foster stable conditions and circumstances and sustainable work-life where the objective is to maintain the worker’s health and workability beyond the legal retirement age.

## References

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