

Focus and Progress of the Occupational Health Initiative

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Summary

China's rapid socioeconomic development has led to the coexistence of traditional and modern occupational hazards, and workers are facing increasingly serious risks of physical and mental health issues.

Combined with the Healthy China strategy acting as the innovative force in advancing China's public health, a series of national action plans has been implemented providing comprehensive strategies for protecting worker's benefits and strengthening occupational disease prevention by integrating the sources of government, employers, workers, and other stakeholders. This article interprets the objectives, strategies, and features of the Occupational Health Protection Campaign and the Action Plan for the Prevention and Control of Pneumoconiosis as two national programs for promoting occupational health and the Healthy Enterprises initiative as a great practice in integrating national theories of workplace health promotion and the World Health Organization's concepts of the healthy workplace model.

It concludes that all occupational health progress achieved in the Healthy China Initiative contributes to defending health and well-being of occupational populations and promoting the sustainable development of the economy and society in China.

China has the largest working population in the world with about 776 million workers in 2018, and most of them spend half of their life cycles working (1). As a rapidly developing country, the remarkable socioeconomic changes during the last 30 years have posed increasing risk of occupational hazards. According to a series of national occupational disease reports, annual new cases of occupational diseases rose steadily from 12,511 in 2003 to 31,789 in 2016 (2), and over 975,000 cases of occupational disease have been reported cumulatively by the end of 2018, of which 90% were pneumoconiosis (about 873,000 cases) (3). However, the actual burden of occupational diseases in China was likely to have been underestimated due to low rates of occupational health examinations. In addition, the transformation and

upgrading of the economy and technology have led to work-related mental illness and musculoskeletal disorders resulting from psychosocial and ergonomic factors, which pose great challenges in protecting worker health. The Chinese government has always prioritized occupational disease control and prevention as the National Health Commission and other agencies have introduced 11 regulations and more than 700 standards on occupational health and has issued a five-year plan (2016–2020) on the control and prevention of occupational diseases including pneumoconiosis. In 2019, a series of national action plans has been implemented to prevent and control occupational diseases and to protect worker's health.

OCCUPATIONAL HEALTH PROTECTION CAMPAIGN (OHPC)

To ensure full implementation of the Healthy China 2030 blueprint, the State Council has released Opinions of the State Council on Implementing the Healthy China Initiative in July 2019 with new paradigm shifts from treating diseases to providing full-lifecycle health services (4). With emphasis on disease prevention and health promotion, an action plan from 2019 to 2030 was unveiled to “intervene in health influencing factors, protect full-life-cycle health, and prevent and control major diseases.” Consisting of 15 special campaigns, it specified the objectives and tasks of each campaign and the responsibilities of different sectors in the campaigns. As one of these campaigns, the OHPC focuses on protecting occupational health and the wellbeing of almost 776 million workers in China and proposed medium to long-term action plans to provide comprehensive occupational health services from 2019 to 2030 (5).

OHPC strategies are embodied at three levels including employees, employers, and government. Strategies for employees include promoting healthy working styles; fostering occupational health awareness; increasing consciousness of occupational laws and regulations; strengthening personal protection at work; improving emergency response capabilities;

enhancing chronic and non-communicable disease prevention and control; protecting employees who work at desks or maintain forward sitting positions for a long periods (such as white-collar workers); protecting employees who stand for long periods while working (such as teachers, traffic police, doctors, and nurses); and protecting employees who keep fixed positions at work (such as drivers).

For employers, the strategies focused on the following: establishing an accountability system for occupational disease control and prevention, especially primary-responsibility legal bodies for enterprises; strengthening the source control of occupational hazards, specifically construction enterprises or institutions that should fulfill the responsibility of controlling, preventing, and eliminating occupational hazards; building clean, hygienic, green, comfortable, and pleasing working environments; implementing protection measures for workers' health (such as work-break exercise and smoke-free programs); and establishing overall management strategies for employment including labor contracts, work-related injury insurance, occupational hazard reporting, routine surveillance, occupational diagnosis, health insurance for workers, etc.

Supported by joint efforts of 10 ministries and commissions, the OHPC has also developed strategies for government including the following: reviewing relevant laws and policies including the Code of Prevention and Control of Occupational Disease and other relevant rules and regulations; developing and promoting innovative technology, facilities and materials to protect workers' health; improving occupational disease prevention and control systems; enhancing the regulatory and supervisory system of occupational health; strengthening supervision of occupational disease prevention on labor dispatch units, especially starting with rural migrant workers; improving reporting of occupational hazards by establishing a united and efficient data management mechanism of law enforcement and supervision; and incorporating the Healthy Enterprises as a priority into

the Healthy Cities program, as well as enriching the scope of occupational health with an emphasis on job stress, musculoskeletal disorders, and other emerging occupational exposures.

Complemented by the National Plan on Occupational Disease Prevention and Control Program (2016–2020), the OHPC proposed 3 major outcome indices as listed in Table 1. In addition, it also included several other advocated indices and the awareness of work-related hazards and protection knowledge, health management, and comprehensive strategies such as advancing technology and adjusting schedules to protect employees from monotonous, repetitive, and stressful work conditions.

The transformation of economic growth in China from a high-speed mode to a high-quality mode with constant changes in industrialization, urbanization, population aging, occupational disease spectrum, ecological environment, and lifestyle has led to new occupational health problems. Pneumoconiosis, chemical poisoning, occupational hearing loss, and radiation sickness resulting from traditional occupational hazards pose a serious threat to workers' health. Meanwhile, teachers, traffic police, healthcare workers, and other key populations highlighted by OHPC are facing increasing work-related exposures. Although these disorders were not legally included in the Classification and Categorization of Occupational Diseases, certain diseases such as cervical spondylosis and work-related stress have become increasingly common among office employees (2). In the progress of the Healthy China 2030 initiative, resolving this situation is necessary through designing political strategies and guidelines to protect key occupational populations. This campaign advocates to strengthen the promotion and training for knowledge of occupational disease prevention and prevent both occupational diseases and other work-related diseases at this stage. Employers are encouraged to improve technique and working systems to prevent fatigue and other related disorders and take integrated measures to reduce job stress and other negative health effects.

TABLE 1. Major outcome indices by the Occupational Health Protection Campaign.

Indices	Targeted data	
	2020	2020
Coverage of industrial injury insurance	Steadily improved; Baseline: 236 million in 2018	Achieved legally full coverage
New pneumoconiosis cases among workers with exposure to dust ≤ 5 years accounted for all reported cases per year (%)	Significantly declined	Continuously declined
Rates of occupational health inspection and coverage of diagnostic service	$\geq 80\%$	$\geq 90\%$

Protecting occupational health is an important basis for improving people's health, wellbeing, and quality of life. By prioritizing the people's health, the National Health Commission is cooperating closely with other agencies to accelerate the switch from hazard control and disease treatment to workers' health by holding workplaces accountable for preventing, treating, and controlling diseases and promoting health protection knowledge. Dedicated to comprehensive health protection for workers, related departments, government, and society at all levels should fulfill their responsibilities and enhance coordination to ensure the achievement of Healthy China Initiative 2030 goals.

ACTION PLAN FOR THE PREVENTION AND CONTROL OF PNEUMOCONIOSIS

Among all occupational diseases in China, pneumoconiosis—a chronic and irreversible lung disease caused by inhaling coal or silicon dust—is the most prevalent as it makes up more than 90% of all work-related illnesses. As the world's largest coal producer, China actually increased its coal production from 1.02 billion tons in 1990 to 3.68 billion tons in 2018 (6). Often under poor, unsafe working conditions, coal workers in China are subject to long-term exposure to respirable coal mine dust, leading to pneumoconiosis. An Action Plan for the Prevention and Control of Pneumoconiosis has been issued on behalf of the National Health Commission jointly with other nine government departments such as the National Healthcare Security Administration and the Ministry of Human Resources and Social Security (7). As another key national program, it is a vital part of the OHPC that aims to control the widespread exposure to different types of dust and the high prevalence of pneumoconiosis by vowing to fulfill the targets in the plan by the end of 2020.

Focusing on pneumoconiosis prevention, the action plan proposes five major tasks including special management of dust hazards, treatment of pneumoconiosis patients, regulatory enforcement of occupational health, employer responsibility, and improving technical capacity for prevention and control. The remarkable progress will be made in the rectification and control of dust hazards in industries such as coal mining, non-coal mining, metallurgy, and construction materials. According to the action plan, a nationwide survey investigating threats of dust poisoning covering these key industries and health conditions of reported pneumoconiosis patients will be

completed. It pledges that by the end of 2020, authorities must grasp the dust hazards of related employers and the employer's reporting of the health status of occupational pneumoconiosis patients to supervisors. It also establishes a goal that work-related injury insurance should cover more than 80% of employees working in these industries. The action plan emphasizes the necessity of treating pneumoconiosis patients and calls for delivering multiple forms of assistance to workers with lung disease including basic medical insurance, insurance plans for critical diseases, and other medical and legal assistance.

HEALTHY ENTERPRISES

The World Health Organization (WHO) defined a healthy city as “one that is continually developing those public policies and creating those physical and social environments which enable its people to mutually support each other in carrying out all functions of life and achieving their full potential (8).” The National Patriotic Health Campaign Committee of China has defined a healthy city as an upgraded version of a hygienic city and specified that constructing healthy cells (healthy schools, institutions/enterprises, and communities) as one of the key tasks (9). Because the occupational population is in a complicated situation with multiple disease threats and various risk factors, guiding the enterprises to effectively fulfill their responsibility is highly important to protecting worker health. To further implement the Code of Occupational Disease Prevention, Healthy China 2030 and other requirements of the Healthy City movement, the National Patriotic Health Campaign Committee and other seven government departments jointly issued the Notice on Promoting Healthy Enterprises and tentative Guidelines on the Construction of Healthy Enterprises in November of 2019 (10).

The Healthy Enterprise initiative aims to achieve the coordinated development of enterprises and human health through constant optimization of enterprise management systems, effective improvement of enterprise environments, promotion of health management and service quality, and cultivation of corporate health culture and satisfaction of employees' health demands. Through the priority construction of “healthy cells” (Figure 1), Healthy Enterprises is a starting point with great practices integrating national theories of workplace health promotion and concepts of healthy cities according to the WHO (11). Based on



FIGURE 1. Structure relationship of Healthy Enterprises, Healthy City and Healthy China

the healthy workplace model published by the WHO, the guidelines standardize four major areas which are improving management systems, building a healthy work environment, providing health management and services, and creating a healthy culture. With emphasis on statutory liabilities and obligations of enterprises in protecting worker's health, the construction of Healthy Enterprises engages employers and employees jointly to build a healthy, safe, harmonious, and sustainable working environment.

CONCLUSION

Through strengthening coordination among relevant departments, the government is focusing on monitoring and executing laws and regulations, improving the insurance system to protect vulnerable working populations, providing occupational health knowledge to the public, etc. Directing actions towards promoting occupational health as Healthy China has guided direct actions to promote occupational health and has made significant progress with efforts to defend the health and wellbeing of working

populations and promote the sustainable development of the economy and society in China.

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