### Recommendations

# Comprehensive Strategic Planning and Enhancement of China CDC Contributes to High-Quality Development of the National Disease Control and Prevention System

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The Chinese government has always attached great importance to disease control and prevention efforts. Recently, the general office of China's State Council "Guidelines for High-Quality Development of Disease Prevention and Control" (hereinafter referred to as the "Guidelines") (1). The Guidelines focus on promoting high-quality development of disease control and prevention and the strategic goal of "Healthy China," providing implementation pathways development of national disease control prevention in the new era, including overall planning, restructuring of governance, enhancing capabilities, strengthening talent development, and improving organizational support. As a national level disease control and prevention institution, China CDC will firmly seize the historic opportunity of national disease control and prevention system reform, and effectively promote the modernization of China CDC to better serve the goal of building a healthy China and fulfill its historical mission of safeguarding economic and social stability.

### Reinforce China CDC's Pivotal Functions of Cultivating Strategic Scientific Strength, Building Talent Teams, and Fostering Global Health Collaboration

The Guidelines propose strengthening the core functions of disease control and prevention agencies at all levels, specifically strengthening those of China CDC in terms of health emergency response capacity, scientific research, education and training, and global public health cooperation in order to meet the health needs of the people. The Guidelines also propose that national and provincial CDCs should incorporate the Academy of Preventive Medicine to strengthen scientific research and technical support. China CDC will use this reform opportunity to optimize and adjust the "Three Fixed Plans" (fixed organization, fixed

function, and fixed staffing) to achieve mutual support between China CDC and the Chinese Academy of Preventive Medicine through synchronous reform and coordinated development, strengthen and balance the development of key functions and tasks, and achieve the goal of shared strength with mutually beneficial outcomes. These include the following:

One: cultivate national strategic scientific and technological strength for disease control and prevention by strengthening exploration of scientific and technological frontiers of forward-looking major national strategies, fully leveraging the foundational role of key national laboratories, undertaking major national scientific and technological research tasks, generating significant original achievements, and creating a source of innovative technology.

Two: optimize the nurturing and training of the talent pool for disease control and prevention by stimulating and using the high-quality public health field practice and training resources of China CDC, vigorously promoting cooperation with high-level public health schools in colleges and universities, and cultivating high-level multidisciplinary public health as well as practical field epidemiological talent at all levels.

Three: strengthen global public health efforts by actively participating in global public health governance and using the national "Belt and Road," BRICS, and China-Africa cooperation mechanisms and platforms to fulfill the responsibilities and tasks of China CDC in serving the national strategy; contribute valuable Chinese wisdom, solutions, and power in the process of reforming and improving the global public health governance system and building a community with a shared future for all mankind.

## Comprehensively Enhance the Eight Core Competencies of China CDC

The Guidelines put forward new requirements for building the capacity of the national disease control

and prevention system. In line with the functional positioning of China CDC, problem-oriented, goal-oriented, and results-oriented measures are being taken that address weaknesses and shortcomings exposed in epidemic prevention and control practices. These measures aim to promote high-quality disease control and prevention initiatives and ensure effective implementation:

One: enhance the capacity of public health surveillance by optimizing vertical and horizontal networks for reporting infectious diseases and public health emergencies, establishing an intelligent multitrigger early warning mechanism, promoting data exchange between the information systems and infectious disease monitoring systems of medical institutions, strengthening data linkages and real-time data sharing, removing barriers to data and information exchange across multiple departments, improving early warning and information release systems, and enhancing collaborative monitoring, rapid identification, and prompt information release.

**Two:** strengthen emergency response capacity for infectious diseases and public health emergencies by further improving the emergency response system, enhancing remote and international support capabilities of China CDC's emergency response team for acute infectious diseases, establishing specialized and versatile emergency training facilities, and conducting regular practice drills. Additionally, mechanisms for stockpiling emergency supplies are being improved.

Three: enhance national governance capacity for biosafety and laboratory testing by leading the establishment of a highly efficient national network of biosafety laboratories that will meet the demands for prevention and control of major infectious disease epidemics to enhance biosafety governance capacity; further strengthen the national public health laboratory testing and monitoring network, and significantly improve laboratory testing capabilities.

Four: improve disease control information systems and capabilities by accelerating digital transformation of disease control work, promoting the construction and applications of the public health big data platform at China CDC, leveraging information and data as fundamental support, and using technologies such as big data, cloud computing, and artificial intelligence to improve data integration, risk identification, intelligent analyses, and timely warning capabilities.

Five: enhance scientific and technological innovation

and the ability to translate research findings into practical applications by establishing mechanisms for regular participation in national science and technology strategic decision-making; concentrating resources and effort on key scientific research projects related to prevention and control of major diseases and health hazards in terms of core technologies and key equipment; establishing scientific and technological innovation support platforms and key laboratories to enhance disease control and prevention innovation capacity; and supporting the establishment of collaborative platforms for industry, academia, research institutions and enterprises to strengthen translation and application of scientific and technological achievements.

**Six:** improve the ability to cultivate public health talent by strengthening cooperation and exchange between China CDC and schools of public health in colleges and universities in terms of personnel exchange, educational platform construction, data sharing, and establishing joint training bases for public health personnel; continuously implement the China Field Epidemiology Training Program (CFETP) with an emphasis on practical skills.

**Seven:** enhance strategic decision-making and advisory services from expert groups by establishing a National Committee of Experts on Disease Prevention and Control with a key consultative role in epidemic analysis and decision-making; guide scientific research to serve strategic public health decision-making and enhance public health consultation capacity.

Eight: improve global public health governance and foreign cooperation capabilities by cultivating global public health emergency response talent, actively engaging in global public health cooperation and assistance, strengthening international public health cooperation and exchanges, and shifting assistance from "fighting wildfires" to "scientifically managing forests." The national disease control system will be mobilized to promote the establishment of overseas and cooperative project offices collaborative laboratories by national-level disease control institutions, further strengthening the national biosafety barrier.

### Improve the Management and Operations Systems of China CDC

China CDC will fully adhere to the requirements outlined in the Guidelines and actively promote reforms in personnel management, performance

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evaluation, and incentive mechanisms. China CDC will strengthen leadership in provincial-level CDCs and regional public health centers, further elevating its outlook with a focus on the development of a unified, nationwide disease control effort, to ultimately achieve the goal of using China CDC reforms as a driving force for modernization of the national disease control and prevention system.

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### **REFERENCES**

1. China's State Council. Guidelines for High-Quality Development of Disease Prevention and Control. 2023. https://www.gov.cn/zhengce/content/202312/content\_6922483.htm. [2024-1-16]. (In Chinese).

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