

The Disaster and Emergency Management System in China

WANG Zhe, Emily YY CHAN, Kevin Sida LIU, May PS YEUNG

Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC),
The Chinese University of Hong Kong

Policy Brief

May 2016



Collaborating Centre for Oxford University and CUHK
for Disaster and Medical Humanitarian Response
CCOUC 災害與人道救援研究所



香港中文大學
The Chinese University of Hong Kong



香港中文大學醫學院
Faculty of Medicine
The Chinese University of Hong Kong



Supported by:



救災 HKJCDPRI 香港賽馬會災難防護應變教研中心
Hong Kong Jockey Club
Disaster Preparedness and Response Institute
Institute for humanitarian crisis and disaster management

Funded by:



香港賽馬會慈善信託基金
The Hong Kong Jockey Club Charities Trust
同心同步同進 RIDING HIGH TOGETHER

For more information:

Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response

Address: 3/F, School of Public Health, Prince of Wales Hospital, Shatin, New Territories, Hong Kong

Email: ccouc@cuhk.edu.hk

Website: www.ccouc.org

Authors Information:

1. WANG Z, Assistant Professor, Public Health Emergency Center, Chinese Center for Disease Control and Prevention, Beijing, China.
2. CHAN EYY, Professor and Director of the Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC), School of Public Health and Primary Care (SPHPC), Faculty of Medicine of The Chinese University of Hong Kong (CUHK), Hong Kong.
3. LIU SK, Assistant Lecturer, CCOUC, SPHPC, CUHK.
4. YEUNG MPS, Assistant Professor, CCOUC, SPHPC, CUHK.

This policy brief was funded by the Hong Kong Jockey Club Charities Trust and supported by the Hong Kong Jockey Club Disaster Preparedness and Response Institute.

1. Background

SARS in 2003 was the trigger leading to a reform of China's emergency management system. In 2007, the Chinese government adopted and enacted the "Emergency Response Law of the People's Republic of China".¹ The purposes of the law are to prevent and reduce the occurrence of emergencies, controlling, mitigating and eliminating the serious social harm caused by emergencies, regulating activities in response to emergencies, protecting the lives and property of the people, and maintaining national security, public security, environmental safety and public order.¹ Following the restructuring of the emergency management system, the public health emergency management system has undergone a significant change. This policy brief outlines the emergency management system by the China government; analyzes its strengths and weaknesses, and recommends improvements options.

2. Emergency Management System in China

2.1 Types of Emergency Disasters and Incidents

An "emergency incident" refers to a natural disaster, accidental disaster, public health incident or social safety incident, which takes place by accident, has caused or might cause serious social damage and the adoption of emergency response measures.² In China's emergency contingency plans, incidents are classified into four types: natural disasters, accidental disasters, public health incidents and social security incidents. Natural disasters are distinguished from man-made disasters caused by accident and disruption of social security. It refers to earthquakes, floods, weather change and other nature processes of the Earth. Accident disasters included large scale traffic accident, radiation, contamination of the environment etc. Public Health incidents refer to infectious diseases, food safety, occupational hazards that severely affect health and safety. Lastly the social security incidents are terrorist attack, riots, economic crisis etc. Some academics separate economic crisis from social security incidents. Economic crisis includes the shortage of essential resources, energy, living essentials, or financial crisis.³

2.2 Emergency Grades

According to the degree of social harm done and the extent of repercussions and other factors, an emergency incident is classified into four grades: especially serious (I), serious (II), relatively serious (III) and common (IV).³ The classification of an incident is made by the State Council, or a department designated by the State Council according to a pre-defined criteria.

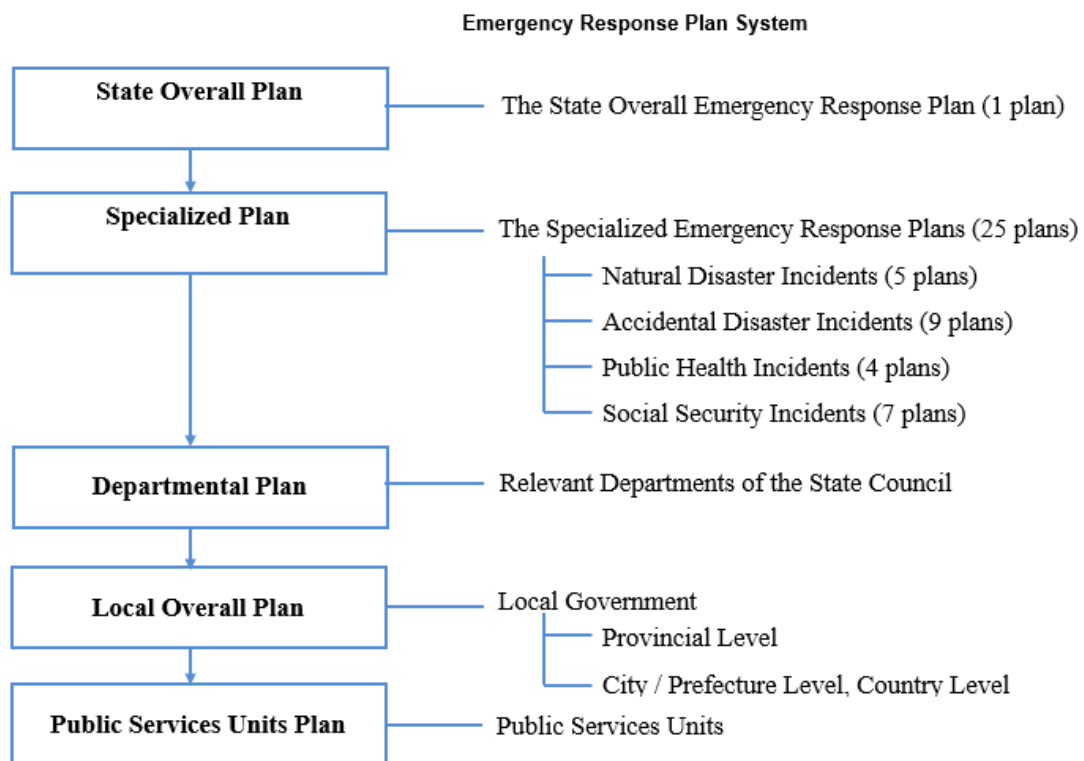
2.3 “One Planning Plus Three Systems” Framework

The Chinese emergency preparedness framework follows “One Planning plus Three Systems” framework. This means one emergency response plan is followed by emergency legislative / institutional / regulatory systems.⁴ For example, in the “Nuclear Emergency Preparedness” plan published in January 2016 detailed the *legal* system comprising State laws, administrative regulations, departmental rules and industrial standards; *institutional* system of management from national and provincial (regional and municipal) authorities; and *regulatory* system of coordinated responses and responsibilities before, during and after the incident.⁵ The “One Planning plus Three Systems” framework is further explained in sections 2.3.1 to 2.3.4 below.

2.3.1 Emergency Response Plan

Under the “Emergency Response Law of the People’s Republic of China”, the State is required to establish a sound precautionary system for emergency response. The State Council is responsible for drawing up and organizing the making of special national emergency response plans for specific national emergencies. The various departments of the State Council are coordinated to make their departmental State emergency response plans in their respective capacities in line with the relevant emergency response plans of the State Council (Chart 1).⁶

Chart 1



Local governments at all levels and the relevant departments of the local governments at and above the county level are required to make the corresponding emergency response plans in accordance with the relevant laws, administrative regulations and rules, the emergency response plans of the governments at higher levels and their relevant departments, and local realities.

By the end of 2005, the national emergency response plan system had been completed. It includes the State overall emergency response plan, 25 specialized emergency response plans and 80 departmental emergency response plans.⁶ By 2007, most or all of the provincial, city and county governments had developed their local emergency response plans.⁴

2.3.2 Emergency Legislation System

The main responsibility of the emergency legislation system is to clearly define the specification of special administrative procedures in emergencies, and to make emergency management gradually standardized, institutionalized and legalized.

The Chinese government officially promulgated the "Regulations on Preparedness for and Response to Emergent Public Health Hazards" on 12 May 2003. Subsequently, the Chinese government officially promulgated the "Emergency Response Law of the People's Republic of China" on 30 August 2007. So far the Chinese government has developed more than 60 laws and sets of regulations on subjects including natural disaster incidents, accidental disaster incidents, public health incidents and social security incidents.⁴

2.3.3 Emergency Institutional System

Under the "Emergency Response Law of the People's Republic of China", the Chinese Government is required to establish an emergency response management system with the following major features: centralized leadership, integrated coordination, categorialized management, level-based responsibility and localized management.¹

When an "especially serious" emergency incident occurs, the State Council is responsible for studying the situation, deciding on the required response and implementing that response. It is also responsible for establishing a state emergency response command body to be responsible for responding to emergency incidents. In 2006, the general office of the state council in China established the State Emergency Management Office, which is responsible for routine work, providing staffing during emergencies, information collection and comprehensive coordination.⁷

Determined by the types of emergencies, the response could be led by the most appropriate government ministries. For example, response to natural disaster

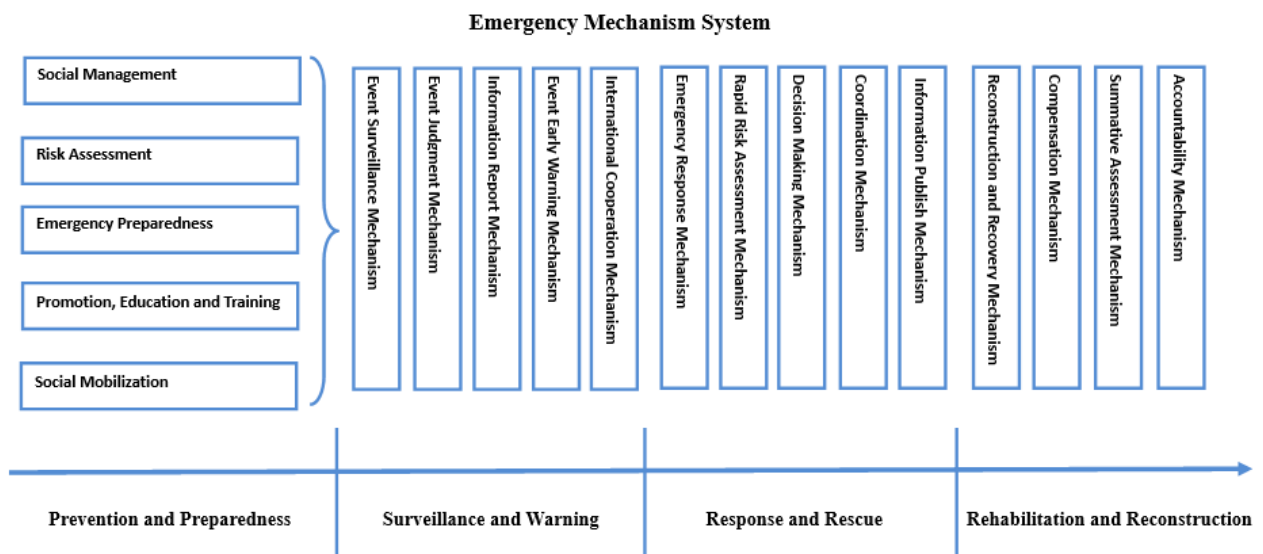
incidents could be led by the Ministry of Civil Affairs, the Ministry of Water Resources or the China Seismological Bureau. The accidental disaster incidents such as forest grassland fires and environmental problems could be led by the State Forestry Administration for Forestry and the Ministry of Environmental Protection respectively. The response to public health incidents is led by the National Health and Family Planning Commission (NHFPC). The response to social security incidents is led by the Ministry of Public Security which active duty soldiers would be mobilised.⁸

Every local government at or above the county level is required to form an emergency response command body made up of the principal officers of the government. The competent departments of the higher governments are required to guide and assist the lower governments and their relevant departments in their respective capacities in response to emergency incidents.

2.3.4 Emergency Regulatory System

Emergency regulatory system refers to a mechanism building on methods and measures of the emergency management process. In some government documents, the word “regulatory” is replaced by “mechanism”. The Emergency Regulatory / Mechanism System is required to cover the four main phases of the disaster cycle: prevention and preparedness, surveillance and warning, response and rescue, rehabilitation and reconstruction (Chart 2).⁹ Some people also add evaluation as the fifth phase. After 2003, the Chinese government issued many documents on specific elements of the emergency mechanism, including monitoring and early warning, information reporting, decision making, information dissemination, risk assessment and restoration.

Chart 2



Source: Shan Chunchang, Zhou ling and Zhong kaibin 闪淳昌,周玲,钟开斌 (2011). The overall thinking on the construction of emergency management mechanism of China 对我国应急管理机制建设的总体思考. *Journal of Chinese Academy of Governance* 《国家行政学院学报》. 2011(1):8-12.

2.4 Local Response to Emergencies

County level governments are responsible for responding to emergency incidents within their administrative regions. Where two or more administrative regions are involved, the government at the next higher level is responsible.

After the occurrence of an emergency incident, the county level government at the place of occurrence shall immediately take measures to control the effects of the incident, organize and carry out the necessary emergency response rescue and operations, and immediately report the incident to the next higher level of government, or report without regard to the levels when necessary.

The county level government at the place of occurrence of an emergency incident that cannot eliminate or effectively control the serious social damage caused by the emergency incident is required to report on it to the next higher level government in a timely manner. The next higher level government must promptly take the necessary measures and take charge of the emergency response operations.

3. Public Health in Emergencies

The ultimate goal of public health management is to reduce the impact of disasters and emergencies on human health and wellbeing, by providing timely health interventions and sustain usual healthcare during and after disasters. There is a range of public health activities and measures related to emergency starting from planning and organising, to implementing, controlling and evaluation. In China, the Administrative Departments of Health including NHFPC, the CDC system (Centre for Disease Control and Prevention at different levels) and the public and private hospitals all belong to the health sector, and all may be involved in responding to public health emergencies.

The public health emergency management can be divided into four phases and have five aspects. The four phases are similar to the one described in the disaster cycle (section 2.3.4) and they are emergency prevention, preparedness, response and recovery. The five aspects are legislation, institution / organization, management mechanism, emergency response plan and social mobilization. Some aspects of the public health emergency management are further explained in sections 3.1 to 3.4.

3.1 Legislation

The public health emergency legislation is a collective term for all laws and regulations governing public health emergency management. In 2003, the Chinese government officially promulgated the "Regulations on Preparedness for and Response to Emergent Public Health Hazards". This document explicitly proposes the

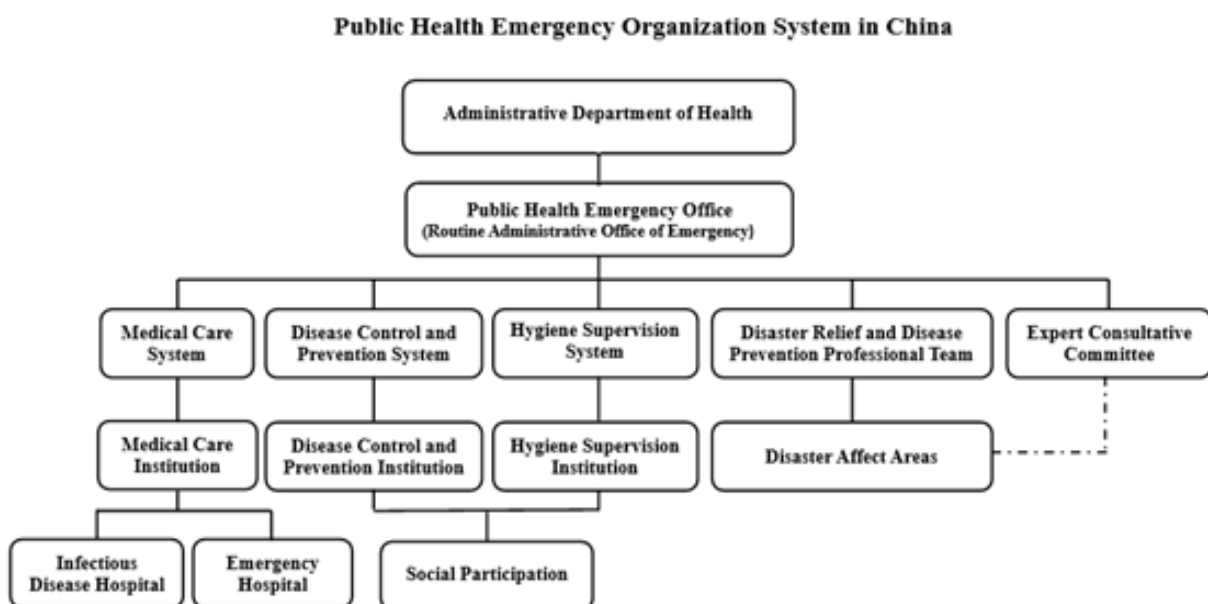
definition of “Public health emergency incidents” for the first time. In 2007, the “Emergency Response Law of the People’s Republic of China” defined public health emergency incidents as the one of the four types of emergency incident.¹ When an acute infectious disease is newly identified, the State Council or the NHFPC have the power to declare it a statutory infectious disease in accordance with the Infectious Disease Law.¹⁰

The Chinese government has signed the revised WHO International Health Regulations (IHR 2005), which replaced the old IHR (1969).¹¹ The IHR (2005) broaden the scope of the 1969 Regulations to cover existing, new and re-emerging diseases, including emergencies caused by non-infectious agents. There is little information on the evaluation of the IHR compliance and implementation but literature seems to suggest it was satisfactory.¹²

3.2 Institution

The State Council is the highest executive organ and has the power, among others, to direct and administer public health work.¹⁰ The NHFPC is in-charge of most health-related matters at the national level. It mobilizes national health care personnel and technical resources to assist local governments and other concerned departments in dealing with outbreaks of epidemics and disease and in taking emergency measures to prevent and control them, and also oversees international cooperation and exchanges involving health care.¹⁰ The Public Health Emergency Office is set up in the NHFPC to address public health emergencies. Once there is public health crisis, headquarters will be set up at the National and /or Provincial level to unify leadership and command, and to executive related tasks. The health department of the local government would be responsible to investigate and provide treatment. Chart 3 shows the parties involved in a public health emergency.

Chart 3



3.3 Emergency Response Plan

The State public health emergency response plan system in China is established based on the “Master State Plan for Rapid Response to Public Emergencies”. The main parts of this system are two specialized plans, namely the “National Plan for Rapid Response to Public Emergencies” and the “National Plan for Medical Care and Medical Relief to Public Emergencies”. The public health emergency response plan system in China also includes 17 single plans, 7 departmental plans and 1 set of guidelines. In addition, the governments at all levels have been gradually developing and improving public health emergency response plans at their level, and individual plans for different types of public health emergency incidents.

3.4 Social Mobilisation

There was ample social support which had contributed to front-line disaster responses in China. These include non-governmental (NGO) / non-profit (NPO) / community / charitable organizations, private enterprises and public. The Red Cross Society of China is the biggest and most systematic NGO provided post-disaster relief. After disaster such as the Wenchuan earthquake, grassroots NGOs formed alliances in response to the humanitarian aid and disaster recovery. These groups contributed in providing immediate frontline relief and support to disaster victims and their families. May be emergency response is a minor part of these organisations' overall scope of services or may be due to their low profile, it is harder to find action plans or organisation documents on emergency response.

4. Discussion

China has developed a comprehensive system and a set of contingency plans to respond to a range of disasters and emergencies, as evidenced by the literatures, policy documents and contingency plans available to the public. Most contingency plans defined the major roles and responsibilities of different stakeholders within the government institution, with a hierarchical command structure at national and provincial (regional and municipal) level. Theoretically an integrated response would occur according to the contingency plans during emergencies.

Most of the accessible policy documents and contingency plans on public and public health emergencies focus on response, rather than on surveillance, preparedness, risk assessment, infrastructure building, relief and recovery. The Emergency Management Office under the State Council is responsible for work only during emergencies. It is uncertain which government department should coordinate work during other times, i.e. before and after emergencies, among various departments.¹³ It is desirable to:

- Set up a department to coordinate work within the government in all phases of the disaster cycle, especially on disaster monitoring, prevention, mitigation, preparedness and recovery.

There has been mentioning of the risk communication in some government documents and contingency plans but mostly as a guiding principles and not as practical details.^{2,5,6} Risk communication includes collection and release of emergency-related information within the government, to social media, to public by announcements and to the international community. Sometimes what types and when the information should be release has to be outlined in both publicly available contingency plans and internal guidelines. These data could be surveillance statistics, risk assessment, routine monitoring data, or during disaster situation reports, hazard evaluation, number of casualties etc. Otherwise sharing and exchange of information between government departments would be an obstacle in preparedness and response.¹⁴ The emergency risk communication system in China can be improved by:

- Setting and follow an explicit mechanism for information releasing and reporting, especially during the emergency response phase, e.g. establishing a unified information standard and emergency terminological system.
- Develop and publicize risk communication as part of the contingency plans and guidelines for internal and external use as appropriate.

Although the Government encouraged social organisations and volunteers to take an active role in disaster prevention and mitigation, there seems to be no corresponding legal mechanism or system on how to engage participation in the governmental institutions.¹³ The Government does not explicitly list out the role and coordination of community-based organizations, social groups and individuals in the plans and documents. During emergencies, the government seems to mobilize its resources and manpower much more effectively than coordinating efforts from community and social organisations.¹⁵ Besides, there has to be a reasonable level of community awareness, knowledge and skills to build up community resilience. To enhance participation of businesses, NGOs, NPOs and volunteers, it is useful to:

- Acknowledge and engage relevant stakeholders, including international NGOs, community-based organisations, private healthcare providers, business sector, schools, civil societies and others, by assigning clearly defined functions in contingency planning.

With the rising international status of China, it needs to take more responsibility in the public health emergency field in the Asia-Pacific region. Under the IHR (2005), China has taken initiatives to strengthen the reporting system and control of infectious diseases.¹² It is anticipated the international cooperation and communication on emergency response is likely to increase in the future.

References

1. National Security, Civil Affairs, People's Republic of China 中华人民共和国民政部 (2007). Emergency Response Law of the People's Republic of China (中华人民共和国突发事件应对法). Available at: http://english.gov.cn/archive/laws_regulations/2014/08/23/content_281474983042515.htm [Accessed 8 May 2016].
2. The State Council 国务院 (2006). Overall Contingency Plan for National Public Emergencies 国家突发公共事件总体应急预案,2006. Available at: http://www.gov.cn/yjgl/2005-08/07/content_21048.htm. [Accessed 8 May 2016].
3. Xue Lan & Zhong Kaibin 薛澜,钟开斌 (2005). Classification, Staging and Grading of Public Emergencies: Basis of Emergency Management System 突发公共事件分类、分级与分期:应急体制的管理基础. *Chinese Public Administration* 《中国行政管理学术论坛》. 2005, 2:102-107.
4. Gao Xiaoping 高小平 (2009). Emergency Management System with Chinese Characteristics 建设中国特色的应急管理体系. *Chinese Emergency Management* 《中国应急管理》. 2009.(4):11-17.
5. The State Council Information Office of the People's Republic of China (2016). Full text of China's Nuclear Emergency Preparedness. Available at: http://english.gov.cn/archive/white_paper/2016/01/27/content_281475279484672.htm. [Accessed 8 May 2016].
6. General Office of the State Council on Issuing the State Emergency Response Plan 国务院应急管理办公室 (2014). National Sudden Public Incident Response System 国家突发公共事件预案体系. Available at: http://www.gov.cn/yjgl/2005-08/31/content_27872.htm. [Accessed 8 May 2016].
7. Zhong Kaibin 钟开斌 (2009). Retrospect and Prospect: China Emergency Management System 回顾与前瞻:中国应急管理体系建设. *Case Journal of Political Science* 《政治学研究》 2009(1): 78-88.
8. China National Commission for Disaster Reduction 国家减灾委员会. Members of the National Committee for Disaster Reduction Unit 国家减灾委员会成员单位 Available at: <http://www.jianzai.gov.cn//DRpublish/jggl/0001000800010001-1.html>. [Accessed 8 May 2016].
9. Shan Chunchang ,Zhou ling and Zhong kaibin 闪淳昌,周玲,钟开斌 (2011). The overall thinking on the construction of emergency management mechanism of China 对我国应急管理机制建设的总体思考. *Journal of Chinese Academy of Governance* 《国家行政学院学报》. 2011(1):8-12.
10. Library of Congress (2015). China: Legal Responses to Health Emergencies. Available at: http://www.loc.gov/law/help/health-emergencies/china.php#_ftnref38. [Accessed 8 May 2016].

-
11. World Health Organisation (2007). Strengthening health security by implementing the International Health Regulations (2005). Available at: http://www.who.int/ihr/legal_issues/states_parties/en/. [Accessed 8 May 2016].
12. Liu B, Sun Y, Dong Q et al (2015). Strengthening core public health capacity based on the implementation of the International Health Regulations (IHR) (2005): Chinese lessons. *Int J Health Policy Manag.* 2015 Apr 17;4(6):381-6. doi: 10.15171/ijhpm.2015.84.
13. Yi Lixin, Ge Lingling, Zhao Dong et al (2012). An analysis on disasters management system in China. *Nat Hazards* (2012) 60:295–309
14. Wang hongwei 王宏伟 (2007). Problems and Counter measures for the China's Health Emergency Management 我国卫生应急管理的问题与对策. *Disaster Reduction in China* 《中国减灾》. 2007,4:30-31.
15. Huang Jianshi, Chen Xianyi, Lei Zhenglong et al 黄建始,陈贤义,雷正龙等 (2005). Public health events and warning systems framework 突发公共卫生事件预警系统建设框架思路. *National Medical Journal of China* 《中华医学杂志》, 2005-85(36):2547-2549.

* Some names of the authors and titles in these references do not have original English translation.