International Health Security: A Concept Paper for World Health Day 2007

Invest in Health, Build a Safer Future

The goal of World Health Day 2007 is to focus on international health security issues, to engage high-level political interest in addressing these issues, and to show the close link of health to national and international security agendas. Over the past few decades, the concept of security was redefined to reflect a shift from the notion of national security as a state-centered defense strategy, to the belief that human security is centered on the people. This new concept of security addresses socioeconomic, natural and man-made threats that jeopardize people's own development and rights. The UNDP's (1994) [1] *Human Development Report, New Dimensions of Human Security* reports on these types of threats that affect people. Among these, *health security* is defined as guaranteeing minimum protection from disease and unhealthy lifestyles, along with food, environmental, economic, community and political security.

Global health security serves as one of the World Health Organization's (WHO) priorities as public health systems worldwide are repeatedly challenged by naturally occurring emerging and re-emerging diseases, environmental changes, natural disasters, and accidental or intentional release of different agents which may constitute public health emergencies. The aim now is to strengthen our commitment to reduce threats to human lives and health inequities and to guarantee the right to live with dignity.

According to the WHO, the theme of World Health Day and the World Health Report 2007 is to show that in a globalized world, health issues increasingly present new challenges that go far beyond a national border and that have impact on the collective security of all people. Increased collaboration among all people and nations will better enable the international community to work for better health and in turn assist in making the world more secure.

While there are many aspects of international health security that should be addressed, the main focus of the Pan American Health Organization (PAHO) will concentrate on the following issues:

1. Emerging and Reemerging Infectious Diseases

Throughout history, epidemics of infectious diseases took their toll on human lives and often resulted in social disruption, political instability, barriers to trade and travel and had tremendous economic and social consequences. In the past three decades alone, new pathogens and diseases emerged as killers such as HIV/AIDS in the mid 1980s, dengue hemorrhagic fever in 1981 in the Americas, the reemergence of cholera in 1991 after an absence of more than a century, Hantavirus pulmonary syndrome in 1993, West Nile virus encephalitis in 1999 and severe acute respiratory syndrome (SARS) in 2003. Most of these diseases are caused mainly by environmental, ecological or demographic factors which are spread worldwide by travel and

[1] United Nations Development Program (1994) Human Development Report 1994. New York: Oxford University Press, in http:/www.undp.org/hdro/1994/94.htm.

trade. This spread of disease can be attributed to human behavior and population movements which poses risks to global health security.

The emergence of a new subtype of the influenza virus that initially infected animals and subsequently infected humans, highlights the precarious stability of nations' socioeconomic conditions.

The universality and speed of free flowing information in real time allows for outbreaks of infectious diseases in any part of the world to be perceived as potential local threats. Frequently unverified and inaccurate information relating to outbreaks triggers excessive reactions which contributes to alarm and inappropriate responses. This has a cascading effect as it interrupts commerce, tourism and business travel which leads to further economic loss and social disruption.

2. International Health Regulations [IHR (2005)]

Recognizing the link between the globalization of trade and travel and the spread of infectious diseases, WHO began identifying, verifying and responding to public health emergencies of international concern.

The legal framework is the recently adopted International Health Regulations (2005), which seek to "prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade."

Scheduled to enter into force in June 2007, the IHR (2005) represents a major step for international cooperation and action in the fight against the spread of epidemics.

The IHR (2005) implementation in the Americas requires determined political action among governments, international organizations, civil society and the business community and an increased focus on information sharing and strengthening of public health systems and surveillance in order to contain the spread of public health emergencies.

Countries bound by the IHR (2005) need to develop, strengthen and maintain their capacity to detect, report and respond to public health events and to provide routine inspection and health control activities at international airports, ports, and some ground crossings. The investment required to build a safer future is the responsibility of the health sector in partnership with other sectors (agriculture, defense, transportation, tourism, etc.) as well as by the community at large.

3. Public Health Infrastructure

Public health emergencies highlight the strengths and weaknesses of the public health infrastructure that is designed to protect the population. Detecting and responding to a public health emergency involves all essential public health activities, including surveillance, health care services, laboratory capacity, human resources, and communication between various actors and the general public. Resources from an inter-sectoral and inter-institutional alliance are required in today's inter-dependent -world, where a local epidemic event can rapidly turn into a global event and economic threat.

For example, the international response to the SARS outbreak was an extreme test of public health systems. WHO's success in coordinating the containment of this previously unknown disease was mainly due to the detection and response mechanisms already in place.

The outbreaks that have challenged public health systems highlight several areas for improvement:

- *Detection and reporting*. The SARS epidemic went unreported and internationally undetected from mid-November 2002 until the end of February 2003. As a result, the first international cases caught health systems by surprise and led to explosive outbreaks.
- *Response capacity*. The measures needed to control dengue outbreaks all over the Americas threaten to overwhelm even the most advanced health systems. These problems would also arise during an influenza pandemic or from intentional release of a biological agent. On the other hand, extreme control measures applied during the cholera epidemics in 1991 interfered with commerce and had tremendous consequences on countries' economies.
- *Preparedness*. The mathematical models designed for pandemic influenza based on the three previous pandemics showed that non-pharmaceutical control measures can reduce the impact of a pandemic. The anthrax event in the United States in 2001 showed that public health systems have to be prepared to implement extensive contact tracing and follow up measures as essential tools for rapid containment.
- *Communication*. Increasingly detailed communication strategies and risk communication plans assist countries at all levels to prepare for outbreaks and national disasters. Communication outlines how the health system should interact by using varying scenarios as well as specifying desired behaviors outcome.
- *Laboratory capacity*. The early detection of outbreaks is closely related to the ability of laboratories to conduct early diagnosis of diseases. On the other hand, accidental release of biological agents, such as SARS cases linked to laboratory accidents, highlight the need to upgrade biosafety standards and systematic staff training.

4. Promoting Health Security through Sustainable Development in Healthy Settings

Natural and man-made disasters, such as hurricanes, earthquakes, tsunamis, chemical and nuclear spills, bioterrorism and large outbreaks of new and re-emerging infectious diseases are receiving increasing attention in a shared international public health agenda. In a globalized world, large scale disasters not only result in a large loss of lives but often lead to a collective sense of vulnerability and insecurity in communities. The public health of the 21st Century embraces the multidimensional nature of new challenges to international health security. The new focus on social determinants is a reflection of the effects on the environment and inequities for human development in a global economy.

International health security requires a larger and more effective interaction between countries, governments, institutions, communities, and citizens. All sectors of society and all citizens share responsibility for health security. Renewed efforts in building basic public health infrastructure and preparation serve as key to the response, and the better prepared a society is as a whole, the more organized and effective the response. In addressing public health threats of international concern, it is important to acknowledge the complexities of promoting and maintaining health security. Therefore it is fundamental to advocate for long term investment in healthy policies which involved the public and private sector at all levels, as well as concerted action with local governments, civil institutions, health services and the communities they serve. This investment will provide both better health security and improved opportunities for human development in places where people live, learn, and work.