CRISIS SCENARIO – ECOSOC

Background:

As the war in Iraq began, a battle of a different kind was intensifying in China, Hong Kong and Singapore. Severe acute respiratory syndrome (SARS), a deadly virus, was spreading and picking up pace, with 7,761 infections, 623 deaths and 3,674 recovered patients as of 17 May 2003. This is no longer a Hong Kong, China, Singapore or even Asian emergency, the virus has spread beyond the initial countries and regions and the crisis is going global.

To date, SARS has been discovered in 30 countries, and the disease is beginning to affect countries outside of Asia. Canada has had 140 cases diagnosed, with 23 deaths and 106 recovered, while the United States has 66 cases diagnosed, without any deaths to date.

Like the war in Iraq and the war on terrorism, SARS is changing the way people live and interact. People are staying indoors and only traveling when they must, food and water are being hoarded, media are disseminating information (both accurate and false), victims are being housed in special temporary facilities or quarantined, rumors are rampant, citizens are panicky, and fear of the unknown is strong.

Many Asian countries are now making significant efforts to contain the outbreak or prevent the virus from penetrating their borders. Through unprecedented global cooperation between scientists, clinicians, laboratory chiefs, public health officials and the coordination of the World Health Organization (WHO), knowledge that would normally take months or years to acquire has been achieved in a matter of weeks. Lessons from this cooperation and coordination, and from the reactions of citizens, enterprises, government and media, can help us react to the diverse risks and opportunities in our ever-changing world.

In countries that are remote from the regions hard hit by SARS, considering this crisis as something distant and unlikely to have a direct local effect is easy. Unfortunately this may be a shortsighted approach. The 1918 “Spanish flu” pandemic circled the globe and killed millions. SARS may share certain genetic similarities with the Spanish flu. Between 1918 and 1919, a deadly influenza infected more than a fifth of the world's population, causing an estimated 40 million deaths. An estimated 675,000 Americans died during the pandemic, 10 times as many as died in World War I, which was in its final stages.

To put this information into perspective, the mortality rate of the Spanish flu was 2.5 percent. This is lower than SARS's approximate mortality rate of between 5 percent and 15 percent, depending on country.

Will SARS go on to kill millions or will it be nothing more than a "storm in a teacup"? It is too soon to tell.

Recent clinical, epidemiological, and laboratory evidence suggests that the impact of a pandemic caused by the current H5N1 strain would be similar to that of the 1918-19 pandemic. More than half of the people killed in that pandemic were 18 to 40 years old and largely healthy. If 1918-19 mortality data are extrapolated to the current U.S. population, 1.7 million people could die, half of them between the ages of 18 and 40. Globally, those same estimates yield 180-360 million deaths, more than five times the cumulative number of documented AIDS deaths. In 1918-19, most deaths were caused by a virus-

Sources: *Michael Osterholm, **Preparing for the Next Pandemic**, Foreign Affairs, July-August 2005*
*Dion Wiggins, **SARS: A Global War Against an Unknown Enemy**, 19 May 2003*

induced response of the victim's immune system -- a cytokine storm -- which led to acute respiratory distress syndrome (ARDS). In other words, in the process of fighting the disease, a person's immune system severely damaged the lungs, resulting in death. Victims of H5N1 have also suffered from cytokine storms, and the world is not much better prepared to treat millions of cases of ARDS today than it was 85 years ago. In the 1957-58 and 1968-69 pandemics, the primary cause of death was secondary bacterial pneumonias that infected lungs weakened by influenza. Although such bacterial infections can often be treated by antibiotics, these drugs would be either unavailable or in short supply for much of the global population during a pandemic.

The arrival of a pandemic influenza would trigger a reaction that would change the world overnight. A vaccine would not be available for a number of months after the pandemic started, and there are very limited stockpiles of antiviral drugs. Plus, only a few privileged areas of the world have access to vaccine-production facilities. Foreign trade and travel would be reduced or even ended in an attempt to stop the virus from entering new countries -- even though such efforts would probably fail given the infectiousness of influenza and the volume of illegal crossings that occur at most borders. It is likely that transportation would also be significantly curtailed domestically, as smaller communities sought to keep the disease contained. The world relies on the speedy distribution of products such as food and replacement parts for equipment. Global, regional, and national economies would come to an abrupt halt -- something that has never happened due to HIV, malaria, or TB despite their dramatic impact on the developing world.

The closest the world has come to this scenario in modern times was the SARS (severe acute respiratory syndrome) crisis of 2003. Over a period of five months, about 8,000 people were infected by a novel human coronavirus. About ten percent of them died. The virus apparently spread to humans when infected animals were sold and slaughtered in unsanitary and crowded markets in China's Guangdong Province. Although the transmission rate of SARS paled in comparison to that of influenza, it demonstrated how quickly such an infectious agent can circle the globe, given the ease and frequency of international travel. Once SARS emerged in rural China, it spread to five countries within 24 hours and to 30 countries on six continents within several months.

Crisis Scenario:

The worst case scenario envisioned by experts draws a dreary picture: If an influenza pandemic struck today, borders would close, the global economy would shut down, international vaccine supplies and health-care systems would be overwhelmed, and panic would reign. To limit the fallout, the industrialized world must create a detailed response strategy involving the public and private sectors.

Last month, such a pandemic struck the island of Borneo with devastating results. Because of its relatively secluded situation, authorities have managed to circumscribe it and prevent its spread. However, the island is today devastated, with close to a third of the population dead or dying. If the pandemic had broken out elsewhere, it might well have wrecked havoc in the world.

Today, the ECOSOC of the United Nations convenes, conscious of the gravity of the situation and of its responsibility, in order to draw urgent guidelines to deal with such a pandemic. The problem is daunting: How to secure minimal economic activity in the face of such a devastating pandemic? If travel and trade are impaired by fear of the pandemic, how will basic necessities be provided?

Sources: *Michael Osterholm,* ***Preparing for the Next Pandemic****, Foreign Affairs, July-August 2005*
Dion Wiggins, ***SARS: A Global War Against an Unknown Enemy****, 19 May 2003*