



Ministerial Conference on Avian and Pandemic Influenza
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Opening Remarks at the New Delhi International Ministerial Conference on Avian and Pandemic Influenza

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Honourable Minister of Agriculture and Honourable Minister of Health and Family Welfare of the government of India, honourable ministers from around the world, distinguished delegates, colleagues from the UN system, ladies and gentlemen,

First and foremost, let me thank the government of India for hosting this ministerial meeting. It is critical that we remain alert to the threat from avian influenza, and do so at a high level.

I have three main points to make. First, we dare not let down our guard. Second, the advance warning we have been given is an unprecedented opportunity. We must use this opportunity wisely. Third, preparedness plans need to engage sectors other than health. The consequences of the first influenza pandemic of the 21st century will go well beyond the impact on health.

Let me elaborate. Influenza pandemics are recurring events. They can be reliably documented beginning in the 16th century. Since then, each century has experienced, on average, three pandemics.

Pandemics are recurring events because influenza A viruses are so sloppy and capricious. These RNA viruses have no proofreading mechanism. Small errors that occur when the virus replicates are not corrected. Influenza viruses have the fastest mutation rate of any human respiratory virus. This is evolutionary change by the hour.

This is one reason why WHO and its collaborating laboratories need to issue revised recommendations for vaccines against seasonal influenza every year. This is also one mechanism that can lead to the emergence of a pandemic virus.

Through adaptive mutation, an avian virus can gradually acquire an ability to spread efficiently from one human to another. This is why the world needs a system to ensure that every chain of human transmission, however limited, is thoroughly investigated. Thorough investigation includes genetic studies of viruses.

Influenza viruses are also promiscuous. They show no absolute species fidelity. Many can replicate in both birds and mammals. The virus has eight neatly segmented genes. If a person is co-infected with an avian and a human influenza virus, these genes can shuffle like playing cards.

This is the second mechanism, known as reassortment, by which a pandemic virus can emerge. When the right genes are swapped, the resulting new virus will have enough human genes to spread efficiently from one person to another. At the same time, it will have enough avian genes to evade the defences of the immune system. This mechanism, too, can ignite a pandemic.

Scientific understanding of pandemics and the viruses that cause them has grown in important ways over the past four years. During the previous century, the pandemic that began in 1918, and killed at least 40 million people, was caused by adaptive mutation of an avian virus. This we know, though debate continues about how many years this process of adaptation took. The 1918 pandemic was also distinctive in the age group most severely affected: young and previously healthy adults.

Subsequent 20th century pandemics were much milder. The one in 1957 killed more than 2 million people. The one in 1968 killed around one million. Both of these milder pandemics began following reassortment between human and avian viruses. Both caused excess mortality in the conventional risk groups for influenza mortality: the elderly and people weakened by underlying disease.

Many scientists now believe that if the H5N1 virus acquires pandemic potential, it will do so through adaptive mutation. We have no idea if or when this might occur.

We have no idea if the current high mortality, at 61%, will be maintained. We have no idea if the next pandemic will be caused by H5N1 or another virus. We have no idea how much time is left to prepare.

But we have no reason to believe that anything about the behaviour of influenza viruses, or anything about the way we inhabit this planet, will protect the 21st century from influenza pandemics.

As I said, these are recurring events with a history spanning at least 5 centuries.

Ladies and gentlemen,

This brings me to my second point. Nature has given us an unprecedented warning. We need to use this opportunity wisely.

Over the past four years, considerable progress has been made. We have a rapid containment protocol, backed by a stockpile of oseltamivir, for use near the start of a pandemic. We are also building up an international stockpile of H5N1 vaccines. We have a plan for increasing the global supply of pandemic vaccines. Almost all countries now have pandemic preparedness plans, and many of these plans have been tested in national and regional exercises. We have never before had such advantages.

I am fully confident that all affected countries are doing their utmost to detect cases and promptly report them. But we all know that human cases are being missed. The initial symptoms of this disease mimic those of many others commonly seen in affected countries. Deaths from pneumonia are by no means a rare event.

Fortunately, implementation of the revised International Health Regulations has focused attention on the need to strengthen core surveillance and response capacities.

Keep in mind, too, that we face a very stubborn problem: poverty. The countries with recurring epidemics in poultry and recurring sporadic human cases are largely poor

countries. Wealthy countries have been able to contain poultry outbreaks fairly quickly. Not a single human case has occurred in a wealthy country. Elsewhere, the virus has become entrenched in birds.

Theoretically, we should be able to reduce the number of human cases, and thus the risk of an influenza pandemic, through education and behavioural change. The vast majority of human cases with a known exposure history have been linked to contact with birds kept by households, and not in the commercial sector. Most cases have occurred in poor populations. Here we face the hard reality of poverty. Poor people will not bury their food.

In terms of the early warning system, sub-Saharan Africa is a major blind spot. In these countries, many deaths go unrecorded and the cause is never known.. Such weak surveillance compromises the early warning system. To compensate, we must use animal outbreaks as the signal to step up vigilance for human cases.

Countries can count on immediate support from WHO and its partners in the Global Outbreak Alert and Response Network.

Let me turn to my third and final point. Preparedness for an influenza pandemic needs to extend beyond the health sector.

SARS taught us how much the world has changed in terms of its vulnerability to the consequences of a new disease. And these consequences include massive economic and social disruption.

Conservative estimates predict that around 20% of the total world population will fall ill during the next influenza pandemic. As many as 28 million people may need hospital care over a relatively short period. The world does not have this kind of surge capacity. Worker absenteeism is likely to reach 35% of the workforce or higher, as workers stay home to care for ill family members or to protect themselves from becoming infected.

The conclusion is obvious. Preparedness needs to include plans to ensure business continuity. These plans need to include the maintenance of essential services, such as food production and distribution, transportation, communication, energy, finance and law enforcement.

I will leave you with these thoughts. Remain vigilant. Improve the early warning system. And be prepared for consequences both within and well beyond the health sector.

Thank you.

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