Dr Margaret Chan Director-General - Opening remarks at a meeting on Global health security collaboration between the Global Partnership against the Spread of Weapons and Materials of Mass Destruction and international organizations Geneva, Switzerland, 17 December 2012

Ambassador Jenkins, Dr Vallat, Dr Gustafson, Excellencies, ambassadors, distinguished guests, ladies and gentlemen,

Let me begin by thanking Ambassador Jenkins, in her role as Chair of the Global Partnership, for viewing biological security in the broader context of global health security. The two go together. It is my firm conviction that true biological security can be achieved only when more countries have the capacity to quickly detect unusual disease events.

One of the best ways to detect the unusual or the unexpected is to have good data on the normal. That is, good background data on disease patterns that are typical for a specific geographical area or season. When that kind of data is readily available, the unusual stands out and the alarm bells start to ring. Getting that data depends, of course, on stronger systems for disease surveillance and response.

I welcome the decision to extend the Global Partnership beyond 2012. The volatile nature of the microbial world warrants such a step. I also welcome the Partnership's inclusive approach to global health security that taps expertise from multiple other sectors, including veterinary public health and agriculture.

I am pleased to share this session with the heads of OIE and FAO. Let me congratulate these two agencies on the successful eradication of rinderpest.

Implementation of the International Health Regulations is not an exclusive function of the health sector. The need to engage non-health as well as health sectors was explicitly recognized earlier this year when the World Health Assembly adopted a resolution on implementation of the Regulations.

As discussions about the Regulations revealed, WHO member states are worried about the continuing lack of capacity, in many countries, to respond to emerging and re-emerging infections.

Too many countries are not yet able to detect an unusual disease event and investigate it, find the cause, report to WHO, gear up their health systems for heightened surveillance, and marshal the appropriate equipment, supplies, and other logistical support. These weaknesses come from a lack of routine surveillance systems, a lack of laboratory capacity, a lack of resources, and a severe shortage of epidemiologists and other specialists.

One statistic tells a disturbing story. Some 85 countries, representing 65% of the world's population, do not have reliable systems of vital registration. This means that causes of

death are neither investigated nor recorded.

This is why many emerging disease, including highly fatal ones, can smoulder undetected for weeks if not months. Outbreaks frequently become visible only after amplification of infection in a hospital or clinic leads to an explosion of cases that is too big to miss.

In other instances, new diseases, were recognized only after patients fell ill and were air-evacuated for treatment to countries with sophisticated diagnostic capacity. This is what happened with the novel coronavirus. Such lapses in vigilance weaken our collective security.

Ladies and gentlemen,

The future looks bright for microbes. They have certainly had a stellar year, with outbreaks of Marburg and Ebola haemorrhagic fever, epidemic cholera, hanta virus in the USA, the worst epidemic of yellow fever to hit Africa in two decades, and the emergence in the Middle East of a new SARS-like coronavirus.

Emerging and re-emerging diseases have become a much larger menace in a world of radically increased interdependence. Constant mutation and adaptation are the survival mechanisms of the microbial world.

These organisms are well-equipped to exploit every opportunity to infect new species, change their modes of transmission, spread to new areas and become established there, and develop resistance to antimicrobials.

Changes in the way humanity inhabits the planet have given these microscopic organisms multiple opportunities to exploit. These are changes that are extremely difficult to reverse: like population growth and overcrowding in urban slums and shantytowns, people living almost nose to nose with food animals like poultry, the industrialization of food production, phenomenal increases in international trade and travel, the misuse of antimicrobials, and incursions into previously uninhabited jungles and rainforests for work, tourism, or food.

Though much about Ebola and Marburg fevers remains cloaked in mystery, many outbreaks are associated with the consumption of bush meat by just a few people.

We have every reason to believe that the explosive recent increases in emerging and re-emerging disease will continue.

The globalization of trade has increased the flow of animals, their pathogens, and disease vectors. As recent trends show, the demand for foods of animal origin is growing as societies modernize and income levels rise.

The industrialization of food production and the globalization of its marketing have

vastly complicated the investigation of foodborne diseases and increased their consequences for health and multiple national economies.

The climate is changing. Unusual weather patterns are reflected in unusual patterns in the distribution of wild animals and disease vectors. Dengue has exploited these opportunities to become the most important mosquito-borne viral disease in the world.

The emergence of hanta virus in the USA in 1993 was linked to a long period of drought, followed by heavy rainfall, that affected populations of deer mice, bringing them into closer contact with humans.

For all of these reasons, stronger collaboration among the veterinary, public health, and agricultural sectors has become imperative as a way to gather early disease intelligence and improve our collective defenses.

OIE, FAO, and WHO have joined forces to address these needs. New networks have been established that unite the existing surveillance and early warning systems maintained by the three organizations. The emphasis is on high-impact pathogens of medical and veterinary importance. And there are many.

Ladies and gentlemen,

The threat from infectious diseases is volatile and constantly evolving. No one is predicting that this threat will subside.

WHO operates some mechanisms, like the Global Outbreak Alert and Response Network, or GOARN, that help compensate for weaknesses in national capacities. The International Health Regulations have provisions for requesting international assistance when domestic capacities are inadequate or overwhelmed.

But these are fail-safe measures. True global health security, and true biological security, will be achieved only when more countries have stronger systems for routinely collecting disease intelligence, detecting and investigating unusual events, sounding the alarm, and mounting a response.

The microbial world is full of surprises. It is well-equipped to defy predictions and shatter long-held assumptions.

Until the start of this century, most experts assumed that new diseases would never gain a foothold in wealthy nations. For imported diseases, good health systems and high standards of living would prevent further cases or stop transmission quickly. SARS proved otherwise. SARS spread fastest and most efficiently in sophisticated urban hospitals.

Until this year, most epidemiologists regarded Asia and sub-Saharan Africa as the breeding grounds of new pathogens and the most likely source of new diseases. The

detection of a new coronavirus in three Middle-Eastern countries proved that assumption wrong.

We must never let down our guard.

Thank you.