

Glossary

○ Pandemic influenza

A term used if an influenza outbreak is caused by efficient and sustainable human-to-human transmission of influenza virus categorized into subtypes HA or NA (classified by difference of antigenicity of glycoprotein on the surface of a virus, between hemagglutinin (HA) or neuraminidase (NA)), without human infection records in the past several decades.

○ Avian influenza

Avian influenza is an infectious disease caused by type A influenza viruses differing from human ones, and carried by birds, typically water birds. Among them, those causing birds' deaths or otherwise indicating particularly high pathogenicity are called 'highly pathogenic avian influenza'.

Cases of birds to human transmission of influenza virus H5N1 have been identified recently, mainly among humans having close contact with infected birds or their viscera or excretory substances. No infection through intake of cooked meats or eggs has been reported.

○ Pandemic

Refers to worldwide outbreak of an infectious disease.

In particular, pandemic (new) influenza viruses may cause a serious pandemic, due to their potential ability to transmit from humans to humans highly efficiently, because most humans lack immunity against such viruses that have never existed before.

○ Phases

Classification of pandemic influenza stages in line with pandemic phases defined by the World Health Organization (WHO); Six phases are defined based on the geographical expansion of infection, each of which is further divided into subcategories "A," which indicates no outbreak has occurred in Japan, and "B," which indicates an outbreak occurring in Japan. Accordingly, the present status is classified as Phase 3A (Human infections with a new subtype influenza virus have been identified, but no human-to-human transmission is occurring in principle, suggesting no risks of infection spread through human-to-human transmission; No outbreak in Japan).

○ Surveillance

Vigilance or monitoring; Especially for an infectious disease, periodical monitoring of the outbreak trend (patients and pathogenic agents) and trend estimation (infectious disease surveillance) are implemented based on the Law concerning the Prevention of Infectious Diseases and Medical Care for Patients of Infections.

○ Proactive epidemiological research

Epidemiological studies conducted directly by health centers etc. as a part of countermeasures against infection diseases, in accordance with Article 15 of the Law concerning Prevention of Infection of Infectious Diseases and Patients with Infectious Diseases

○ Antiviral drugs

Drugs that alleviate symptoms of influenza by specifically inhibiting the multiplication of influenza viruses

○ Pre-pandemic vaccines

Vaccines manufactured from viruses isolated from patients or birds infected by birds to human infection, prior to the outbreak of pandemic influenza viruses (The present vaccines are produced using an H5N1 subtype.)

○ Pandemic vaccines

Vaccines manufactured from viruses that actually cause humans to human infection during pandemic

○ Personal Protective Equipment (PPE)

Refers to personal protective equipment designed and developed to protect individuals from damage caused by contact with pathogens, chemicals, radioactive substances and other hazard sources, and includes masks, goggles, gowns, gloves and others. In the case of pathogens, the primary objective of PPE is to prevent their infection. Therefore, differing PPE must be developed and supplied in accordance with infection routes and applications (e.g. screening, medical consultation, invasive procedures).

○ Coughing manners

Infection prevention measures recommended to (suspected) patients

- Cover the mouth and nose when you cough or sneeze, turning the face away from others and keeping a distance of at least one meter.
- Install covered trash boxes so that tissue paper containing respiratory secretion (such as nasal mucus and phlegm) can be disposed of immediately.
- Urge coughing persons to wear masks.
 - * It is desirable to use less penetrable masks such as surgical masks used at medical facilities, but common marketed masks are considered capable of

preventing the spread of virus coughed out of infected persons to a certain degree.

* It must be noted that, even if a healthy person wears a mask, he or she cannot completely prevent the inhalation of virus.

○ Polymerase Chain Reaction (PCR)

A method to multiply DNA greatly using polymerase (an enzyme related with its reproduction) and primer; this method is used in common in tests of pathogens, because it can identify even minute amounts of DNA. In the case of influenza viruses, the RT-PCR method using reverse transcriptase (RT) is used, because influenza viruses are RNA viruses and require conversion into DNA before PCR.

○ Risk communication

Sharing information on risks that surround us between the administration, local residents and other stake holders, promoting mutual exchange of information and opinions

○ Infection routes

General routes of infection by pathogens are as follows.

• Contact infection

Infection through direct contact between the skin and membrane or wound, or indirect contact through intervening environment

• Droplet infection

Infection through large particles containing pathogens (droplets larger than five microns), scattering and attaching to other person's nasal or oral membrane, or conjunctiva; Droplets scatter during coughs, sneezes, conversation etc., and only reach a short distance (within one to two meters) without drifting in the air.

• Aerial infection

Infection through small particles containing pathogens (droplets the size of five microns or smaller), scattering and inhaled by other person; Droplet nuclei are suspended in the air, and require special ventilation (including the use of negative pressure rooms) and filters to remove.

○ National Epidemiological Surveillance of Infectious Diseases (NESID)

Under the Infectious Diseases Law, the outbreak trends of various infectious diseases are under continuous monitoring to identify outbreak information promptly, thereby preventing their occurrence and expansion, as well as providing accurate information to the general public. This monitoring is based on reports from medical institutions diagnosing specified infectious diseases. The NESID refers to an electronic system based on the Internet and networks between the central and local governments, aimed at centralized and efficient compilation and analysis of such reports.