

GLOSSARY OF TERMS

Antibodies - Proteins produced by the body in response to exposure to a foreign substance (antigen); antibodies neutralize antigens and render them harmless.

Antigen - Any molecule that is recognized by the immune system and that triggers an immune response, such as release of antibodies.

Antigenic Drift - A gradual change of the hemagglutinin or neuraminidase proteins on the surface of a particular strain of influenza virus that occurs in response to host antibodies in humans who have been exposed to it. Antigenic drift occurs on an ongoing basis in both type A and type B influenza strains and necessitates ongoing changes in influenza vaccines.

Antigenic Shift – The “evolutionary” changes that take place in the RNA/DNA in microorganisms during their passage from one host to another. Antigenic shift leads to the alteration in the antigenic composition of the influenza virus and thus in the response of individuals and populations to exposure to the influenza virus. This type of change causes pandemics.

Antivirals - Drugs that inhibit either the life cycle or replication of viruses, resulting in decreasing the severity and duration of a viral infection.

Asian flu - Common name for the influenza A strain that killed over one million people around the world in the 1957 pandemic.

Avian flu - Avian influenza, or "bird flu", is a contagious disease of animals caused by viruses that normally infect only birds and, less commonly, pigs. It is of concern because of its potential to develop into the source of the next pandemic.

Chemoprophylaxis – prevention of disease using drugs.

Epidemic/Outbreak - A disease such as influenza occurring suddenly in a community, region or country in numbers clearly in excess of normal.

Gene - Any of the units in chromosomes by which hereditary characteristics are transmitted.

Hemagglutinin - An important surface structure protein of the influenza virus that enables the virus to attach itself to a cell in the respiratory system and penetrate it.

Hong Kong Flu - Common name for the influenza A strain that killed nearly 750,000 people around the world in the 1968 pandemic.

Incubation period – The time period between invasion by an infectious agent (e.g. influenza virus) and appearance of the first sign or symptom of the disease in question (e.g. influenza).

Isolate - In microbiology, to obtain a pure strain from a source such as a clinical specimen that may have been part of a mixture of different organisms.

Neuraminidase - An important surface structure protein of the influenza virus that enables the virus to escape the host cell and infect new cells.

Pandemic - An epidemic occurring worldwide, or over a very wide area, crossing international boundaries, and usually affecting a large number of people.

Period of communicability – The time during which an infectious agent may be transferred directly or indirectly from an infected person to another person, from an infected animal to humans, or from an infected person to an animal.

Sentinel Physicians – A network of physicians across Canada asked to complete a report form, including the total number of patients seen for any reason (denominator) and the total number of patients meeting the standard case definition for influenza-like illness (numerator). Sentinel report forms were either returned by fax, or the information was conveyed via e-mail or telephone to Health Canada's Centre for Infectious Disease Prevention and Control (CIDPC) on a weekly basis for data collation, analysis and dissemination. The results of this surveillance system are posted each week during the influenza season on the FluWatch website. The total number of patients seen each week, and the number of those patients with influenza-like illness by age group, is part of the World Health Organization global flu surveillance network.

Spanish Flu - The common name for the influenza A strain that killed over 20 million people around the world during the years 1918 to 1920, the highest death toll of any pandemic.

Strain – differences within a subtype; i.e. Fujian vs. Panama.

Subtype – Based on difference in Hemagglutinin & Neuraminidase proteins; for influenza A there are several different subtypes; for influenza B there is only one subtype.

Surveillance - the ongoing systematic collection and analysis of influenza (or other disease) data, and the dissemination of information to local health department, provincial and national public health organizations, for the purpose of an effective disease prevention and control program.

Type – A, B, or C influenza.

Vaccine - A specific substance that elicits an immune response to prevent infection by a foreign agent.

Virus - A submicroscopic infectious agent that is capable of growth and multiplication only in living cells. Viruses cause important diseases in humans, animals and plants.