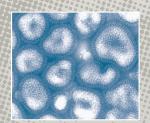
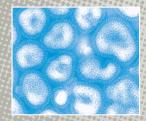
WHO Global Influenza Surveillance Network

Manual for the laboratory diagnosis and virological surveillance of influenza









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Antigenic drift – the gradual alteration by point mutations of the haemagglutinin (HA) and neuraminidase (NA) proteins within a type or subtype which results in the inability of antibodies to previous strains to neutralize the mutant virus. Antigenic drift occurs in both influenza A and B viruses and causes periodic epidemics.

Antigenic shift – the appearance in the human population of an influenza A virus containing a novel HA protein with or without a novel NA protein that are immunologically different from those of isolates circulating previously. Antigenic shift is responsible for worldwide pandemics.

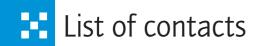
Disease surveillance – the systematic, continuing assessment of the health of a community, based on the collection, interpretation and use of health data. Surveillance provides information necessary for public health decision-making.

Epidemiology – the study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to the control of health problems.

Influenza epidemic – an outbreak of influenza caused by influenza A or B viruses that have undergone antigenic drift. The terms "influenza epidemic" and "influenza outbreak" have the same meaning, and may occur locally or in many parts of the world during the same season.

Influenza pandemic – by convention, worldwide outbreaks of influenza caused by influenza A viruses that have undergone antigenic shift. However, as recently demonstrated, an antigenically novel virus of an existing subtype is capable of pandemic spread

Virological surveillance – the ongoing and systematic collection and analysis of viruses in order to monitor their characteristics.



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