

Influenza

There are three types of influenza viruses: influenza A, B, and C. The 'A' virus can be further divided into different subtypes according to the nature of their surface proteins, haemagglutinin (H) and neuraminidase (N). There are 16 different haemagglutinin subtypes (H1 to H16) and 9 neuraminidase subtypes (N1 to N9). Each virus has its own mix of H and N types.

Viruses carrying all the different H and N subtypes can be found in aquatic birds. Human infections are mostly caused by H1N1 and H3N2 viruses. Occasionally, influenza is transmitted to people by pigs (swine influenza) or birds (avian influenza).

Seasonal influenza is a common infection. Each year, between 5 and 10 per cent of the people come down with seasonal influenza. Influenza is mainly contracted by inhaling virus-laden droplets emitted from a person cough or sneeze. The infection occurs when these secretions come in contact with a person's mucous membrane.

The current swine flu outbreak is caused by a new virus called influenza A/H1N1. Although the genes of this virus appears to have come from other swine influenza viruses found in the past, its genes combination has not been seen before. It is therefore difficult to predict whether this virus will continue spreading and cause an influenza pandemic. It depends also on whether the current person-to-person transmission will continue, or whether the virus will mutate and become stronger.

People do not normally have natural immunity to new viruses. This situation is exacerbated when the virus can be passed swiftly from person to person. To control this virus, it is important to know what caused it in the first place. Until then, it is important to wash one's hands frequently and to observe proper personal hygiene. To prevent its spread, people should cover their mouth and nose when coughing or sneezing, also wear face masks to minimize the risk of outbreaks and reduce transmission.