

# Past pandemics

## 2009 pandemic

The first influenza pandemic of the 21st century occurred in 2009–2010 and was caused by an influenza A(H1N1) virus. It was the first pandemic for which many Member States had developed comprehensive pandemic plans describing the public health measures to be taken, aimed at reducing illness and fatalities. For the first time, pandemic vaccine was developed, produced and deployed in multiple countries during the first year of the pandemic.

While most cases of pandemic H1N1 were mild, globally it is estimated that the 2009 pandemic caused between 100 000–400 000 deaths in the first year alone. Children and young adults were disproportionately affected in comparison to seasonal influenza, which causes severe disease mainly in the elderly, persons with chronic conditions and pregnant women.

## Pandemics of the 20th century

Three influenza pandemics occurred at intervals of several decades during the 20th century, the most severe of which was the so-called "Spanish Flu" (caused by an A(H1N1) virus), estimated to have caused 20–50 million deaths in 1918–1919. Milder pandemics occurred subsequently in 1957–1958 (the "Asian Flu" caused by an

A(H2N2) virus) and in 1968 (the "Hong Kong Flu" caused by an A(H3N2) virus), which were estimated to have caused 1–4 million deaths each.

## **Continuous learning**

With each pandemic, researchers, public health experts and international organizations have gained a better understanding of the complexity and dynamics of influenza pandemics. With the improvement of surveillance and reporting systems, more data and characteristics of viruses can be documented than was possible a decade ago.

Researchers and public health experts are continuously learning more about the influenza virus, vaccines and response measures, and this knowledge is used to improve capacities related to both seasonal and pandemic influenza. Much of the knowledge acquired may also be applied to other areas of disease surveillance or to respond to other health threats.