

## Pandemics & Threats 1900 – 2006

This is a compilation of information from a variety of sources about historical influenza pandemics and threats. It should not be considered an exhaustive exploration on this topic. This resource was developed under contract with the Centers for Medicare & Medicaid Services #HHSM-500-2006-NW012C to the Heartland Kidney Network.

Year	Name/Strain	Duration	Morbidity	Mortality	Comments
1918	Spanish Flu H1N1	September 1918 - April 1919	20-40% of the worlds population became ill (or one-fifth of the world's population was infected)	675,000 deaths in the USA.	High mortality among young adults aged 20-50! People who felt fine in the morning were ill at noon and dead by evening. This flu killed more people than World War I.  More people died of this influenza in a single year than in the four-years of the Black Death plague (1347 to 1351).
In 1944 Francis, Jonas Salk, and others developed the influenza vaccine.					
1947	The 1947 epidemic				The 1947 epidemic has been thought of as a <u>mild</u> <u>pandemic</u> because the disease, although globally distributed, caused relatively few deaths. The influenza vaccine was not effective.
1957	Asian Flu H2N2	Wave 1: May - September Wave 2: January - March		69,800 deaths in the USA.	The virus was quickly identified. Infection rates were highest among school children, young adults, and pregnant women in October 1957.
1968	Hong Kong Flu H3N2	September – January '69		34,000 deaths in the United States	People over the age of 65 were most likely to die.
1976	Swine Flu Threat				The concern was that a major pandemic would sweep across the world led to a mass vaccination campaign in the United States. The pandemic did not occur.
1977	Russian Flu Threat H1N1	January 1978			Because illness occurred primarily in children, this was not considered a true pandemic. Individuals born before 1957 were generally protected, but children and young adults born after that year were not because they had no prior immunity.
1997	Avian Flu Threat H5N1		Eighteen people in Hong Kong were hospitalized,	Six people died.	The first time an influenza virus was transmitted directly from birds to people, with infections linked to exposure to poultry markets.
1999	H9N2		It caused illness in two children in Hong Kong,		This strain appeared for the first time in humans. Poultry was the probable source.

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Year	Name/Strain	Duration	Morbidity	Mortality	Comments
2002	H7N2		Evidence of infection was found in one person in Virginia.		The individuals' illness was following a poultry influenza outbreak.
2003	H5N1, H7N7, H7N2, H9N2		<p>H5N1 Two people were diagnosed in Hong Kong</p> <p>H7N7 89 people in the Netherlands,</p> <p>H7N2 Caused a person to be hospitalized in New York.</p> <p>H9N2 Caused illness in one child in Hong Kong.</p>	<p>H5N1 - A 33-year-old man died. (A third family member died while in China of an undiagnosed respiratory illness.)</p> <p>H7N7 A veterinarian who visited one of the affected poultry farms died.</p>	<p>H5N1 Caused two Hong Kong family members to be hospitalized after a visit to China,</p> <p>H7N7 Poultry workers became ill with eye infections and/or flu-like symptoms.</p> <p>H7N7 The first reported cases of this strain in humans,</p>
2004	H5N1 ,H7N3 , H10N7		<p>H5N1 Caused illness in 47 people in Thailand and Vietnam.</p> <p>H7N3 Two people became ill in Canada</p> <p>H10N7 It caused illness in two infants in Egypt.</p>	<p>H5N1 34 people died.</p>	<p>H5N1 Researchers were especially concerned that this flu strain, which was quite deadly, would become endemic in Asia.</p> <p>H7N3 The strain caused illness in poultry workers in Canada</p> <p>H7N3 &amp; H10N7 These strains were reported for the first time in humans.</p> <p>H10N7 One of the Egyptian infants father was a poultry merchant.</p>

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2005	H5N1	February - December	H5N1 The WHO reported a cumulative total of 142 laboratory-confirmed cases of H5N1 infection worldwide (all in Asia),	H5N1 Cambodia – 4 deaths Indonesia – 1 death Asia – 74 deaths	Human infection with H5N1 arose in Cambodia, Indonesia, Vietnam, Thailand, China, and Asia.
2006	Avian Influenza A H5N1	January	H5N1 E. Turkey = 2 China =10 Iraq = 7 Egypt = 4 Sub-Saharan Africa = 1	H5N1 E. Turkey = 2. China =7 Iraq=5 Egypt=2.	<ul style="list-style-type: none"> <li>• all influenza viruses have the ability to change</li> <li>• H5N1 virus one day could be able to infect humans and spread easily from one person to another.</li> <li>• Because these viruses do not commonly infect humans, there is little or no immune protection against them in the human population.</li> <li>• If H5N1 virus were to gain the capacity to spread easily from person to person, an influenza pandemic (worldwide outbreak of disease) could begin.</li> <li>• No one can predict when a pandemic might occur</li> <li>• Experts from around the world are watching the H5N1 situation in Asia and Europe very closely</li> </ul>

Sources:

- <http://www.cdc.gov/ncidod/EID/vol12no01/05-1132.htm>
- [http://www.idph.state.il.us/pandemic\\_flu/history.htm](http://www.idph.state.il.us/pandemic_flu/history.htm)
- <http://www3.niaid.nih.gov/news/focuson/flu/illustrations/timeline/timeline.htm>
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- [http://militaryhistory.about.com/b/a/2004\\_02\\_06.htm](http://militaryhistory.about.com/b/a/2004_02_06.htm)
- <http://www.cdc.gov/flu/avian/gen-info/facts.htm>