Influenza, but usually only in rare cases

Influenza, also known as “ the flu,” is a virus that infects the respiratory tract.

Although Influenza is not as severe as many viral infections it’s almost the worst for viral infections of the respiratory tract. Typically, when someone is infected with influenza they experience fever (usually 100 to 103F in adults, but even higher in children) and causes a cough, sore throat, runny or stuffy nose, and also headaches, muscle aches, and usually extreme tiredness. There are sometimes other symptoms such as nausea, vomiting and diarrhea but usually only in rare cases with young children.

One other note: The term “ Stomach flu” isn’t really caused by the influenza virus. The average recovery time from the flu is about 1-2 weeks, although some patients do develop more severe complications such as pneumonia, which are capable of being life threatening. On average, influenza is associated with more than 20, 000 deaths nationwide and more than 100, 000 hospitalizations. These are usually from patients who develop complications and they are usually children or the elderly, although complications can develop at any age. There are three types of influenza viruses, Groups A, B, and C. Only Groups A and B are responsible for causing the epidemics of flu that occur almost every year.

Influenza C is different in several ways because it causes mild to no symptoms and doesn’t cause the yearly epidemics. Scientists put out most of their effort to control influenza A and B because of their huge impact on the nation and the world. Influenza type A viruses have two proteins that determine their specific type.

Take Influenza A(H1N1) the H stands for hemagglutinin and the N stands for neuraminidase. The current types of Influenza A are A(H1N1) and A(H3N2). Influenza A(H1N1), A(H3N2), and Influenza B strains are included in each year’s vaccines.

Influenza A viruses are very hard to control because they undergo changes, making it harder for human’s immune systems to detect them. There are two types of changes. The first is a series of mutations that occur over time and cause a gradual change in the virus. This is called antigenic “ drift.” This process allows the virus to make a more stable change yet still evade the immune system. The second type of change is an abrupt change in the hemagglutinin and/or the neuraminidase proteins.

This is called antigenic “ shift.” It isn’t as stable of a change but if it does make a successful and complete mutation it can become so deadly that another pandemic. Although Type A viruses undergo both types of changes, Type B only go through the more gradual Type B. Antigenic shift occurs only occasionally, but when it does large numbers of people or even entire populations have no antibody against the virus. Although this is potentially lethal, the virus can only start a pandemic if it is able to be spread easily. Throughout the 20th century there were three pandemics, one in 1918, one in 1957, and one in 1968.

Each of which resulted in large numbers of deaths. The 1918 pandemic was known as the “ Spanish Flu” and was Influenza strain A(H1N1) and it caused the highest known influenza death rate known, 500, 000 Americans and 20

million people worldwide. The 1957 pandemic was known as the “ Asian Flu” and was Influenza strain A(H2N2) and caused 70, 000 U. S. deaths.

The 1968 Pandemic was known as the “ Hong Kong Flu” and was Influenza strain A(H3N2) and caused 34, 000 deaths in the U. S. The emergence of the “ Hong Kong Flu” in 1968-1969 marked the beginning of the A(H3N2) days.

When this virus first emerged it had the lowest mortality rate in the 20th century. Although this virus first emerged with such a small death rate, it still continues to kill people to this day. Just as when the A(H2N2) virus appeared in 1957 causing the disappearance of the A(H1N1) virus, the appearance of the A(H2N3) virus caused the disappearance of the A(H2N2) virus. After being dormant for almost 30 years, the A(H1N1) virus reappeared and today the A(H1N1) virus and A(H2N3) viruses co-circulate each year along with a few different strains of Influenza Type B. Now, to answer a few common questions about influenza.

Q. If I am exposed to a person with Influenza and become infected,