A Flu Review: Flu Season Ahead

Despite our seat at the top of the food chain, disease has been and continues to be one of the biggest threats to humanity. Last year's Ebola scare was a perfect example—it was terrifying considering what might happen if it escaped control in the US.

Over the years many diseases have carried that same dread, and have done similar significant damage: the Black Death, Smallpox, Malaria, Cholera, Ebola, HIV, the Flu, to name a few on the list.

Wait, the flu?

Yup, the flu—short for Influenza virus, of course—actually continues to rank right up there with the baddies in terms of lives lost and disruption.

It is estimated that there are anywhere from 3,000 deaths per flu season in the US to 49,000 deaths. It's a big range—some years the strain isn't as deadly as other years. However, in recent years the seasonal average has been higher, closer to 30,000 deaths. That is still a lot of lives lost—a lot more than died in the US from Ebola—and it is a lot considering that there is a vaccine.

The last big, big flu pandemic was in 1918, when 50 million people worldwide died, and public health officials, doctors and scientists scrambled to isolate the virus and create a vaccine to protect people from further devastation by influenza.

The flu doesn't usually kill people directly, rather it leads to fatal complications, like pneumonia, or worsens previous conditions, including congestive heart failure, or chronic obstructive pulmonary disease that can then lead to death. This makes tracking deaths by influenza challenging—very few death certificates will actually list influenza as a cause of death.

Any flu patient runs the risk of these serious complications, but certain groups of people have higher risk: the elderly, the young, people with asthma, and pregnant women. In fact, in a typical flu season, people 65 or older account for 90% of deaths from the flu.

Annual influenza vaccination continues to be the primary means of preventing influenza and its complications. For this reason, in the US, the recommendations for flu vaccination is for everyone older than 6 months of age, including pregnant women.

There will be a city-wide flu clinic—for adults and children alike—on October 5, in the Machine Shop from 1-4 pm, and it will be a convenient, easy, and nearly painless way to get the protective vaccine.

Influenza or flu is a virus that infects the nose, throat, windpipe and lungs. It is highly contagious, spreading from one person to another through coughing, sneezing and talking. The commonly known symptoms include fever, chills, muscle aches, congestion, cough, runny nose and difficulty breathing.

The term flu has often been used as a catch-all term for pretty much any sort of sickness that has any of those symptoms, and it is true that other viruses do cause symptoms very similar to influenza. But, the actual flu virus is a more common cause of severe, fatal pneumonia and other complications.

Despite the potential seriousness of the disease, there are still concerns about the vaccine, both its efficacy, and the belief that it may actually give a person the flu.

There have been years when the vaccine has been less effective, because the flu virus is tricky—it changes genetically frequently, which means that last year's vaccine might not create immunity against this year's strain. The World Health Organization takes charge of monitoring the flu strains and determining which ones are circulating each season. They then make recommendations for the vaccine "ingredients," drawing their information from over a hundred research laboratories in various parts of the world which monitor the changes in the viruses.

Sometimes the virus can actually go through a change between the time that the WHO decides which strains are out there and when the manufacturers create the vaccines. These are the situations in which the vaccine is less effective.

However, the vaccine has been shown to protect 60-90% of individuals who receive it from getting the honest-to-goodness flu, and it protects an even higher percentage against hospitalization. The odds aren't perfect, but they are decent, especially if an individual falls into an at-risk category.

The other question that comes up frequently is that of getting the actual flu from the vaccine. The vaccine is made from an inactivated or killed virus, so it cannot give an individual the flu. However, a vaccine's purpose is to introduce the important proteins from the virus into the body so that the immune system will power up, so to speak, and be prepared for the actual virus when it is introduced. Many of the symptoms people experience following the flu shot—some headache, slight fever, etc.—are actually the after-effects of the immune system responding, preparing and ramping up.

This year Uinta County Public Health is offering a four-strain vaccine, which protects against four different strains of the influenza virus: an A/California/7/2009 (H1N1)-like virus, an A/Hong Kong/4801/2016 (H3N2)-like virus, a b/Brisbane/60/2008-like virus (Victorian lineage), and a B/Phuket/3073/2013-like virus (Yamagata lineage).

Unfortunately, due to concerns about efficacy, no flu mist will be available. Just the shot.

For any questions or concerns regarding the flu, flu shots and flu clinics give Public Health a call at 789-9203.