

Influenza

General Information

Influenza (the flu) is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and may lead to death. Older people, young children, and people with certain comorbidities, such as asthma, diabetes, heart or kidney diseases, are at high risk for serious complications.

The influenza virus can infect many different species including ducks, chickens, pigs, horses, whales, and seals. Animals like the pig can also be infected by human and bird influenza viruses, which can lead to genetic mixing. Most animal flu viruses will not infect humans, this is a rare occurrence.

The two main types of human influenza viruses are A and B. These are categorized by their surface antigens (H and N). Each year, there can be a change in the virus causing human infections, which requires a new vaccine to be made each year, usually covering two different A flu viruses and a B flu virus.

Symptoms

The main characteristic of flu is “sudden onset”. People are fine one minute then very sick the next. Symptoms can include: fever or feeling feverish/chills, cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, and fatigue. Vomiting and diarrhea may occur in some cases, though this is more common in children than adults.

Complications

People 65 years and older, people with certain chronic medical conditions (such as asthma, diabetes, or heart disease), pregnant women, and young children are at a higher risk for complications. Most people who get influenza will recover in a few days to less than two weeks, but some people can develop complications, such as bronchitis, sinus and ear infections, and pneumonia, which can be life-threatening and possibly result in death. The flu can make chronic health problems worse. For example, people with asthma may experience asthma attacks while they have the flu, and people with chronic congestive heart failure may have worsening of this condition that is triggered by the flu.

Flu is unpredictable. The severity of illness can vary widely from one season to the next depending on many things, including: what flu viruses are spreading, how much flu vaccine is available, when the vaccine is available, how many people get vaccinated, and how well the flu vaccine is matched to flu viruses that are causing illness.



CDC estimates that flu has resulted in 9 million – 41 million illnesses, 140,000 – 710,000 hospitalizations and 12,000 – 52,000 deaths annually between 2010 and 2020.

Transmission

Most experts think that flu viruses are spread mainly by droplets made when people with the flu cough, sneeze or talk. People with the flu can spread it to others up to 6 feet away. These droplets can land in the mouth, nose or eyes of people who are nearby or possibly be inhaled into the lungs. Less often, a person might also get flu by touching a surface or object that has the flu virus on it and then touching his/her own mouth or nose.

Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick. Children and people with weakened immune systems may pass the virus for more than 7 days after becoming sick.

Symptoms start 1 to 4 days after the virus enters the body. That means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick for up to 7 days. Some people can be infected with the flu virus but have no symptoms. During this time, those persons may still spread the virus to others.

Prevention

Vaccination

Getting a flu vaccine can protect against flu viruses that are the same or related to the viruses in the vaccine. The vaccine is not a live virus. Different strains of influenza A (H1N1), A (H3N2), and one or two influenza B viruses are included in each year's influenza vaccine, depending on the vaccine. Flu vaccines will **NOT** protect against infection and illness caused by other viruses that can also cause influenza-like symptoms, such as Rhinovirus, RSV or parainfluenza.

The Advisory Committee on Immunization Practices (ACIP) makes the following recommendations on who should be vaccinated:

“Health care personnel, including all paid and unpaid persons working in health-care settings who have the potential for exposure to patients or to infectious materials. These personnel might include (but are not limited to) physicians, nurses, nursing assistants, nurse practitioners, physician assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff, and other persons not directly involved in patient care but who can potentially be exposed to infectious agents (e.g., clerical, dietary, housekeeping, laundry, security, maintenance, administrative, and billing staff and volunteers).”

Once vaccinated, it takes about two (2) weeks for your body to build immunity. Even if you have received the vaccine, it is still possible for you to get the flu.



General Hygiene

This includes covering your mouth and nose with a tissue when coughing and sneezing then doing proper hand hygiene or coughing and sneezing into your elbow. Ensuring that environmental surfaces are cleaned and disinfected on regular basis will help reduce transmission.

Infected/symptomatic persons should avoid contact with others in order to reduce the risk of transmission (home quarantine). This is important to keep infected children away from school/day care and adults should not go to work place during the illness period which can last up to seven (7) days. If someone symptomatic with the flu needs to go out, they should wear a mask.

In healthcare, patients are usually placed on droplet precautions, or a combination of contact and droplet precautions, to protect healthcare personnel and other patient from this illness. CDC does recommend use of a fitted N95 respirator if aerosol-generating procedures are expected, however, data is limited on this recommendation. Because healthcare-specific guidance on preventing influenza is frequently updated, we recommend visiting the CDC website for the most up-to-date information:

<https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>.

Treatment

If you get sick with flu, influenza antiviral drugs may be a treatment option. Antiviral drugs work best when started early, such as one to two days after your flu symptoms begin.

Check with your doctor promptly if you are at higher risk of serious flu complications and you get flu symptoms. Learn more at <https://www.cdc.gov/flu/treatment/index.html>














Cleaning and Disinfection













Diligent and frequent cleaning and disinfection of environmental surfaces is a key component in a comprehensive “respiratory illness” prevention strategy.

The EPA has established its perspective that if a disinfectant carries an influenza claim, it will allow companies to promote their product as effective against all strains of influenza. Disinfectants have not shown strain specificity. Thus there's no value in testing against a number of additional strains beyond the basic strains common on disinfectant labels already.



Influenza is susceptible to the following Diversey disinfectants:

Product	Oxivir® 1 RTU / Wipes	Oxivir® Tb RTU / Wipes	Oxivir® HC RTU / Wipes	Oxivir® Five 16	Alpha HP®	Avert™ Sporidical Disinfectant Cleaner/Wipes	Virex® Plus	Virex® II 256	Virex® Tb	Virex® Rapid 1	Expose® II 256	MoonBeam™ 3 UV Disinfection
Contact Time (Min)	1	1	1	5	5	1	1	10	3	1	10	< 1 min
												

Product	Oxivir® Tb RTU / Wipes	Oxivir® Plus (Concentrate)	Oxivir® Five 16	Virex® II 256	Virex® Plus	Percept™ (TMMC) (Concentrate, RTU & Wipes)	Accel® INTERVENTion RTU/Wipes	Accel® PREVENTion RTU/Wipes	Accel® PREVENTion Concentrate	Rescue® (Liquid, Gel & Wipes)	MoonBeam™ 3 UV Disinfection
Contact Time (Min)	1	5	5	10	3	5	1	3	5	1	< 1 min
											

References:

<https://www.cdc.gov/flu/about/keyfacts.htm>
<https://www.cdc.gov/flu/about/burden/index.html>
https://www.cdc.gov/mmwr/volumes/69/rr/rr6908a1.htm?s_cid=rr6908a1_w

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