

Influenza

What you need to know

Kaiser Permanente Hawaii
Regional Mandatory Training

LEARNING OBJECTIVES

1

Explain the transmission and impact of influenza

2

Describe the clinical manifestations, diagnosis, and treatment of the influenza virus

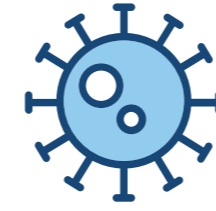
3

Identify multiple non-vaccine control and prevention measures for influenza

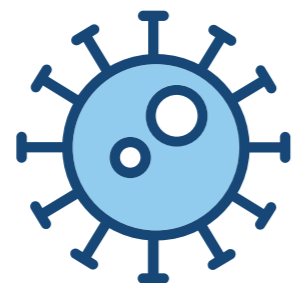
4

Describe the importance of why patients and staff should receive the influenza vaccine

What is Influenza (Flu)?

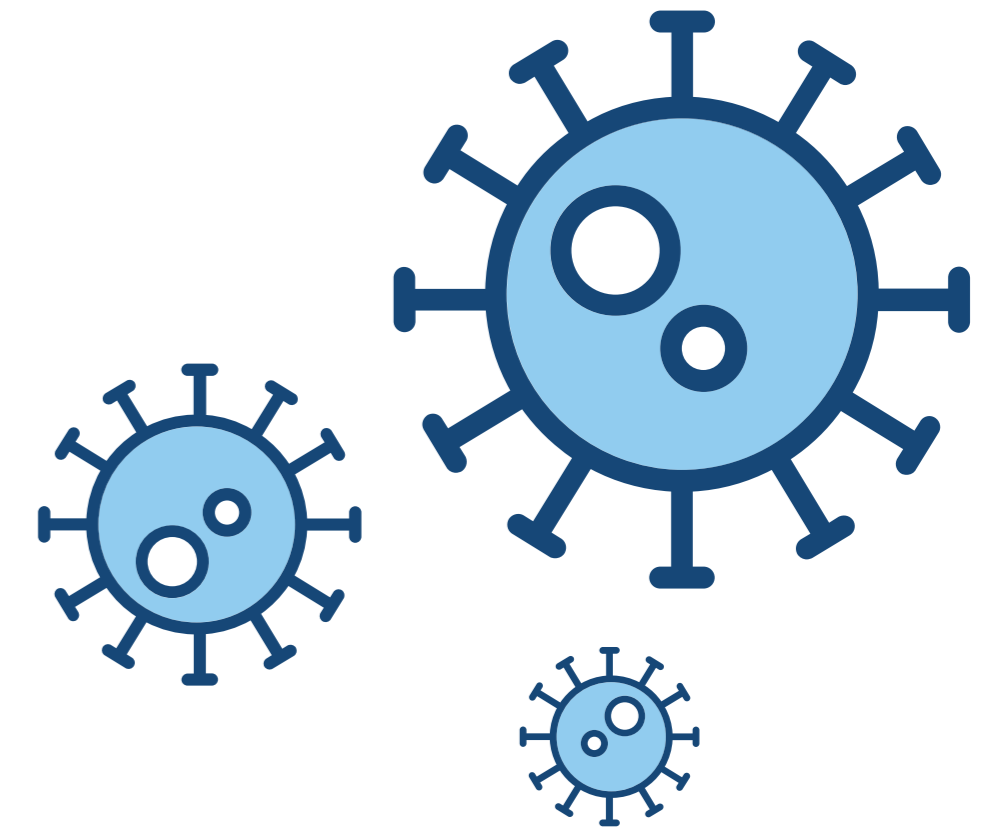


- Influenza, or commonly known as “the flu,” is a contagious respiratory illness that infects the nose, throat, and lungs.
- The illness is caused by one of a number of strains of the virus, either influenza viruses A, B or C.
- Influenza A often causes the most serious of flu illnesses. Examples of this are the Swine and Avian/Bird flu.
- The flu usually spreads around the United States between October and May.
- There have been 4 worldwide influenza pandemics in the 19th century, one which caused the deaths of 21 million people in 1918-1919.

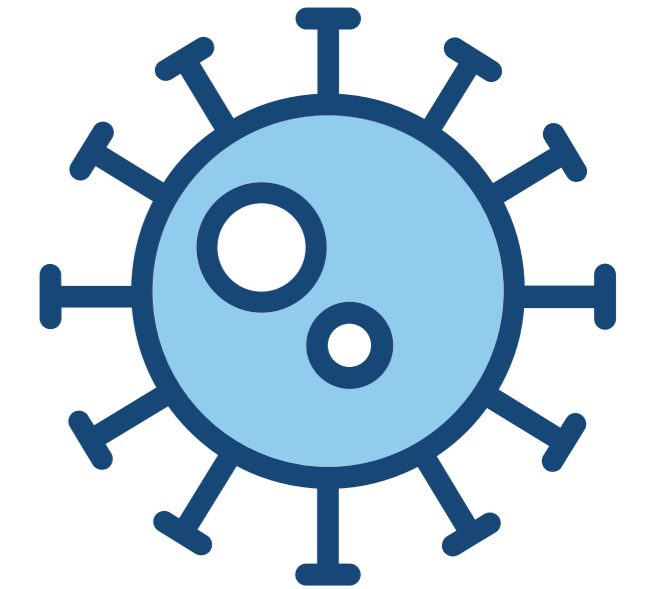


The Flu is a Serious Illness

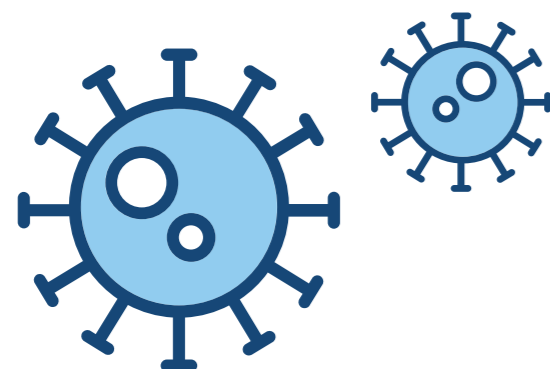
- It can cause mild to severe illness and can lead to **death**.
- Complications of flu can include:
 - bacterial pneumonia
 - sinus and ear infections
 - dehydration
 - seizures in children
 - worsening of chronic medical conditions: heart, lung, kidney or diabetes.
 - Those who are hospitalized are at risk of getting sicker from the flu than others because of their pre-existing conditions.
- Flu is the 9th leading cause of death in the U.S.
- Flu kills as many, or more, Americans than breast cancer.
- Approximately 30-50 thousand Americans die from the flu annually.



Influenza Transmission

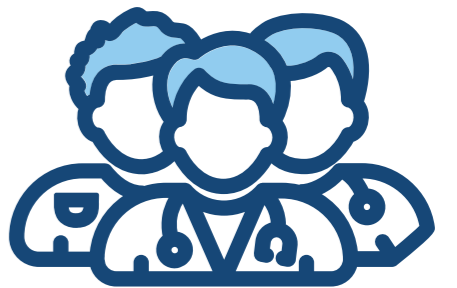
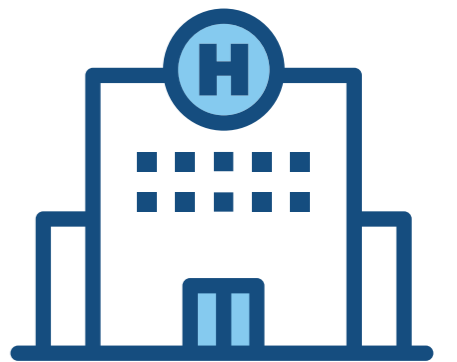


- **The flu is highly contagious.**
- The flu is easily spread from person to person via respiratory droplets when an infected person coughs, sneezes or talks.
- It is also spread when someone touches a surface contaminated with the virus.
- Most healthy adults may infect other people beginning 1-2 days before symptoms develop and up to 5-7 days after becoming sick.
- Children may pass the virus for longer than 7 days.
- People can be infected with the flu virus but have no symptoms and may still spread the virus to others.
- **This means that the flu can be passed on to someone else before a person realizes they are sick, as well as while they are sick.**



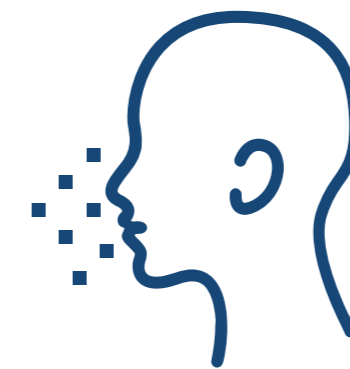
Influenza Transmission and Impact on Health Care Facilities

- Because influenza is highly contagious, it is capable of spreading rapidly through a health care facility.
- Influenza is transmitted to patients by other patients, visitors and hospital staff.
- Up to ¼ of hospital staff contract influenza each season, potentially putting already sick patients at risk for influenza disease.
- Influenza also causes economic and resource impacts. A CDC hospital survey conducted during flu season showed the following:
 - 35% of hospitals reported staffing shortages
 - 28% of hospitals reported bed shortages
 - 43% of hospitals reported ICU bed shortages
 - 9% of hospitals reported diversion of patients to other facilities



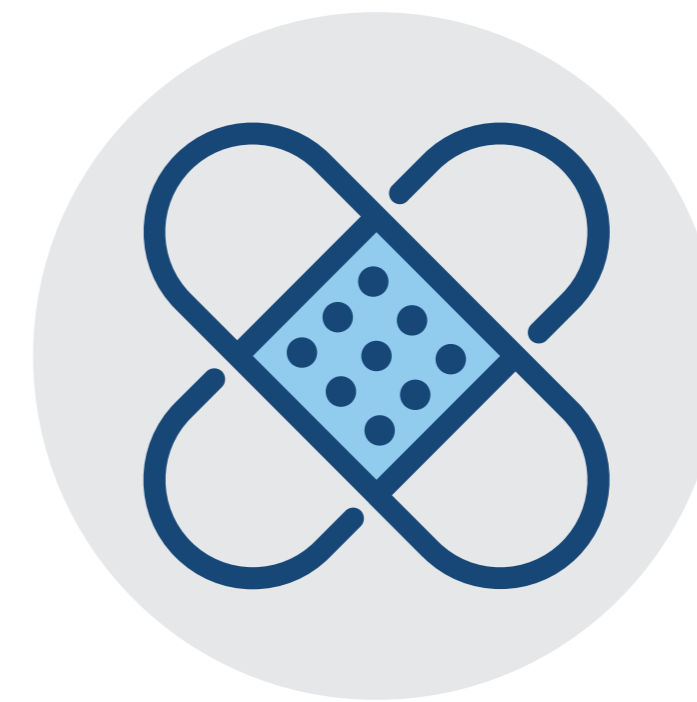
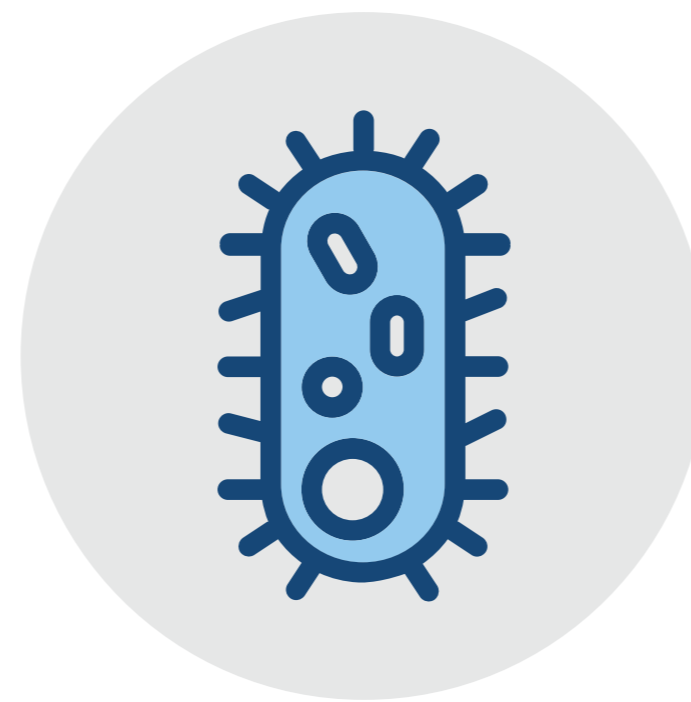
Diagnosing and Treating the Flu

- Influenza symptoms may come on suddenly and may last several days. Symptoms can include:
 - fever/chills
 - sore throat
 - muscle aches
 - fatigue
 - cough
 - headache
 - runny nose or nasal/sinus congestion
- Flu is formally diagnosed by using an influenza rapid diagnostic test, which consists of a nasal swab or wash, and can be resulted by a lab in 15 minutes.
- There are prescription medications called “**antiviral drugs**” that can be used to treat influenza illness. There are two FDA-approved influenza antiviral drugs recommended by the CDC.
 - Tamiflu® (generic name oseltamivir) is available as a pill or liquid. There have been manufacturer shortages of this medication.
 - Relenza® (generic name zanamivir) is a powder that is inhaled. It is not for people with breathing problems, like asthma or COPD.



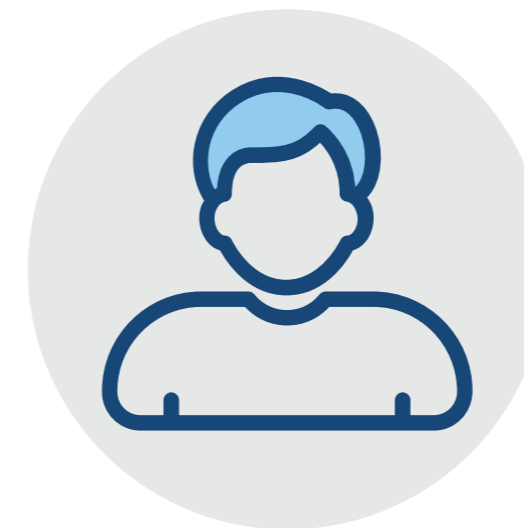
More On the Flu Vaccine

- Intramuscular (IM) flu vaccines are available.
- The IM vaccine contains only non-infectious fragments of influenza virus – these are called “inactivated viruses.”
- **The influenza vaccine does not cause influenza disease.**
- As with any vaccine, like medicine, there are chances of mild side effects, which usually go away on their own. These can include soreness at the site, fatigue, headache and fever.



Who Should Not Get the Flu Vaccine

- Influenza vaccine is not approved for children younger than 6 months of age.
- People who have had a severe allergic reaction to influenza vaccine generally should not be vaccinated.
- Some people should consult with a physician on whether they should receive the vaccine. These include:
 - People who have a moderate-to-severe illness, with or without a fever. Often, they can receive the vaccine when they are feeling better.
 - People with a history of [Guillain-Barre Syndrome](#), a severe paralytic illness. These often do not receive the vaccine.



Non-Vaccine Control and Prevention for Staff

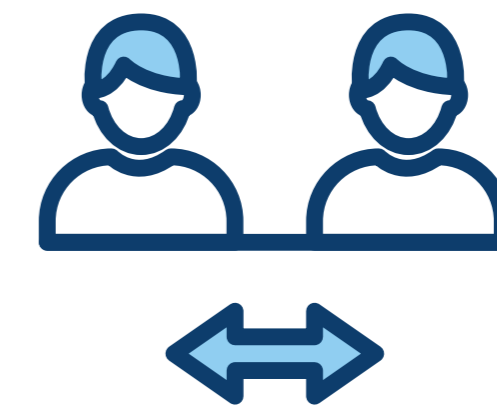
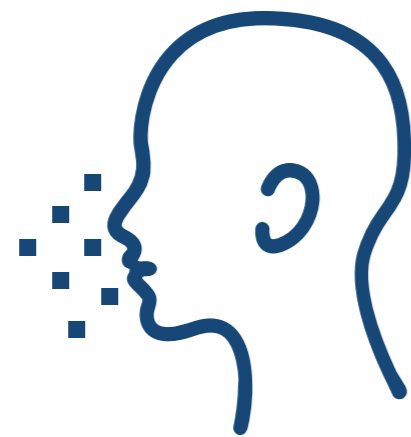
Along with vaccinations, there are several steps that can be taken to control and prevent the spread of influenza by minimizing potential exposure:

- **Get vaccinated!**
 - Research shows high rates of vaccinations in health care workers can reduce influenza outbreaks in a health care facility by 60%!
- **Stay home if sick!**
 - Many health care providers work while ill with influenza-like illness (ILI), likely exposing many very ill patients to the risk of influenza.
 - >75% of MDs and RNs surveyed reported working while sick with an ILI.
 - 37% of residents surveyed worked while sick with ILI.
- Adherence to respiratory hygiene and cough etiquette after returning to work is critical. If cough and sneezing are still present, staff should wear a facemask while in the facility.
- The importance of performing frequent hand hygiene, especially before and after each patient contact, must be followed.
- Frequently touched surfaces should be cleaned and disinfected.



Non-Vaccine Control and Prevention for Patients

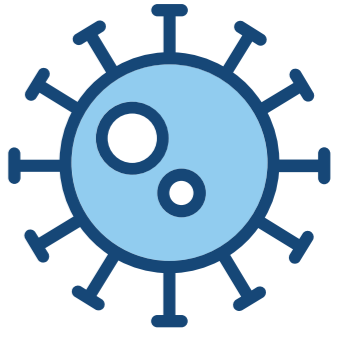
- Implement droplet precautions for patients with suspected/confirmed influenza for 7 days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer, while in the facility.
- If a patient under droplet precautions requires transport, have the patient wear a facemask, if possible, and follow respiratory hygiene, cough etiquette and hand hygiene.
- Communicate information about patients with suspected/confirmed influenza to appropriate personnel before transferring them to other departments.
- Limit visitors for patients with influenza to persons who are necessary for the patient's emotional well-being. Visitors who have been in contact with the patient before and during hospitalization are possible sources of influenza for other patients, visitors and staff.



Conclusion

- **The influenza vaccine is the best protection we have from influenza/flu and its complications.**
- Kaiser Permanente Hawaii offers free and convenient flu vaccines to its employees and members annually.
- Check with a physician to see if your patient is eligible for a flu shot.
- **Get vaccinated annually!** Encourage and recommend others to also get their flu shots, as well as use non-vaccine control and prevention methods to prevent the spread of flu.





References

- Kaiser Permanente. (2021). *Get the Facts on Seasonal Flu*. Retrieved October 5, 2022 from [Facts About the Flu & Flu Shot | Kaiser Permanente](#)
- Centers for Disease Control and Prevention. (2020). *Influenza*. Retrieved October 5, 2022 from <https://www.cdc.gov/nchs/fastats/flu.htm>

