

# 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

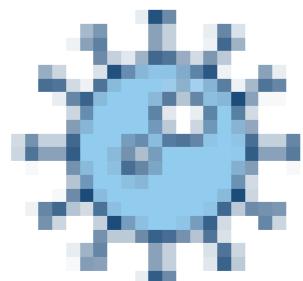
4

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

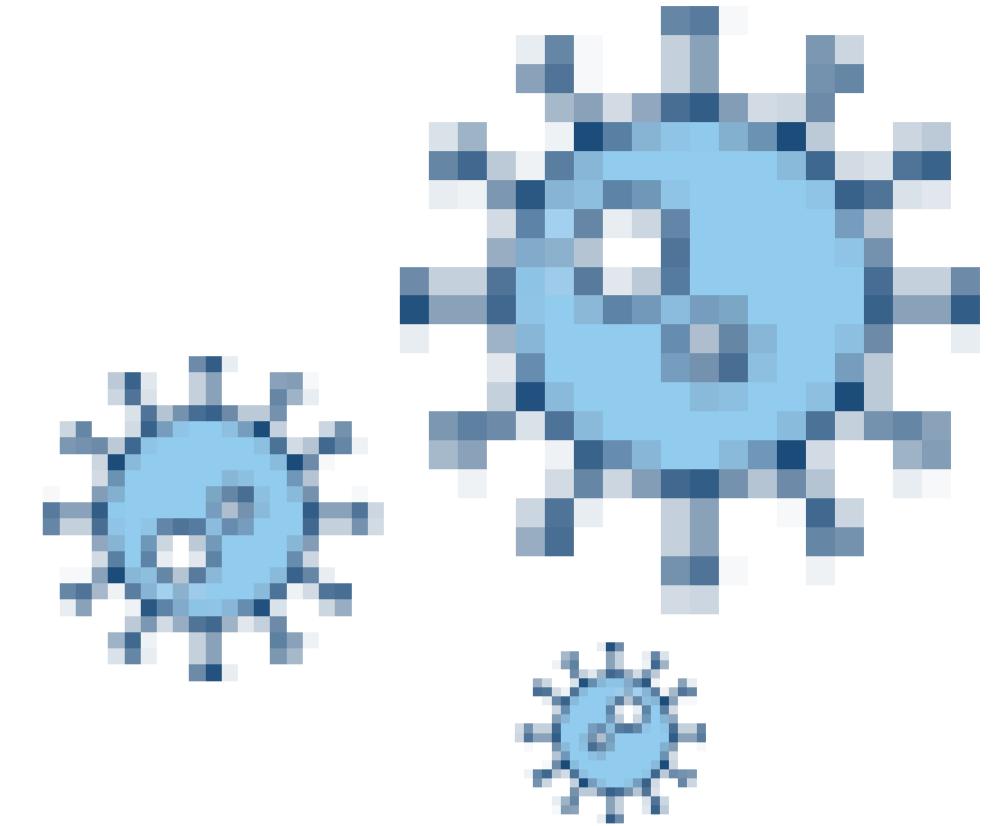
# What is Influenza (Flu)?



- 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 20th century, one which caused the deaths of 50 million people in 1918-1919.

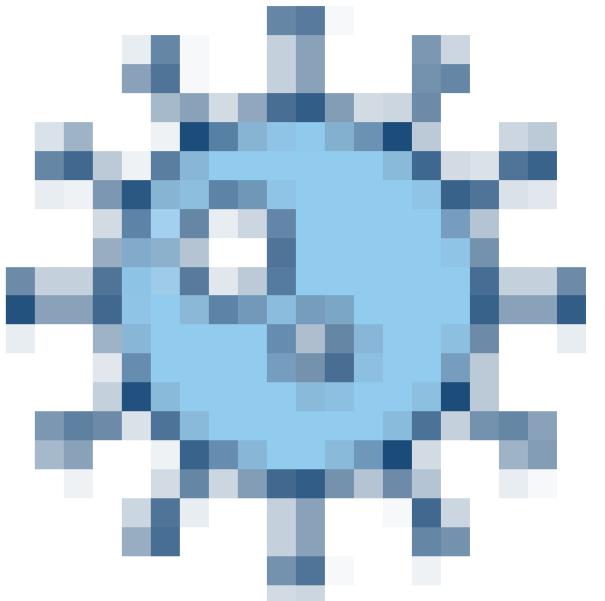


# The Flu is a Serious Illness

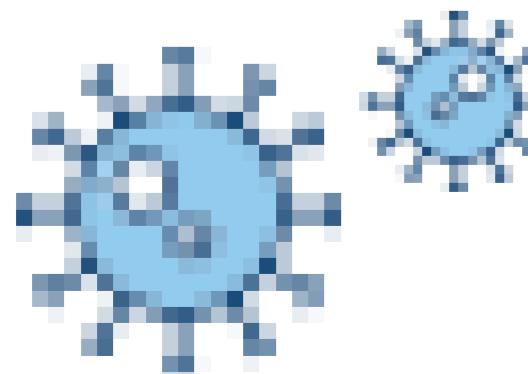


- It can cause mild to severe illness and can lead to **death**.
- Complications of flu can include:
  - bacterial pneumonia
  - sinus and ear infections
  - dehydration
  - seizures in children
  - worsening of chronic medical conditions: heart, lung, kidney or diabetes.
  - Those who are hospitalized are at risk of getting sicker from the flu than others because of their pre-existing conditions.
- In the United States between 2010 and 2023, the flu has resulted each year in:
  - 9.3 - 41 million illnesses
  - 100,000 – 710,000 hospitalization
  - 4,900 – 51,000 deaths

# Influenza Transmission

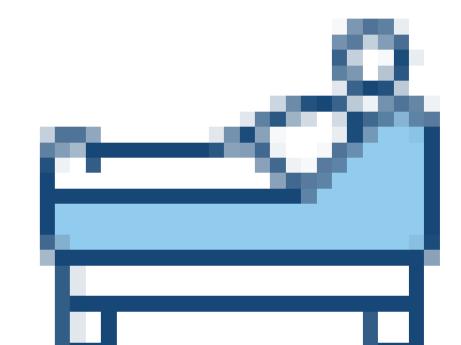
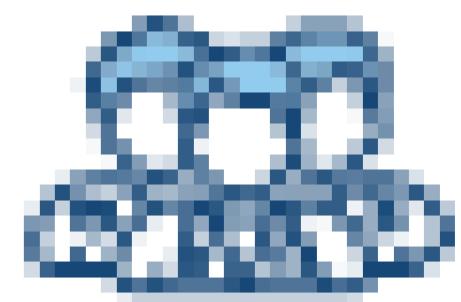
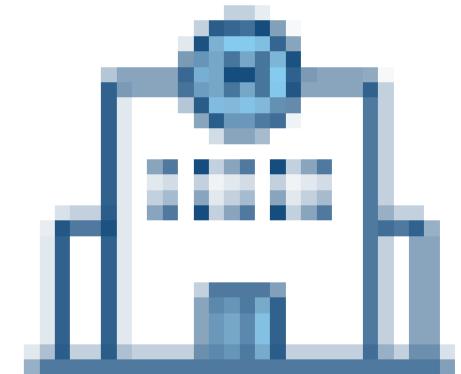


- **The flu is highly contagious.**
- The flu is easily spread from person to person via respiratory droplets when an infected person coughs, sneezes or talks.
- It is also spread when someone touches a surface contaminated with the virus.
- Most healthy adults may infect other people beginning 1-2 days before symptoms develop and up to 5-7 days after becoming sick.
- Children and people with weakened immune systems 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.**



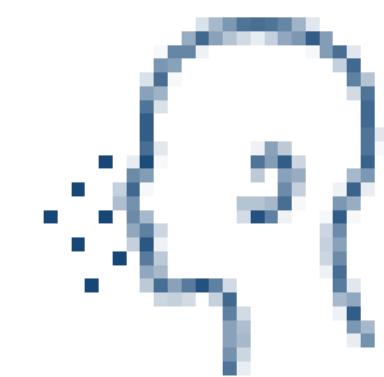
# Influenza Transmission and Impact on Health Care Facilities

- Since 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  $\frac{1}{4}$  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



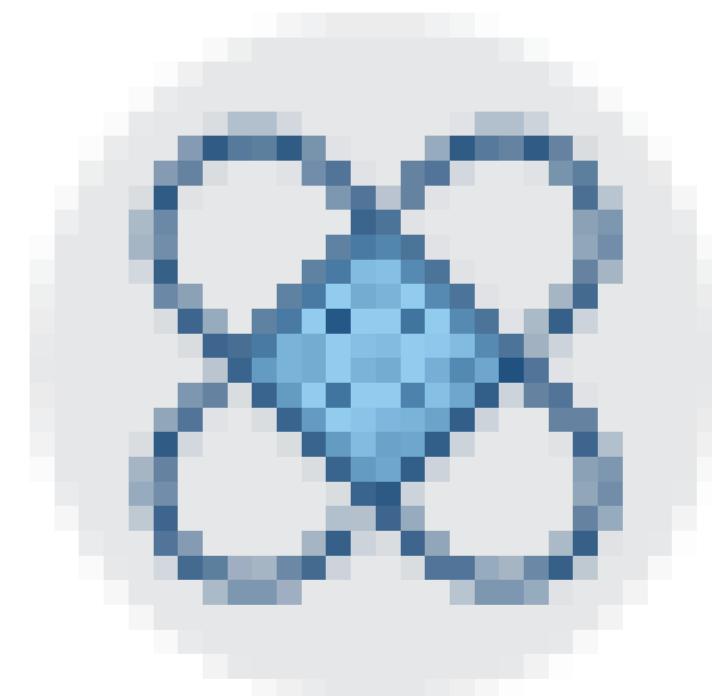
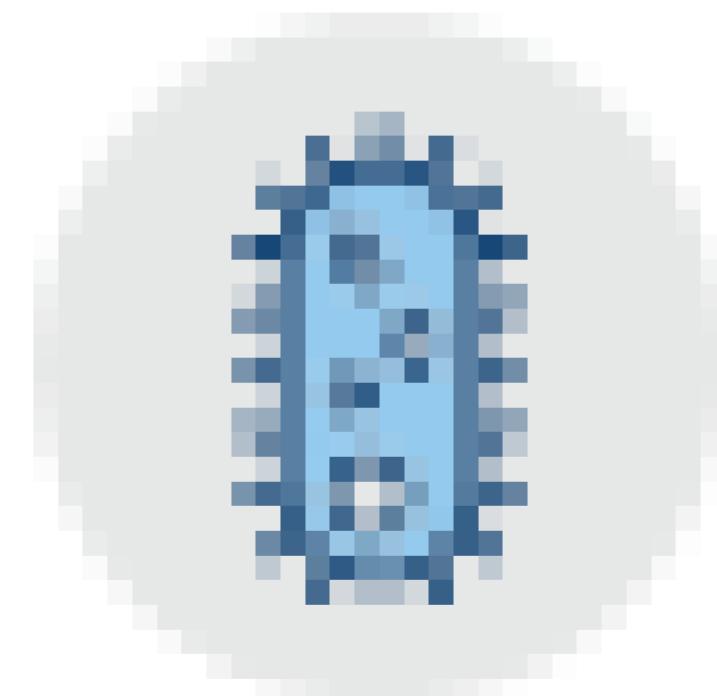
# Diagnosing and Treating the Flu

- 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 “**antivirals**” that can be used to lessen the symptoms of the influenza illness and shortens the time you are sick.
- Antiviral drugs work best when started within 1-2 days after flu symptoms begin.



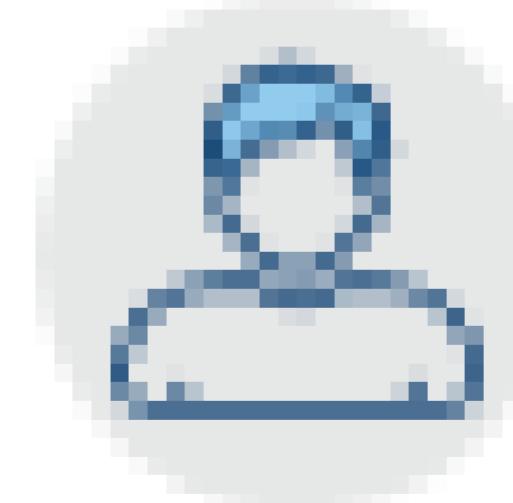
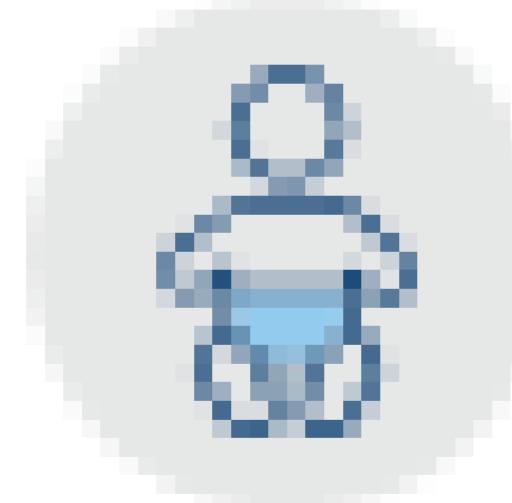
# More On the Flu Vaccine

- There are intramuscular (IM) flu vaccines available.
- The IM vaccine contain only non-infectious fragments of influenza virus – these are called “inactivated viruses.”
- **The 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

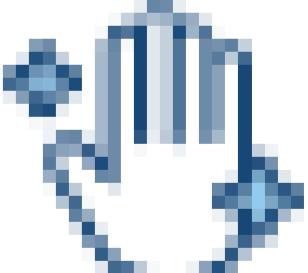
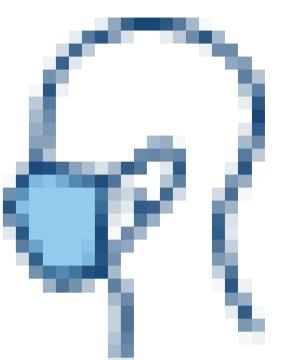
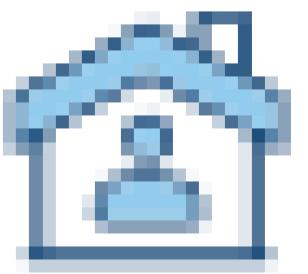
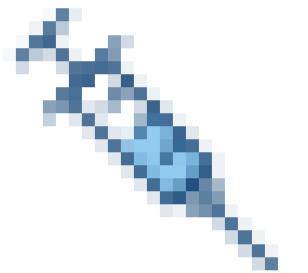
- Influenza vaccine is not approved for children younger than 6 months of age.
- People who have had a severe allergic reaction to influenza vaccine generally should not be vaccinated.
- Some people should consult with a physician on whether they should receive the vaccine. These include:
  - People 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

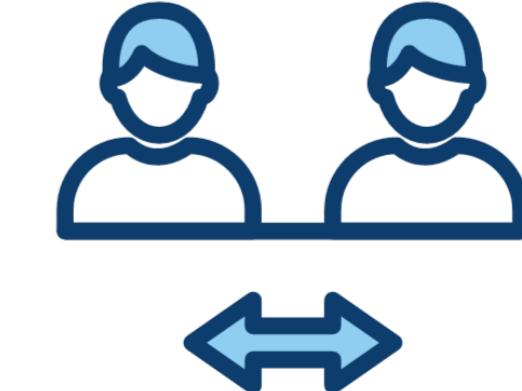
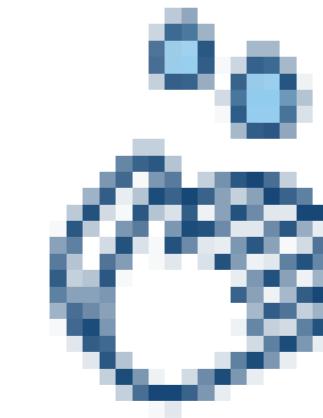
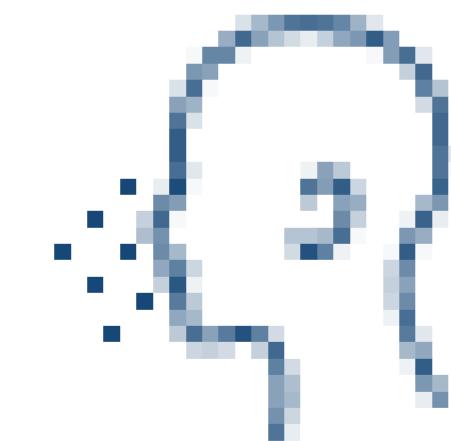
Along with vaccinations, there are several steps that can be taken to control and prevent the spread of influenza by minimizing potential exposure:

- **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.



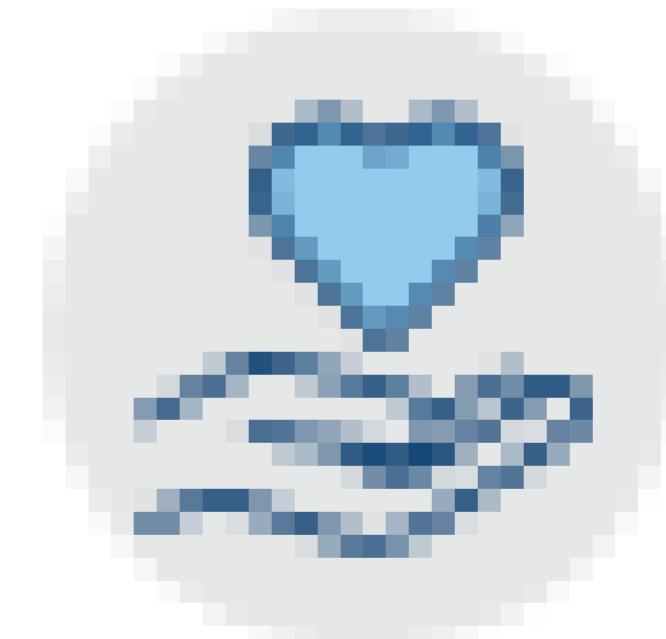
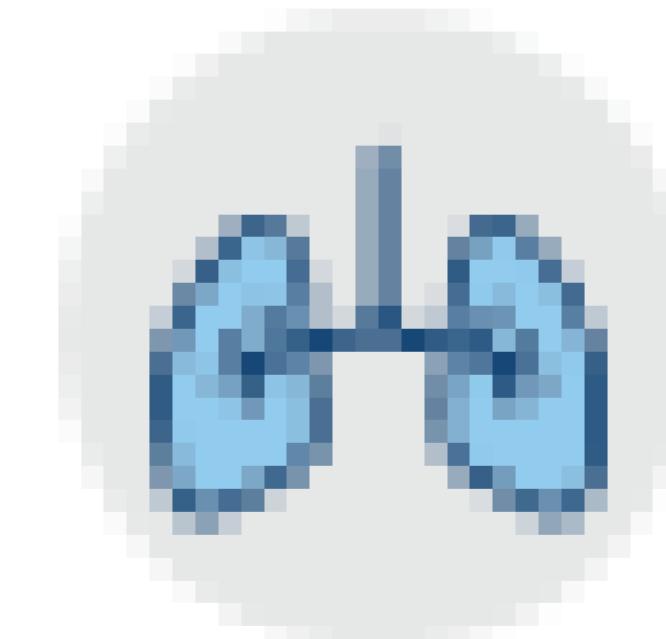
# Non-Vaccine Control and Prevention for Patients

- 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.

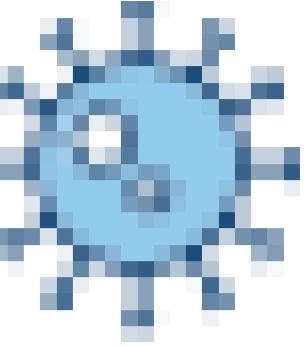


# Conclusion

- **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](https://www.kaiserpermanente.org/flu-facts-and-information)
- Centers for Disease Control and Prevention. *Influenza*. Retrieved December 11, 2024 from <https://www.cdc.gov/flu/site.html>



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