

Flu Prevention and Infection Control

Abraham Agiba, Jackie Deniz
Katrina Lazarte, & Marcela Dos Santos
Graduate Students
UCI Sue and Bill Gross School of Nursing



Outline

- Flu Basics
- Universal Precautions
- Flu shot information
- Norovirus
- Hepatitis A
- Questions?
- Stations

FLUVIEW



A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*
Week Ending Jan 06, 2018 - Week 1



*This map indicates geographic spread and does not measure the severity of influenza activity.
CDC (Weekly Influenza Surveillance Report, 2018)

Two types of diseases:

Communicable/Infectious
(Diseases you can share)

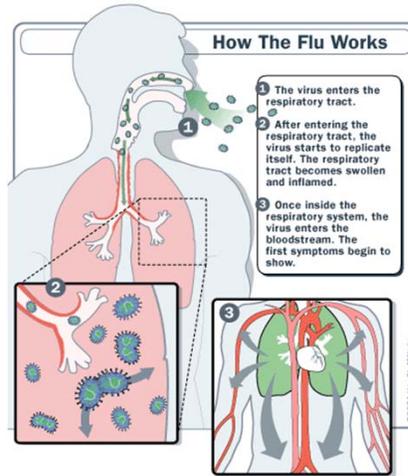


Non-communicable
(Diseases you cannot share)



What is Influenza (Flu)

- Viral infection that attacks your respiratory system — nose, throat and lungs.
- The virus is spread by tiny droplets when people cough, sneeze or talk.



CDC (Flu Fact Sheet, 2017)

Flu vs Cold Symptoms

Symptoms	Cold	Flu
Fever	Rare	Common: fever may be high (100 F to 102 F), may last 3 to 4 days.
Headache	Rare	Common
General aches, pains	Sometimes	Usual, often severe
Fatigue, weakness	Sometimes	Usual, can last 2 to 3 weeks
Extreme exhaustion	Never	Usual, typically at the beginning of the illness
Stuffy nose	Common	Sometimes
Sneezing	Common	Sometimes
Sore throat	Common	Sometimes
Chest discomfort, cough	Mild to moderate, hacking cough	Common, can become severe

CDC (Cold vs Flu, 2016)

So why is it important to talk about the Flu?

Influenza and Other Respiratory Viruses Weekly Report

California Influenza Surveillance Program



Highlights (Week 1: December 31, 2017 – January 6, 2018)

Statewide Activity

No Activity Sporadic Local Regional **Widespread**

Regions with Elevated Activity



- ▶ **Deaths:** 15 (Age 0-64)
- ▶ **Outbreaks:** 68
- ▶ **Laboratory:** 38.8% positive
- ▶ **Outpatient IIL:** Above expected levels
- ▶ **Hospitalizations:** Above expected levels

Click on images and links for more information

Key messages:

- Influenza is circulating widely in California.
- Influenza A (H3N2) viruses are predominating this season.
- It's not too late to get vaccinated – vaccination is the best protection against this potentially serious disease.
- Take actions to stop the spread of flu: wash hands often, cover coughs and sneezes, and stay home when sick.

CDPH (California Influenza Surveillance Program, 2018)

Flu widespread in 36 states, CDC reports

USA TODAY NETWORK Rachel Ohm, Knoxville (Tenn.) News Sentinel

Published 12:15 p.m. ET Dec. 29, 2017 | Updated 5:19 p.m. ET Dec. 29, 2017



Deadly flu season hits California particularly hard

By Jacqueline Howard, CNN
Updated 6:29 PM ET, Tue January 9, 2018



At risk populations for developing flu like complications

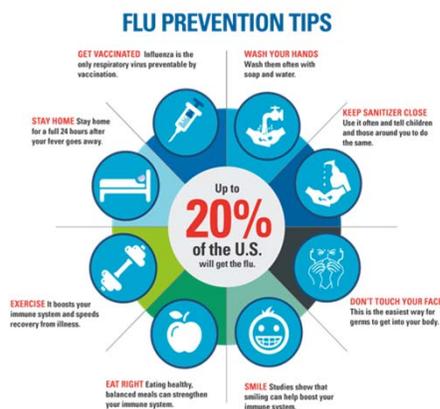
- Children younger than 5, but especially children younger than 2 years old.
- Adults 65 years of age and older.
- Pregnant women (and women up to two weeks postpartum).
- Residents of nursing homes and other long-term care facilities.

CDC (Influenza, 2018)

What can you do to avoid getting sick?

Universal Precautions

- **Get vaccinated.**
- Practice hand hygiene.
- Practice cough and sneeze etiquette.
- Avoid close contact with with sick individuals.
- Avoid touching your mouth, eyes, or nose.
- Clean and disinfect surfaces and objects that may be contaminated.



CDC (Preventive Steps, 2017)

Universal Precautions: Hand Hygiene



1. Remove all jewelry.
2. Turn on faucet using a paper towel.
3. Wet your hands and apply liquid soap.
4. Work soap into a lather and scrub hands for at least twenty seconds.
5. Clean between your fingers.
6. Scrub your nails.
7. Dry your hands with a clean paper towel.
8. Turn off the faucet using a clean paper towel.

Universal Precautions: Cough/Sneeze



- The most effective and sanitary way to cover your cough/sneeze is to cough/sneeze into your sleeve.
- You should NEVER cough/sneeze into your hand.
- Always wash or sanitize your hands afterwards.
- If necessary, wear a surgical mask to protect others.

Stop the spread of germs that make you and others sick!

Cover your Cough



CDC (Cover Your Cough, 2015)

Universal Precaution: Influenza (Flu) Vaccination

- Flu vaccines cause antibodies to develop in the body about two weeks after vaccination.
- Antibodies provide protection against infection with the viruses that are in the vaccine.



Get the
FLU  **SHOT**
not the flu!

CDC (Why Get a Flu Vaccine, 2017)

What are the benefits of the flu shot?

- Flu vaccine can prevent you from getting sick from the flu
- Vaccination can prevent hospitalization from flu-like symptoms among children and older adults
- It is an important preventative tool for people with chronic health problems
- Flu vaccination also has been shown to be associated with reduced hospitalizations among people with diabetes (79%) and chronic lung disease (52%)
- Flu vaccination also may make your illness milder if you do get sick.

The estimated number of flu **hospitalizations prevented** by vaccination during the 2015-2016 season:

71,000

enough to fill every registered hospital bed in the state of Texas



CDC (Why Get a Flu Vaccine, 2017)

When should you NOT get a vaccine?

- If you are not feeling well (example: you have a Cold)
- People with life threatening allergies to flu vaccine or any ingredient in the vaccine, such as eggs.
- If you ever had Guillain-Barré Syndrome (a severe paralyzing illness, also called GBS).
- Babies <6 months old



CDC (Influenza, 2017)

Where can you get a flu shot?

- Ask your doctor
- Find a clinic
- Go to a pharmacy
- Visit the OC Health Care Agency Flu Clinic

+
**KEEP
CALM
AND
GET YOUR
FLU SHOT**



OC Health Care Agency (Information on Flu Shots, 2017)

Food Safety: Norovirus

Norovirus

- The virus is highly contagious
- Causes sudden onset of Vomiting/Diarrhea

How is it spread?

- Food or water that is contaminated during preparation or contaminated surfaces.
- Close contact with an infected person



CDC (Tips to Protect Yourself from Norovirus, 2017)

Norovirus: Symptoms

Symptoms: Start 12-48 hours after exposure.

- Nausea
- Vomiting
- Abdominal pain or cramps
- Watery or loose diarrhea
- Malaise
- Low-grade fever
- Muscle pain



SANONDAF(North East Norovirus Outbreak, 2017)

Food Safety: Hepatitis A

Hepatitis A

- Hepatitis A is a highly contagious liver infection caused by the hepatitis A virus

How is it spread?

- Contaminated food or water or from close contact with a person or object that's infected
- Eating raw shellfish
- Having sex with someone with the virus

Symptoms: Don't appear until you've had the virus for a few weeks. But not everyone with hepatitis A develops them.

Symptoms can include:

- Yellowing skin and eyes
- Dark urine
- Light-colored stools
- Nausea and vomiting
- Loss of appetite
- Extreme fatigue

PREVENTION

SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION, WORLD HEALTH ORGANIZATION, WORLD HEPATITIS ALLIANCE

WNCAP (Hepatitis ABC's, 2017)

Food Safety: Prevention

KEEP YOUR FAMILY SAFER FROM FOOD POISONING

Check your steps at FoodSafety.gov

SAFE MINIMUM INTERNAL TEMPERATURES <i>As measured with a food thermometer</i>	
Beef, pork, veal and lamb (roast, steaks and chops)	145°F with a 3-minute "rest time" after removal from the heat source.
Ground Meats	160°F
Poultry (whole, parts or ground)	165°F
Eggs and egg dishes	160°F Cook eggs until the yolk and white are firm. Scrambled eggs should't be runny.
Leftovers	165°F
Fin Fish	145°F



CDC (Food safety, 2017)

NDSU (Fight BAC!, 2017)

Stations

Station 1: Flu Shot Jeopardy

Station 2: Infection Control

Station 3: Food safety and Norovirus/Hep A

Station 4: Debunking Flu Myths

Acknowledgement

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under 1 U1QHP28724-01-00, Cultivating a Culture of Caring for Older Adults, for \$2.5 million. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

We thank for the guidance from faculty members in UCI School of Nursing.

References

- California Influenza Surveillance Program. (2018, January 6). Retrieved from <https://www.cdph.ca.gov/>
- Centers for Disease Control and Prevention (CDC). Influenza (Flu). (2017). Retrieved from <https://www.cdc.gov/flu/index.htm>
- Colorado Farm to Table Food Safety. (n.d.). Retrieved from <http://cofarmtotable.tumblr.com/>
- Hepatitis. (2017). Retrieved from <https://wnicap.org/hepatitis>
- Mayo Clinic. Norovirus infection. (2017). Retrieved from <https://www.mayoclinic.org/diseases-conditions/norovirus/symptoms-causes/syc-20355296>
- Mayo Clinic. Hepatitis A. (2017). Retrieved from <https://www.mayoclinic.org/diseases-conditions/hepatitis-a/symptoms-causes/syc-20367007>
- Norovirus. (2016, July 15). Retrieved from <https://www.cdc.gov/norovirus/preventing-infection.html>
- OC Health Care Agency. Influenza. (2017). Retrieved from <http://www.ohealthinfo.com/gov/health/phs/about/dcepi/epi/flu/fluinfo.asp>
- Prevention Strategies for Seasonal Influenza in Healthcare Settings. (2016, October 05). Retrieved from <https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>
- Weekly U.S. Influenza Surveillance Report. (2018, January 12). Retrieved from <https://www.cdc.gov/flu/weekly/index.htm>
- Why get a flu vaccine?. (2017, October 03). Retrieved from <https://www.cdc.gov/flu/protect/whoshouldvax.htm>