

# Cough, Sneeze, Sniffle, Oh My?!?

Region 8

September 2010  
Continuing Education



# Objectives

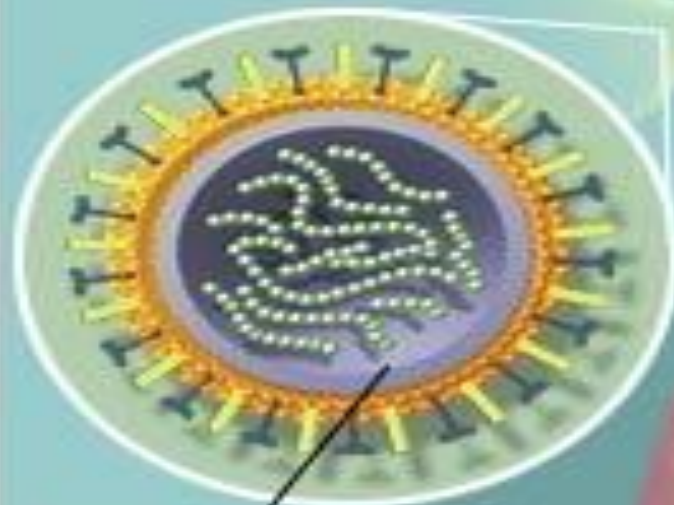
- Describe differences between influenza and the common cold.
- Describe differences between influenza and gastroenteritis.
- Review influenza prevention, symptoms, treatments and potential complications.

# Influenza

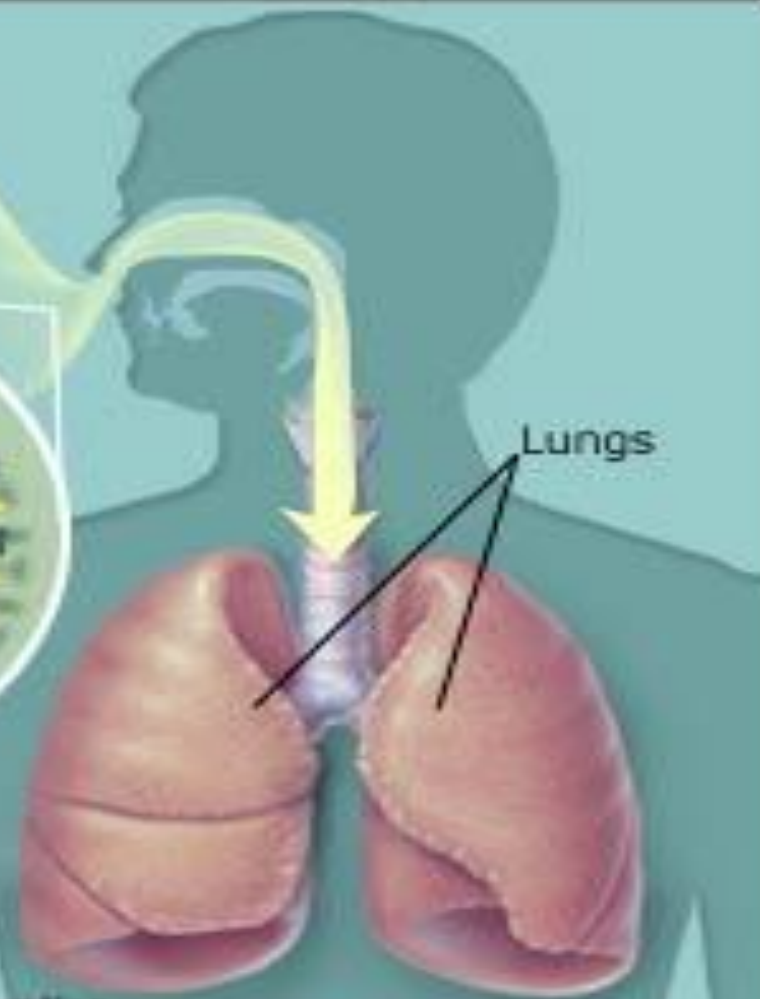
- Viral infection that attacks your respiratory system, including your nose, throat, bronchial tubes and lungs.
- If you're generally healthy and you catch influenza — commonly called the flu — you're likely to feel rotten for a few days, but you probably won't develop complications or need hospital care. If you have a weakened immune system or chronic illness, though, influenza can be fatal.

## Influenza Virus

Influenza enters through the nose and settles in the respiratory tract.



Influenza virus



# Influenza

- Initially, the flu may seem like a common cold with a runny nose, sneezing and sore throat. But colds usually develop slowly, whereas the flu tends to come on suddenly. And although a cold can be a nuisance, you usually feel much worse with the flu .
- We will discuss the difference between a cold and the flu later!

# Flu Symptoms

- Fever over 101 F (38 C) in adults, and often as high as 103 to 105 F (39.5 C to 40.5 C) in children
- Chills and sweats
- Headache
- Dry cough
- Muscular aches and pains, especially in your back, arms and legs
- Fatigue and weakness
- Nasal congestion
- Loss of appetite
- Diarrhea and vomiting in children

# How the Flu Flies.....

- Flu viruses travel through the air in droplets when someone with the infection coughs, sneezes or talks. You can inhale the droplets directly, or you can pick up the germs from an object, such as a telephone or computer keyboard, and then transfer them to your eyes, nose or mouth.

# The ABC's of the Flu

- The flu is caused by three types (strains) of viruses —
- influenza A
- influenza B
- influenza C

# What 's the difference between H1N1 flu (swine flu) and influenza A?



# H 1 N 1.....

- Influenza (flu) viruses are divided into three broad categories: influenza A, B or C. Influenza A is the most common type. The new virus causing H1N1 flu (swine flu) is a variety of influenza A. This year's expected seasonal influenza strain is also a type A strain, but a different variety.

# You're at increased risk of influenza or its complications if you:

- Are an infant or young child
- Are over age 50
- Are a resident of a nursing home or other long term care facility
- Have a chronic disorder, such as diabetes or heart, kidney or lung disease
- Have a weakened immune system, such as from medications or HIV infection
- Will be pregnant during flu season
- Work in a health care facility where you're more likely to be exposed to the flu virus
- Are in regular, close contact with infants or young children

# But I'm healthy.....

- If you're young and healthy, influenza usually isn't serious. Although you may feel miserable while you have it, the flu usually goes away with no lasting effects. But high-risk children and adults may develop complications such as:
  - Ear infections
  - Acute sinusitis
  - Bronchitis
  - Pneumonia
  - Encephalitis

# Anti-Viral.....NOT Anti-biotic!

- Usually, you'll need nothing more than bed rest and plenty of fluids to treat the flu. But in some cases, your doctor may prescribe an antiviral medication such as oseltamivir (Tamiflu) or zanamivir (Relenza)



# Time for a funny!

*Why do they call it the "flu"? No one who has it feels like flying. A better name would be the "crawled two feet and passed out".*



# If you do come down with the flu, these measures may help ease your symptoms:

- **Drink plenty of liquids.** Choose water, juice and warm soups to prevent dehydration. Drink enough so that your urine is clear or pale yellow.
- **Rest.** Get more sleep to help your immune system fight infection.
- **Try chicken soup.** It's not just good for your soul — it really can help relieve flu symptoms by breaking up congestion.
- **Consider pain relievers.** Use an over-the-counter pain reliever such as acetaminophen (Tylenol, others) or ibuprofen (Advil, Motrin, others) cautiously, as needed.
- **Get an annual flu vaccination.** The best time to be vaccinated is October or November.

# Shot or not to shot??

- Injection
- FluMist



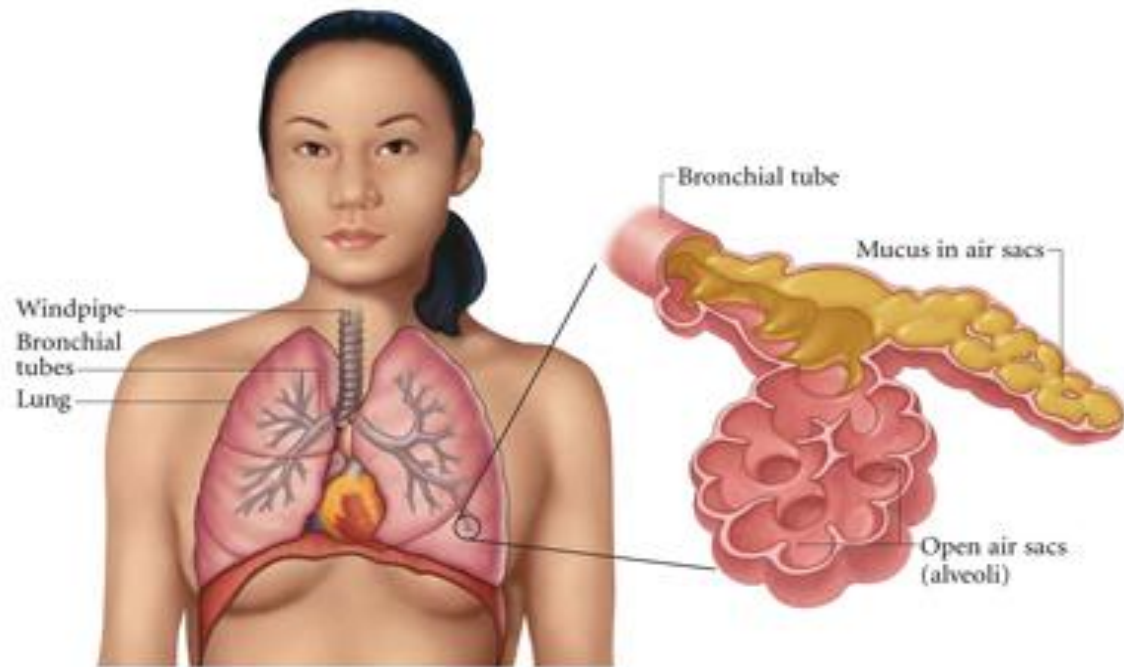
# Vaccine...

- The flu vaccine is safe for children 6 months and older. If your child isn't at risk of the flu but lives with someone who is, you still may want to have your child vaccinated. That way, your child is less likely to infect others. The more people immunized, the less likely it is that the flu will spread through a community.

# Tips for prevention

- **Wash your hands**
- **Eat right, sleep tight**
- **Exercise regularly**
- **Avoid crowds during flu season**

# Pneumonia



# Pneumonia....very obvious on this CXR!



# What's the Difference?!?

- Bacterial Pneumonia
- Viral Pneumonia
  
- Difference in Treatment??

**What about just a plain old COLD!**



# What is the difference between a cold and the flu?

- Both are respiratory illnesses, but caused by different viruses.
- Colds are usually milder and tend to not cause any serious health problems.....like pneumonia.

# How can you tell the difference between a cold and the flu?

- Because colds and flu share many symptoms, it can be difficult (or even impossible) to tell the difference between them based on symptoms alone.
- Tests??

# Cold or Influenza, either way, what can I do to help?!?

- Wheezing
  - Give nebulizer(s) to help make them breath easier. A lot of times they will start coughing up more mucus after nebs! Be prepared 😊

# Treatment

- If your patient hasn't been feeling well, they probably haven't been eating and drinking normally so they are probably mildly to severely dehydrated.
  - Give them some fluid. 200ml increments of 0.9NS may not only help their vitals, it will probably help them **feel a lot better!**

# Signs and Symptoms of Mild Dehydration

- Thirst
- Loss of Appetite
- Dry Skin
- Skin Flushing
- Dark Colored Urine
- Dry Mouth
- Fatigue or Weakness
- Chills
- Head Rushes

# Signs and Symptoms of Moderate-Severe Dehydration

- Increased heart rate
- Increased respiration
- Decreased BP
- Decreased sweating
- Decreased urination
- Increased body temperature
- Extreme fatigue
- Muscle cramps
- Headaches
- Nausea
- Tingling of the limbs

## Wait a second.....

- But my patients always tell me that they have “the flu” and their main complaints are vomiting and diarrhea???

# Gastroenteritis IS NOT the FLU!

- Although it's commonly called stomach flu, gastroenteritis isn't the same as influenza. Real flu (influenza) affects your respiratory system — your nose, throat and lungs. Gastroenteritis, on the other hand, attacks your intestines, causing signs and symptoms such as.....

# Signs and Symptoms

- Watery, usually non-bloody diarrhea — bloody diarrhea usually means you have a different, more severe infection
- Abdominal cramps and pain
- Nausea, vomiting or both
- Occasional muscle aches or headache
- Low-grade fever

# N/V/D

- Viral gastroenteritis is an intestinal infection marked by watery diarrhea, abdominal cramps, nausea or vomiting, and sometimes fever.



# How'd I catch that??

- The most common way to develop viral gastroenteritis is through contact with an infected person or ingestion of contaminated food or water. If you're otherwise healthy, you'll likely recover without complications. But for infants, older adults and people with compromised immune systems, viral gastroenteritis can be deadly.

# Prevention is KEY!

- There's no effective treatment for viral gastroenteritis, so prevention is key. In addition to avoiding food and water that may be contaminated, thorough and frequent hand washing is your best defense.

# When will it go away??

- Depending on the cause, viral gastroenteritis symptoms may appear within one to three days after you're infected and can range from mild to severe. Symptoms usually last just a day or two, but occasionally they may persist as long as 10 days.
- Because the symptoms are similar, it's easy to confuse viral diarrhea with diarrhea caused by bacteria such as salmonella and Escherichia coli (E. coli) or parasites such as giardia.

# When to see a doctor.....Adults!

- You're not able to keep liquids down for 24 hours
- You've been vomiting for more than two days
- You're vomiting blood
- You're dehydrated — signs of dehydration include excessive thirst, dry mouth, deep yellow urine or little or no urine, and severe weakness, dizziness or lightheadedness
- You notice blood in your bowel movements
- You have a fever above 104 F (40 C)

# When to see a doctor....Children!

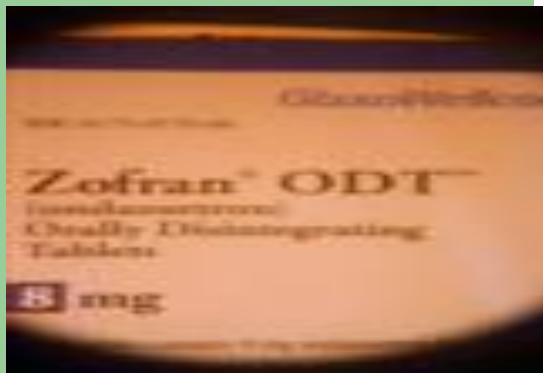
- Has a fever of 102 F (38.9 C) or higher
- Seems lethargic or very irritable
- Is in a lot of discomfort or pain
- Has bloody diarrhea
- Seems dehydrated — watch for signs of dehydration in sick infants and children by comparing how much they drink and urinate with how much is normal for them
- If you have an infant, remember that while spitting up may be an everyday occurrence for your baby, vomiting is not. Babies vomit for a variety of reasons, many of which may require medical attention.

# When to see a doctor.....Baby!

- Has vomiting that lasts more than several hours
- Hasn't had a wet diaper in six hours
- Has bloody stools or severe diarrhea
- Has a sunken fontanel — the soft spot on the top of your baby's head
- Has a dry mouth or cries without tears
- Is unusually sleepy, drowsy or unresponsive

# **A number of viruses can be the cause of gastroenteritis, including**

- **Rotavirus**
- **Noroviruses**



## Again, what can I do??

- Zofran to the rescue!
  - 4mg ODT tablet for patient experiencing nausea and/or vomiting may really subside their symptoms.
    - May not get instant relief, sometimes it may take up to 30 minutes to kick in, but it still should be used by EMS even if you personally don't see the results.....the ED and the patient will 😊

# Fluids.....again?!?

- For sure fluids should be given to patients that have had any vomiting and/or diarrhea!
  - Like mentioned before, it will not only help their vitals, it will help them to start feeling better!
    - 200ml increments of 0.9NS
      - What do you have to check and document between every 200 ml's??

# Masks, gloves, gowns, OH MY!!

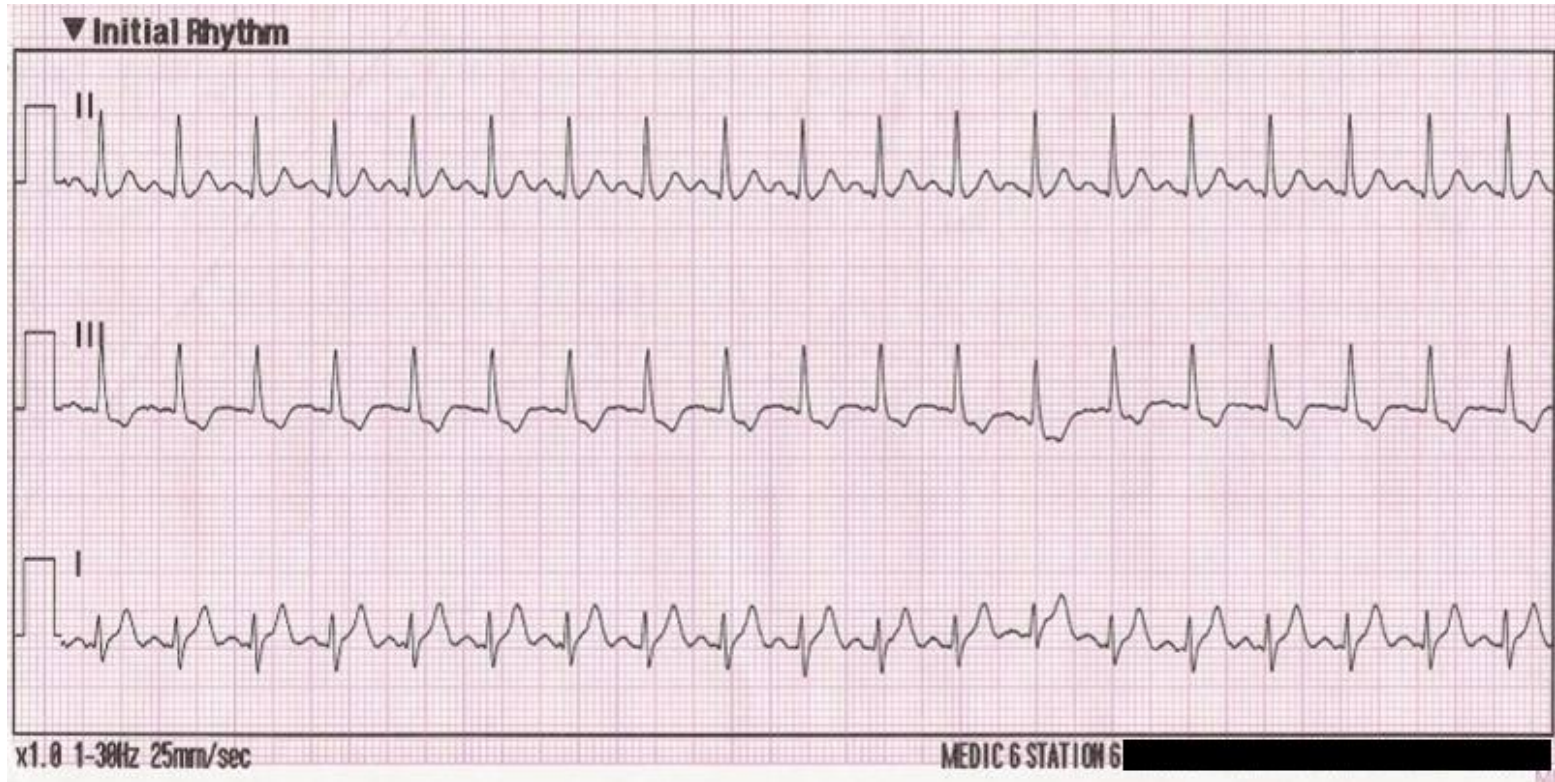
- With any patient, please wear appropriate PPE.
- Gloves, eye protection, N95, etc.
- Discussion of what should be worn when....



# Don't forget your PPE....

- “Institute of Medicine said if properly fitted and used correctly, N95 respirators filter out at least 95 percent of very small airborne particles, smaller than influenza viruses”.

**Sinus Tachycardia**: Most of these “flu” patients will probably have something like this.....



# SOP of the Month!

- Initial Medical Care
- Please do roundtable and review all BLS and ALS aspects of initial medical care.

# QUESTIONS?!?



# REFERENCES

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