Influenza Training

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Influenza

Epidemics of influenza occur nearly every year and most typically peak in the months of January and February.

The estimated annual average of death is 36,000 (1990-1999).

- Flu viruses are constantly undergoing minor changes

- Flu viruses can also undergo major change that results in a virus against which the population has no immunity

- An influenza pandemic may result, which causes high rates of infection, illness and deaths, compared to typical epidemics of influenza.

- These major changes occur sporadically and unpredictably.

History of Pandemics

- Pandemics occur over a large/wide geographic area and effects an exceptionally high proportion of the population

- Pandemics are a naturally occurring event.

- Three (3) pandemics in the past century

  *Spanish Flu of 1918

  *Asian Flu of 1957

  *Hong Kong Flu of 1968

- Spanish Flu of 1918: killed an estimated 80-100 million people in less than one (1) year
- Asian Flu of 1957: killed approximately 69,800 in the US and one (1) million worldwide
- Hong Kong Flu of 1968 (mildest): killed 33,800 in the US and 700,000 worldwide

"H5N1" Avian Flu (Bird Flu)

- High concern this may be the fourth pandemic to occur
- Bird flu has been around for centuries. H5N1 subtype is of concern due to its infection to the human population
- Currently there is NO immunity in the human population

- Currently affecting populations in Asia, Indonesia, China, Japan and other European countries

- NO US cases as of this date

- Currently affecting the "young" (15-40 year olds); has affected young children and some elderly

- Infection/Death Rates as of June 6, 2006: 225 cases/128 deaths

- Mortality rate is 59%

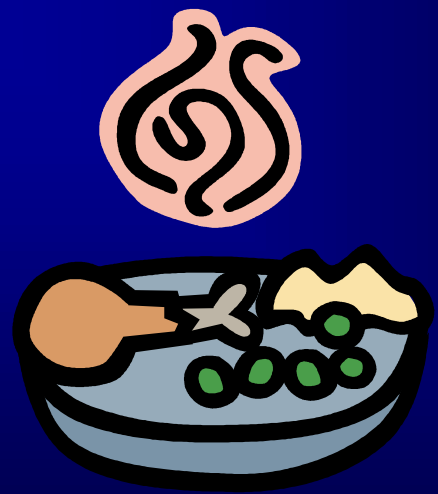
- The virus is not readily transmitted from human to humans as of yet
- The virus is transmitted from bird to human
- H5N1 virus is known to mutate rapidly and can acquire genes form other viruses that are known to infect other species other than birds.

- The virus to date has infected pigs, tigers and cats, both in the wild and laboratory settings, which had fatal outcomes.

Transmission

- Transmission of the avian virus to humans is due to coming in contact with contaminated secretions and contaminated surfaces from infected poultry

- Risk to humans: currently low in the US
- Humans should avoid contact with infected birds, contaminated surfaces and be careful when handling and cooking poultry



Vaccines and Antivirals

- Currently **NO** vaccine to protect humans from the avian H5N1 virus
- Scientists have been working hard to develop a vaccine for H5N1, but viruses are constantly changing, it is difficult to know if the current H5N1 strain would be effective against a pandemic virus

- Influenza antiviral medications are another tool to reduce the health impact of an influenza pandemic.
- Currently the US is stockpiling 20 million treatment courses.
- Current Antivirals: Tamiflu (oseltamivir), Flumadine (rimantadine), Symmetrel (amantadine) and Relenza (zanamivir)

- Tamiflu is not available currently due to the stockpiling order and the use of the drug in the avian flu countries.
- Tamiflu has shown to be the only antiviral that is working on the H5N1 virus.
- Still the mortality rate is over 50%.

What is Influenza

- A contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness and can lead to death

Type A Flu (USA)

- Signs and Symptoms
  - *fever (usually high)
  - *headache
  - *extreme tiredness
  - *dry cough

*sore throat

*runny or stuffy nose

*muscle aches

*stomach symptoms: nausea, vomiting and diarrhea

Complications

- Bacterial Pneumonia
- Dehydration
- Worsening of chronic medical conditions such as:

  *congestive heart failure

  *asthma

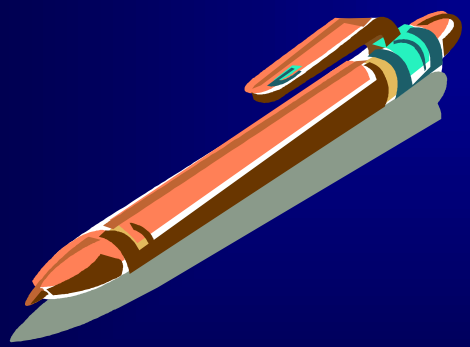
  *diabetes

  Children may get sinus/ear infections

How Flu Spreads

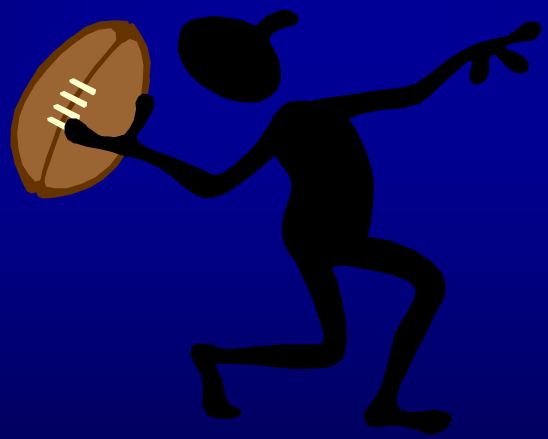
- Flu viruses spread in respiratory droplets caused by coughing and sneezing.

- Infection can be caused by touching something that has the flu virus on it and then the person touches their mouth or nose



- Most healthy adults may be able to infect others beginning 1 day ***before*** symptoms develop and up to 5 days *after* becoming sick.

- So…… this means you can pass on the flu to someone else before you know you are sick, as well as while you are sick



Prevention

- Get a FLU SHOT! CDC recommends all persons capable and older than 6 months old.
- Precautions & Physician Consultation:

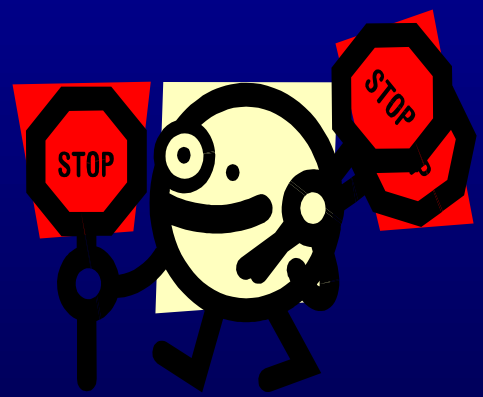
  *severe allergies to chicken eggs

  *severe reaction in the past

  *moderate or severe illness w/fever should wait until symptoms lessen

Stop the Spread

- Practice and use good Cough Etiquette
- Cover your mouth and nose when you sneeze or cough



- Use a tissue or your upper sleeve, NOT YOUR HANDS
- Put your used tissue in the waste basket and do lay on other surfaces

- Avoid touching your eyes, nose or mouth.
- Viruses spread when a person touches something that is contaminated such as telephones, doorknobs, tables, pencils etc…
- Viruses can live for a long time (two hours or more)

- Practice and perform Hand Hygiene
- Wash hands with soap and warm water for at least 15-20 seconds. Rub hands vigorously together and scrub all surfaces.

- Use alcohol-based hand cleaner, rub hands together until product is dry

- Stay HOME when you are sick or have flu symptoms
- Check with a health-care provider if needed
- Remember keeping your distance from others may protect them from getting sick

- Practice other GOOD health habits
- Get plenty of sleep
- Be physically active
- Manage your STRESS
- Drink plenty of fluids and eat nutritious foods

If further information is needed please feel free to contact:

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