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 from 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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