

EPI Update for Friday, April 20, 2007
Center for Acute Disease Epidemiology
Iowa Department of Public Health

Items for this week's EPI Update include:

- **FDA approves vaccine for H5N1 influenza**
- **April is Sexual Assault Awareness Month**
- **New information on the 1918 influenza epidemic**
- **Meeting announcements and training opportunities**

FDA approves vaccine for human H5N1 influenza

This week, the U.S. Food and Drug Administration announced the first approval in the United States of a vaccine for humans against the H5N1 avian influenza strain. This strain of "bird flu" has caused the deaths of almost 300 people and millions of birds in Asia, Europe and Africa. The vaccine will not be sold in the U.S., but is being purchased by the government for the Strategic National Stockpile for distribution by public health officials if needed. However, only 45% of vaccine recipients developed antibodies at a level expected to reduce the risk of getting influenza. Therefore, research continues to develop a better vaccine.

No cases of this strain of H5N1 influenza have occurred in the United States. Basically, it has not spread from person to person, but it has spread to humans after close exposure to sick chickens and ducks. To learn more about avian influenza, visit www.idph.state.ia.us/pandemic/common/pdf/avian_flu_HC.pdf. For information on current international outbreaks see www.who.int/csr/disease/avian_influenza/en/.

April is Sexual Assault Awareness Month

Although rape is one of the most under-reported crimes, according to a 2006 report of the National Violence Against Women Survey, over 300,000 women and 90,000 men were victims of sexual assault in 2005. Since it is estimated that 80 percent of victims do not report the assault, exact numbers of sexual assaults are unknown. It is known, however, that attackers are often family members and partners. The use of drugs and alcohol, prior sexual abuse, living in poverty, and having multiple sexual partners increase the risk of sexual assault. Poverty, community violence, and community tolerance for sexual assault are some of the factors that increase the risk that a person will commit a sexual assault.

The consequences of such violence are great and include a variety of psychological symptoms, including fear, withdrawal, and symptoms of post-traumatic stress disorder. Long-term consequences include depression and suicide or attempted suicide. In addition, between 4 and 30 percent of rape

victims contract sexually transmitted infections, including HIV. A variety of resources, including a fact sheet, are available from the National Center for Injury Prevention at www.cdc.gov/ncipc/factsheets/svfacts.htm.

New information on the 1918 influenza epidemic

Recently, two scientific papers have analyzed how well measures that increase social distance prevented deaths during the 1918 influenza epidemic. These measures included the closing of theaters and schools. You may have seen this in the news. In cities like St. Louis, public health officials imposed multiple social distancing measures within a few days of the first local cases. This resulted in up to half as many weekly deaths than those in cities like Philadelphia, which waited a few weeks to respond. One of these studies also looked at what happened when these measures were lifted. The conclusion? Many deaths could have been prevented if these measures had been continued significantly longer.

These papers are based on computer models that use data from the 1918 epidemic. They cannot predict precisely how another pandemic will spread. Nor can they tell us which public health interventions will be most successful. However, they do support the recently released pandemic response guidance from the Centers for Disease Control and Prevention (CDC) on the use of interventions in which medicines are not used. One such recommendation is a rapid early response. For more details on the CDC recommendations, visit www.pandemicflu.gov/plan/community/mitigation.html. For a discussion of these studies, visit www.pandemicflu.gov.

Meeting announcements and training opportunities

None.

Have a healthy and happy week!

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