

Indiana Health Alert Network Notification — January 26, 2016

INFLUENZA CASES CONFIRMED AT PUTNAMVILLE CORRECTIONAL FACILITY

The Indiana State Department of Health (ISDH) was notified on January 23, 2016 of four inmates from the Putnamville Correctional Facility who had presented to the Terre Haute Regional Hospital during the week of January 17, 2016 with influenza-like illness. The medical conditions of two patients declined rapidly after admission, requiring intubation and circulatory support. Both of the severely ill patients had sputum cultures positive for methicillin-resistant *Staphylococcus aureus* (MRSA) and developed severe leucopenia and unilobar or multilobar infiltrates on chest radiograph, consistent with pneumonia, as their symptoms progressed. One patient succumbed to his infection on day 2 of hospitalization on January 22. Co-infections with MRSA, *Streptococcus pneumoniae*, and other bacteria, can be seen with influenza A viruses and were the most common cause of complications and death during the 2009 H1N1 influenza pandemic.

Since January 23, several individuals who live or work at Putnamville Correctional Facility have been evaluated for influenza-like illness at several local hospitals. Although initial rapid influenza testing was negative in these hospitalized patients, confirmatory polymerase chain reaction (PCR) testing at the ISDH Laboratories on January 25 confirmed influenza A H1N1pdm09 as an etiologic source in two inmates. To date, nine cases of influenza A H1N1pdm09 have been identified. Although influenza activity remains low statewide, localized clusters of influenza infection may be occurring.

Ill individuals at the correctional facility were initially treated in the infirmary for influenza-like symptoms, including headache, myalgias, fever and cough. Many of the ill individuals had not received the 2015-2016 seasonal influenza vaccine. The rapid spread of influenza, and the severity of disease in those presenting with MRSA pneumonia co-infection, including the subsequent death of an inmate, underscores the importance of immunization with seasonal influenza vaccinations as the best protection against influenza. As of January 16, 2016, the Centers for Disease Control and Prevention (CDC) reports that 100% of the circulating influenza A H1N1pdm09 viruses tested have been antigenically characterized as the H1N1 component of the 2015-16 seasonal vaccine, suggesting a good match to date. Healthcare providers are strongly encouraged to continue offering seasonal influenza vaccination for the remainder of this season.

In addition, negative rapid tests initially reported on ill individuals who were later identified as influenza A positive by PCR testing highlights the importance of confirmatory testing with PCR and treating individuals with severe ILI with antiviral medications before reliable test results are available. Empirical treatment with influenza antiviral medication, optimally within 48 hours of illness onset, is recommended for all persons who present with suspected or confirmed influenza requiring hospitalization or who have progressive, severe, or complicated illness. Persons at a higher risk of influenza complications are also recommended for antiviral treatment. Individuals at increased risk for complications from influenza include:

- Children < 5 years of age
- Pregnant women
- Adults > 65 years of age
- Individuals with chronic illness such as heart disease, diabetes, asthma or COPD, or immunosuppression

In addition, those at risk of complications from infection with H1N1pdm2009 also include:

- Individuals with morbid obesity
- Young adults

Standard and droplet precautions are recommended for seasonal influenza in healthcare settings. For more information about infection control in healthcare facilities, please visit the CDC website at http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm .

For more information about influenza, please visit the ISDH website at http://www.in.gov/isdh/22104.htm.