

Epi Update for Friday, November 15, 2019
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's Epi Update include:

- **First flu-related deaths of the season reported, influenza activity increasing**
- **Rabies vaccine and immune globulin fully available**
- **CDC report highlights progress, areas for improvement in fight against antibiotic-resistant organisms**
- **In the news: How maternal Zika virus infection results in newborn microcephaly**
- **In the news: Rural Americans are more likely to die from preventable causes**
- **In the news: These 10 countries are the best prepared to fight a pandemic**
- **Infographic: Whooping cough (pertussis)**

First flu-related deaths of the season reported, influenza activity increasing

The Iowa Department of Public Health (IDPH) today announced the first flu-related deaths of the 2019-2020 influenza season: an older adult (61-80 years of age) Central Iowa woman, and an elderly (81+ years of age) Northwest Iowa woman. Both women had underlying conditions or contributing factors.

Influenza activity in Iowa has increased this week, and geographic spread has increased to "local". Although multiple indicators have increased from previous weeks, activity remains much lower than typical seasonal peaks. Influenza A(H1N1)pdm09 has been the predominate influenza virus detected at SHL this season, accounting for 57% of all positive specimen submissions. A number of non-influenza respiratory viruses are circulating in high amounts, with rhinovirus/enterovirus far exceeding the others. Almost 25% of respiratory panel results reported by Iowa laboratories last week were positive for rhinovirus/enterovirus.

Given the high amount of respiratory virus already circulating and the increase in influenza, it is important to remember to stay home when ill, cover your cough and sneezes, and wash your hands before eating and after coughing and sneezing. Anyone who was not yet been vaccinated for influenza this season should get vaccinated as soon as possible, before influenza activity increases further.

To view the weekly influenza report, visit idph.iowa.gov/influenza/reports.

Rabies vaccine and immune globulin fully available

Rabies vaccine and immune globulin supply shortages have eased. Supply is now only limited for one rabies vaccine and one rabies immune globulin product. Health care providers should continue to administer pre-exposure (PrEP) and post-exposure prophylaxis (PEP) when indicated without any change in practice. Please see product-specific information below.

Rabies Vaccine

- RabAvert rabies vaccine (produced by GlaxoSmithKline) is experiencing a temporary limited supply, but is still available for both PrEP and PEP. Clinicians can request RabAvert for any patient who needs PrEP or PEP by contacting GSK's Vaccine Service Center directly at 866-475-8222, option 3.

- IMOVAX rabies vaccine (produced by Sanofi Pasteur) is now available, following a shortage earlier this year. Sanofi Pasteur began shipping IMOVAX on October 28, 2019. IMOVAX is available from wholesalers, distributors, and directly from the manufacturer. Call Sanofi Pasteur at 1-800-VACCINE if IMOVAX is not available from your wholesalers or distributors.

Human Rabies Immune Globulin

- KEDRAB (produced by Kedrion Biopharma) is available with no restrictions.
- HyperRab (produced by Grifols) is available with no restrictions. (HyperRab is a more potent version of the previously licensed HyperRab S/D and requires a smaller volume to achieve the recommended 20 IU/kg dose.)
- Imogam (produced by Sanofi Pasteur) is currently experiencing a temporary shortage and is only available to healthcare providers who have a patient with current suspected rabies exposure requiring immediate PEP. Providers can obtain Imogam directly from the manufacturer by faxing a completed Rabies Post-Exposure Form found at www.vaccineshoppe.com to 1-877-287-9391 (Attn: Sanofi Pasteur Customer Service).

For more information, visit www.cdc.gov/rabies/resources/availability.html.

CDC report highlights progress, areas for improvement in fight against antibiotic-resistant organisms

CDC released *Antibiotic Resistance Threats in the United States, 2019* this week, showing that antibiotic-resistant bacteria and fungi cause more than 2.8 million infections and 35,000 deaths in the U.S. each year. On average, someone in the U.S. gets an antibiotic-resistant infection every 11 seconds and every 15 minutes someone dies.

Data from the report also show progress made in fighting these infections. Since 2013, prevention efforts have reduced deaths from antibiotic-resistant infections by 18% overall and by nearly 30% in hospitals. In the community, rapid detection and prevention strategies have helped protect people from two community-associated germs: vaccines helped reduce infections from *Streptococcus pneumoniae* in many at-risk groups, and drug-resistant tuberculosis cases remain stable due to effective national TB control strategies.

However, CDC is concerned about antibiotic-resistant infections that are on the rise, including:

- More than half a million resistant gonorrhea infections occur each year, twice as many as reported in 2013. Gonorrhea-causing bacteria have developed resistance to all but one class of antibiotics, and half of all infections are resistant to at least one antibiotic.
- Extended-spectrum beta-lactamase (ESBL)-producing Enterobacteriaceae are one of the leading causes of death from resistant germs. They make urinary tract infections harder to treat, especially in women, and could undo progress made in hospitals if allowed to spread there.
- Erythromycin-resistant group A *Streptococcus* infections have quadrupled since the 2013 report. If resistance continues to grow, infections and deaths could rise.
- Antibiotic-resistant germs often found in healthcare, including CRE and methicillin-resistant *Staphylococcus aureus* (MRSA), caused more than 85% of the total deaths calculated in the report.

This new data shows that continued vigilance is needed to maintain the progress we've seen. Further preventing infections and stopping the spread of germs will save more lives.

To view the full report, visit

www.cdc.gov/drugresistance/pdf/threats-report/2019-ar-threats-report-508.pdf.

In the news: How maternal Zika virus infection results in newborn microcephaly
scienmag.com/how-maternal-zika-virus-infection-results-in-newborn-microcephaly/

In the news: Rural Americans are more likely to die from preventable causes
www.cbsnews.com/news/rural-americans-more-likely-to-die-from-preventable-causes-cancer-heart-disease-injury-respiratory-disease-stroke/

In the news: These 10 countries are the best prepared to fight a pandemic
www.weforum.org/agenda/2019/11/countries-preparedness-pandemics

Infographic: Whooping cough (pertussis)

The infographic is divided into two main color sections: a top orange section and a bottom green section. The top section features the title 'WHOOPING COUGH (PERTUSSIS)' in large, bold, black letters, with a subtitle below it: 'A contagious disease that can be deadly for babies'. The bottom green section has the title 'WHOOPING COUGH CAN BE DANGEROUS' in bold, black letters, followed by the subtitle 'Especially for newborns and babies'. On the left side of the green section, a list of complications is provided: 'Whooping cough can lead to...' followed by 'PNEUMONIA (A SERIOUS LUNG INFECTION)', 'CONVULSIONS', 'BRAIN DAMAGE', 'APNEA', and 'DEATH'. On the right side, there is an illustration of a hospital building with a white cross on its roof. A sign on the building reads: 'About half of babies younger than 1 year old who get whooping cough are hospitalized.' The background of the green section is decorated with faint, stylized green leaves.

To view in full size, visit www.cdc.gov/vaccines/parents/diseases/child/vpd-infographics/whooping-cough-infographic.pdf.

Have a healthy and happy week!
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