First Case of Variant Influenza A H3N2 Detected in New Jersey

Summary
On January 6, 2016, the Centers for Disease Control and Prevention (CDC) confirmed a case of variant influenza A H3N2 virus (H3N2v) in a Mercer County resident. This is the first case of H3N2v to be identified in a New Jersey resident since the virus was first detected in humans in 2011. The New Jersey Department of Health (NJDOH) worked with local, state, and federal counterparts, including the CDC, and New Jersey Department of Agriculture (NJDA) during this investigation.

H3N2v is a non-human influenza virus that typically circulates among swine and subsequently infects a human. When human infection occurs, these viruses are termed variant viruses (denoted with the letter “v”). Transmission from swine to humans is thought to primarily occur the same way seasonal influenza spreads, via respiratory droplets from infected swine coughing and sneezing.

Human-to-human transmission is limited, but has occurred. H3N2v has the potential to cause severe disease, particularly among children and the elderly, which can result in hospitalization or death. Early identification and prompt response is necessary to ensure the virus does not spread throughout the community.

Background
The NJ case, a nine-year-old male, developed symptoms (fever, sore throat, muscle aches, headache, and nasal discharge) and was evaluated by a healthcare provider on December 26, 2015. No underlying medical conditions...
Updated Guidance: Management of Domestic Animals Rabies Exposures

The New Jersey Department of Health (NJDH) Infectious and Zoonotic Disease Program, recently updated its guidance document entitled “Management of Domestic Animal Rabies Exposures.” This document focuses on the proper veterinary and public health response following a potential rabies exposure to a dog, cat or ferret.

Exposure to the rabies virus most commonly occurs when a rabid animal bites another animal. Rabies exposures can also occur when infected saliva from a rabid animal contaminates an open wound (one that was bleeding within the past 24 hours), a scratch or skin abrasion, or a mucous membrane. The incubation varies greatly from 12 days to five or six months.

Domestic animals potentially exposed to the rabies virus will undergo either a confinement or observation based on the animal’s possible exposure to the rabies virus. The length of the confinement or observational period is based on the current vaccination status of the animal. The updated guidance allows for shorter confinement periods for exposed animals based on new recommendations from the “Compendium of Animal Rabies Prevention and Control,” published by National Association of State and Public Health Veterinarians.

If the exposed animal is currently immunized for rabies or has documentation showing a previous vaccination history, it will receive a booster rabies vaccination after exposure and be observed for signs of rabies over a 45-day period. This observation period is necessary because it is possible, but very unlikely, for a vaccinated animal that...
The New Jersey Department of Health, Communicable Disease Service (CDS) received funding from the U.S. Centers for Disease Control and Prevention (CDC) as part of a three-year nationwide program to reduce healthcare-associated infections (HAIs). Using the resources from this cooperative agreement, CDS established the Infection Control Assessment and Response (ICAR) team to assist healthcare facilities reduce the number of HAIs by assessing their infection prevention programs, providing educational resources, and sharing best practices.

The ICAR team is comprised of epidemiologists and infection preventionists specializing in the prevention of HAIs. This team will assess a variety of patient care settings including long-term care facilities, hemodialysis centers, acute care hospitals, and outpatient settings.

The ICAR team is currently seeking healthcare facilities of all types to participate in a non-regulatory assessment of their infection prevention program and practices. The primary goal for the team is to assist the facility with internal performance improvement activities.

During the visit, the ICAR team will:

- Provide infection prevention self-assessment tools and resources
- Detect infection prevention gaps through on-site observations
- Share best practices identified nationally and locally
- Bolster outbreak response and reporting preparedness
- Coordinate post-assessment follow-up to provide additional resources

While acknowledging your staff’s time is valuable, your participation will have lasting effects on the health and safety of the residents of New Jersey. Facilities interested in assessing their infection prevention programs and partnering with the ICAR team can contact Jessica Felix at 609-826-5964 or Jessica.Felix@doh.nj.gov for more information.
CDS Lends Expertise to Antibiotic Stewardship Conference

On March 22, 2016 staff from the Communicable Disease Service provided their expertise by participating in the New Jersey Hospital Association’s conference in Princeton, NJ. The “Best Practices in Antimicrobial Stewardship and Clostridium Difficile Management Conference” targeted professionals in hospital, pharmacy, and long-term care settings. Approximately 150 people attended the conference.

The day-long conference featured Arjun Srinivasan, MD, Associate Director for Healthcare-Associated Infection Prevention Programs at the Centers for Disease Control and Prevention (CDC). Dr. Srinivasan is well known in the world of antibiotic resistance, leads CDC’s efforts to improve antibiotic prescribing and works with a team of CDC experts researching new strategies to eliminate healthcare-associated infections. Ed Lifshitz, MD, Medical Director, and Suzanne Miro, MPH, MCHES, Sr. Health Communication Specialist, contributed presentations highlighting both clinical work and public education being done within New Jersey to combat this growing public health threat.

Additional presentations focused on best practices in infection control, outstanding programs in hospital-based antibiotic stewardship, and the management of C. difficile infections.
Rabies Exposures, continued from page 2

receives a booster rabies vaccination after exposure to still contract rabies.

If the animal has never received a rabies vaccine, it will immediately be vaccinated and be strictly confined for signs of rabies for a four-month period; this is two months less than previously recommended. This situation is of greatest concern because of a significant chance that an unvaccinated domestic animal will develop rabies if exposed to the virus.

Owners of dogs and cats that may have been previously vaccinated but vaccination is not documented can opt for prospective serologic monitoring. This procedure would entail vaccinating the animal within 96 hours of exposure and collecting two serum samples to document an anamnestic response (elevation of the antibodies against rabies) to the booster vaccination. If an anamnestic response is documented, the animal can be observed for 45 days; if not, the animal would be considered unvaccinated and placed in a strict confinement for four months. The animal owner would be responsible for engaging a New Jersey-licensed veterinarian to complete all the provisions of the prospective serologic monitoring protocol and for all the associated costs.

For more information, please contact the NJDOH at (609) 826-4872 or directly access the entire guidance document on the NJDOH website: http://www.state.nj.us/health/cd/rabies/techinfo.shtml.
were noted. A rapid influenza diagnostic test was performed and identified influenza A. The sample was submitted to the NJ Public Health and Environmental Laboratory (PHEL) for routine influenza surveillance. This sample tested presumptive positive for H3N2v at PHEL on December 31, 2015, and confirmed at CDC on January 6, 2016. The individual has since fully recovered with treatment.

**Investigation**

Per protocol, PHEL alerted the influenza surveillance coordinator at NJDOH of the presumptive positive result on December 31, 2015. A public health investigation was initiated to characterize the epidemiology of the case and to identify any additional cases. Upon initial interview the individual denied any swine exposure. The specimen was sent to CDC for confirmatory testing on January 4, 2016.

CDC reported a confirmatory result of H3N2v on January 5, 2016 and performed genetic sequencing, which indicated the virus detected in New Jersey is similar to the virus found circulating in United States swine populations.

The individual was subsequently re-interviewed and it was determined that two days prior to illness onset the child was exposed to a farm where live pigs were housed in Middlesex County. While no direct contact was noted, the individual spent more than three hours at this location and was not continuously monitored during this time period.

A joint site visit to the farm was conducted by NJDOH, NJDA, and the Middlesex County Office of Health Services (MCOHS) on January 6, 2016. A standardized form was developed to assess clinical and risk factor information among workers at the farm and was administered by public health staff. All workers (n=10) denied past or current illness. No workers had been vaccinated or recently evaluated by a healthcare provider. Workers were asked to self-monitor for influenza-like symptoms for 10 days and to alert MCOHS if symptoms develop. Household contacts of the case (n=2) were also asked to self-monitor for symptoms.

**Control Measures**

The following control measures were implemented as part of the public health response to this incident:

- Signage for the farm was created to provide information on preventive actions they can take to minimize risk.
- Recommendations were made for the farm to provide accessible hand hygiene stations (i.e., hand sanitizer).
- NJDOH released a health alert message on January 7, 2016 to clinicians to remind them to inquire about swine exposure in patients presenting with influenza-like illness and how to
**Influenza A H3N2, continued from page 6**

collect and submit specimens from these patients.

**Conclusion**

A confirmed case of H3N2v in NJ was identified in a Mercer County resident, prompting a public health investigation. The investigation revealed the case had exposure to a farm in Middlesex County, where swine were present. The child was not hospitalized and has since fully recovered. The public health investigation was closed after two incubation periods with no additional or secondary reports of illness. At the time of the site visit, no ill animals were noted.

At this time, CDC recommends that anyone with influenza-like symptoms following direct or close contact with swine should notify their healthcare provider. To reduce the risk of spreading flu, everyday prevention actions include covering your nose and mouth with a tissue when sneezing or coughing, washing your hands often with soap and water, and taking precautions when exposed to swine. For additional guidance and resources, please visit the [CDC website](http://www.cdc.gov/flu/swineflu/h3n2v-cases.htm).

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**New Jersey Prepares to ZapZika**

With news of the spread of the Zika virus in tropical regions of the globe, it’s only natural for people to be concerned. While the virus is not being spread locally at this time, the mosquitoes that transmit the virus make their home in some popular travel destinations. Reports of the virus being linked to the serious birth defect microcephaly have increased anxiety among women of childbearing age.

Drug Diversion Tabletop Exercise Pilot Project

As part of New Jersey’s “Keeping the Infection out of the Injection” injection safety initiative, the injection safety team created a drug diversion exercise for acute care facilities. Drug diversion is when prescription medicines are obtained or used illegally.

Drug diversion in healthcare settings can result in substandard care delivered by an impaired healthcare provider, denial of essential pain medication or therapy, and risk of infection if a provider tampers with injectable drugs.

The exercises consist of three scenarios that focus on drug diversion of injectable narcotic medications. Four facilities volunteered to take part in the pilot project: Kennedy Health, CentraState, Hunterdon Medical Center and St. Joseph’s Medical Center.

The exercise gathered administrators, nursing directors, pharmacy directors, infection preventionists, security professionals, risk managers, human resource professionals and more to discuss their current policies about drug diversion of
Drug Diversion, continued from page 8

injectable medications. The exercise objectives included highlighting strengths and gaps in existing drug diversion policies and exploring the process of responding to a drug diversion incident, both internally and externally.

Once all four facilities have completed the exercise, the injection safety team plans to create a facilitator’s guide and share with the NJ Drug Diversion Coalition and other state and federal partners. Plans are also under way to create scenarios for ambulatory surgery centers, too. This unique project was created because there is currently no exercise that addresses drug diversion in acute care settings. New Jersey is proud to be a Safe Injection Practices Coalition state partner.

Looking to get the hepatitis A or B vaccine?

Looking for a hepatitis support group? Check out the “New Jersey Viral Hepatitis Resource Guide” for locations near you!

**CDS Welcomes New Staff!**

We are pleased to have **Stradyne Turnquest, Francis Sanchez, Kristen Ruttley** and **Crystal Randall** join the administrative/clerical staff.

**Leah Burn** joins the CDS as a healthcare-associated infections epidemiologist in the Infection Control Assessment Group. Ms. Burn earned a Master of Public Health degree from Emory University and has training in modeling infectious diseases from the London School of Hygiene and Tropical Medicine and was a Global Epidemiology Fellow with CDC’s Global AIDS Program in Zambia.

**Dela Surti** joins the CDS as the new CDRSS Coordinator. She has a Master of Public Health degree from George Washington University and has worked with health systems, program planning, evaluation and data analysis.

**Deepam Thomas** moved into a new role within CDS as the new Foodborne Disease Surveillance Coordinator. She has a Master of Public Health Degree from Jefferson University and has been working with CDS since 2009 in disease surveillance and as a laboratory liaison.

**Patty Barrett** will be our new Antimicrobial Resistance Coordinator as part of the Healthcare Associated Infections team. Prior to CDS, Patty worked on influenza surveillance in Florida and has a Master of Science degree in Demography.

**Bridget Farrell** is a part-time Infection Control Specialist with over 25 years of experience and will be conducting infection control assessments within various healthcare settings.

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**“Drawing Up” Strategies to Prevent Drug Diversion in Healthcare Settings**

**June 14, 2016**

9:30 am-3:30 pm

Rutgers University – Busch Campus Center, Piscataway, NJ

Cost: $60 (light continental breakfast and lunch included)

This conference is for physicians, nurses, pharmacists, health system administrators, risk managers, health educators and other public health and healthcare professionals. Come and learn more about how to increase awareness among healthcare professionals on how to prevent, detect, and respond to drug diversion (particularly injectable medications).

Registration can be accessed at [https://goo.gl/t9DJtF](https://goo.gl/t9DJtF).
Quick Reference Guide

Quick Reference

Reporting Requirements for Communicable Diseases and Work-Related Conditions
(see New Jersey Administrative Code Title 8, Chapters 57 and 58)

Confirmed or Suspect Cases Telephone: Refer to the local health department

- Arbovirus
- Brucellosis
- Rabies
- Syphilis
- Tetanus
- Typhus
- Tuberculosis
- Yellow fever
- Encephalitis
- Mumps
- Pertussis
- Poliomyelitis
- Salmonellosis
- SARS-like disease (SARS)
- Shigellosis
- SARS-CoV disease (SARS-CoV-2)
- Typhoid fever
- Yellow fever

Cases should be reported to the local health department where the patient resides. If a patient resides in New Jersey, the New Jersey Department of Health maintains an emergency after hours phone number: 609-292-4666.

In cases of immediately reportable diseases and other emergencies, if the local health department cannot be reached, the New Jersey Department of Health maintains an emergency after hours phone number: 609-292-3700.

July 2013

Health care providers required to report: physicians, advanced practice nurses, physical therapists, and certified nurse midwives.

Administrators required to report: persons having control or supervision over a health care facility, correctional facility, school, youth camp, child care center, or institution of higher education.

Laboratory directors: For specific reporting guidelines, see NJAC 8:37-2.1.

Judicial

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964
Regional Epidemiology Program (REP): 609-826-5964
Vaccine Preventable Disease Program (VPDP): 609-826-4860

We’re on the Web! www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: http://nj.gov/health/cd/pub.shtml.

These magnets are available while supplies last. To request a quantity, please call 609-826-5964.