Avian Influenza A (H7N9) Outbreak

**Current Situation**

- China reported human and bird (poultry) infections with a new strain of H7N9 that is very different from previously seen H7N9 viruses.
- As of April 26, 2013, the number of human infections with avian influenza A (H7N9) in China has risen to 109 with 23 deaths.*
- Currently no evidence of sustained human-to-human spread of this virus.
- There are still no reports of H7N9 in the United States.
- Currently there are no travel restrictions to China

**What is Avian Influenza (AI)?**

- AI refers to the disease caused by infection with avian (bird) influenza (flu) Type A viruses.
- These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species.
- AI viruses do not normally infect humans. However, sporadic human infections with avian flu viruses have occurred.

**What is H7N9?**

- “H7N9” is the designation for one subtype of influenza viruses that is sometimes found in birds, but that does not normally infect humans.

**Symptoms**

- Symptoms include high fever, cough, and shortness of breath.
- Severe illness has resulted in acute respiratory distress syndrome, septic shock and multi-organ failure leading to death.

**Treatment**

- CDC recommends oseltamivir/Tamiflu® and zanamivir/Relenza® for treatment of patients with suspected or confirmed H7N9.
- Influenza viruses are always changing and some of these changes can result in viruses becoming resistant to one or more influenza antiviral drugs, so these medications may not always be fully effective.
- CDC will conduct further testing to determine the susceptibility of other H7N9 viruses to existing antiviral drugs.

**Vaccine**

- Currently there is no vaccine to protect against this virus, however, CDC and others are working to develop a vaccine candidate virus that could be used to make a vaccine if needed.

*On April 24, 2013, Chinese authorities announced they will begin reporting cases of H7N9 on a weekly rather a daily basis.

Source: [www.cdc.gov](http://www.cdc.gov)
Norovirus Outbreak

On March 20, 2013, the PCHD Epidemiology Program received notification of a gastrointestinal outbreak at a local nursing home. This outbreak resulted in a total of 15 out of 113 residents and 16 staff members becoming ill with initial illness onset date of March 8th. Individuals experienced diarrhea, vomiting and nausea lasting approximately 42 – 48 hours. PCHD provided lab slips and testing kits for stool collection along with shipping instructions. Infection control measures included: hand washing education, notification of visitors, cancelling group activities, environmental cleaning, and the appropriate usage of personal protective equipment (PPE). A recommendation of a 48 hour exclusion period for staff and residents was given. Gastrointestinal outbreak management documentation was provided. The outbreak pathogen was verified in two residents as Norovirus. As of April 1, 2013, no new cases have developed at the center. The investigation is closed.

Varicella Outbreak

On March 20, 2013, the Pasco County Health Department (PCHD) received notification through the syndromic surveillance system known as ESSENCE or Electronic Surveillance System for Early Notification of Community-based Epidemics regarding three physician diagnosed cases of varicella. It was determined that all three cases were family related. The ages were four, six and eight. The four year old child was the index case as his symptoms (rash and fever) began on 3/14/13. The remaining two children experienced symptoms (rash and fever) on 3/16/13. The children were out of school from 3/15/13 – 4/1/13 due to the illness and Spring Break (3/25 – 4/1). The school health nurse at their elementary school was consulted to determine the history of varicella vaccine. It was determined that both children six and eight were up to date on their vaccinations. The four year old child does not attend school therefore Florida Shots was used to confirm that the child was up to date. The children aged six and eight are in 1st and 2nd grade respectively. Neither of their classrooms reported any students that experienced varicella like symptoms. Student vaccination records for both classrooms were reviewed and determined that all students were up to date. There were pregnant faculty members identified during the investigation. They were advised to consult with their OB/GYN provider.

Exclusion was recommended for students and staff with no history of varicella vaccine or disease. It was recommended that should anyone experience symptoms that they be excluded until 24 hours after the last lesion was crusted over. PCHD provided the supervisor of student health services with a letter to inform parents of the Varicella outbreak at their child’s school. The letter went home with students on 3/21/13. There have been no additional cases. This investigation is closed.

PASCO HIV/AIDS 1st Quarter Summary

<table>
<thead>
<tr>
<th>Disease</th>
<th>2013 Jan - Mar</th>
<th>2013 YTD (Mar)</th>
<th>2012 YTD (Mar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV*</td>
<td>15</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>AIDS*</td>
<td>5</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

*Florida Department of Health, Bureau of HIV/AIDS (excluded Department of Corrections, DOC cases from report) Current HIV Infection data reflects any case meeting the CDC definition of “HIV infection” which includes all newly reported HIV cases and newly reported AIDS cases with no previous report of HIV. Newly reported HIV Infection cases do not imply they are all newly diagnosed cases.

Pasco County Health Department offers FREE RAPID HIV TESTING.
Get tested today and receive results in 20 minutes!

For more information please visit [http://www.doh.state.fl.us/chdPasco/epi.html](http://www.doh.state.fl.us/chdPasco/epi.html) or call (727) 861-5260 ext. 177 or (352) 521-1450 ext 345
# 1st Quarter 2013 Disease Summary

<table>
<thead>
<tr>
<th>Disease/Condition</th>
<th>2013 Jan - Mar</th>
<th>2012 Jan - Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIMAL RABIES</td>
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<tr>
<td>ARSENIC</td>
<td>0</td>
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<tr>
<td>CAMPYLOBACTERIOSIS</td>
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<td>CRYPTOSPORIDIOSIS</td>
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<tr>
<td>CREUTZFELDT-JAKOB DISEASE (CJD)</td>
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<tr>
<td>CRYPTOSPORIDIOSIS</td>
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<td>0</td>
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<tr>
<td>DENGUE FEVER</td>
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<tr>
<td>ESCHERICHIA COLI, SHIGA TOXIN PRODUCING</td>
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<td>4</td>
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<tr>
<td>GIARDIASIS</td>
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<td>3</td>
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<tr>
<td>HAEMOPHILUS INFLUENZAE (INVASIVE DISEASE)</td>
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<tr>
<td>HEPATITIS A</td>
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<td>HEPATITIS B (+HBsAg IN PREGNANT WOMEN)</td>
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<tr>
<td>HEPATITIS B, ACUTE</td>
<td>4</td>
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<tr>
<td>HEPATITIS B, CHRONIC</td>
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<td>16</td>
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<td>HEPATITIS C, ACUTE</td>
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<td>HEPATITIS C, CHRONIC</td>
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<td>INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY</td>
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<tr>
<td>LEAD POISONING</td>
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<td>MENINGOCOCCAL DISEASE</td>
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<td>PERTUSSIS</td>
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<td>PESTICIDE-RELATED ILLNESS OR INJURY</td>
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<tr>
<td>RABIES, POSSIBLE EXPOSURE</td>
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<td>SALMONELLOSIS</td>
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<td>SHIGELLOSIS</td>
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<td>STREP PNEUMONIAE, INVASIVE DISEASE, DRUG-R</td>
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<tr>
<td>STREP PNEUMONIAE, INVASIVE DISEASE, SUSCEPT</td>
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<tr>
<td>STREPTOCOCCAL DISEASE INVASIVE GROUP A</td>
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<tr>
<td>VARICELLA</td>
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<tr>
<td><strong>TOTAL CASES</strong></td>
<td><strong>321</strong></td>
<td><strong>271</strong></td>
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</tbody>
</table>

*Data retrieved from Merlin - Florida's Disease Registry System*
Reportable Diseases/Conditions in Florida
Practitioner* List 11/24/08

Did you know that you are required by Florida statute** to report certain diseases to your local county health department?

*Reporting requirements for laboratories differ. For specific information on disease reporting, consult Rule 640-3, Florida Administrative Code (FAC).

** = Report immediately 24/7 by phone upon initial suspicion or laboratory test order
= Report immediately 24/7 by phone
= Report next business day
+ = Other reporting timeframe

- Any disease outbreak
- Any case, cluster of cases, or outbreak of a disease or condition found in the general community or any defined setting such as a hospital, school or other institution, not listed below that is of urgent public health significance. This includes those indicative of person to person spread, zoonotic spread, the presence of an environmental, food or waterborne source of exposure and those that result from a deliberate act of terrorism.
- Acquired immune deficiency syndrome (AIDS)
- Acne facialis
- Anaplasmosis
- Anthrax
- Arsenic poisoning
- Botulism foodborne, wound, unspecified, other
- Botulism infant
- Brucellosis
- California serogroup virus (neuroinvasive and non-neuroinvasive disease)
- Campylobacteriosis
- Cancer (except non-melanoma skin cancer) and including design and borderline intracranial and CNS tumors
- Carbon monoxide poisoning
- Chlamydia
- Cholera
- Ciguatera fish poisoning (Ciguatera)
- Congenital anomalies
- Conjunctivitis (in neonates ≤14 days old)
- Creutzfeldt-Jakob disease (CJD)
- Cryptosporidiosis
- Cyclosporiasis
- Dengue
- Diphtheria
- Eastern equine encephalitis virus disease (neuroinvasive and non-neuroinvasive disease)
- Ehrlichiosis
- Encephalitis, other (non-arboviral)
- Enteric disease due to Escherichia coli, O157:H7
- Escherichia coli, other pathogenic E. coli including enterotoxigenic, invasive, pathogenic, hemorrhagic, and aggregative strains and stx2 toxigenic strains
- Giardiasis
- Glueakers
- Gonorrhea
- Granuloma inguinale
- Haemophilus influenzae (meningitis and invasive disease)
- Hansen's disease (Leprosy)
- Hantavirus infection
- Hemolytic uremic syndrome
- Hepatitis A
- Hepatitis B, C, D, E, and G
- Herpes simplex virus (HSV) (in infants up to 60 days old with disseminated infection with involvement of liver, encephalitis and infections limited to skin, eyes and mouth; anogenital in children ≤12 months of age)
- Human Immunodeficiency Virus (HIV) infection
- Human papillomavirus (HPV) (associated laryngeal papillomas or recurrent respiratory papillomatosis in children ≤5 years of age; anogenital in children ≤12 years of age)
- Influenza due to novel or pandemic strains
- Influenza-associated pediatric mortality (in persons aged <15 years)
- Lead poisoning (blood lead level ≥10µg/dL; additional reporting requirements exist for handheld and/or on-site blood lead testing technology, see 640-3 FAC)
- Legionellosis
- Leptospirosis
- Listeriosis
- Lyme disease
- Lymphogranuloma venereum (LGV)
- Malaria
- Measles (Rubeola)
- Melioidosis
- Meningitis (bacterial, cryptococcal, mycotic)
- Meningococcal disease (includes meningitis and meningococcemia)
- Mercury poisoning
- Mumps
- Neutrophic shigellosis
- Pertussis
- Pesticide-related illness and injury
- Plague
- Poliomyelitis, paralytic and non-paralytic
- Psittacosis (Ornithosis)
- Q Fever
- Rabies (human, animal)
- Rabies (possible exposure)
- Ricin toxicity
- Rocky Mountain spotted fever
- Rubella (including congenital)
- St. Louis encephalitis (SLE) virus disease (neuroinvasive and non-neuroinvasive disease)
- Salmomellosis
- Saxitoxin poisoning including paralytic shellfish poisoning (PSP)
- Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV) disease
- Shigellosis
- Smallpox
- Staphylococcus aureus, community associated mortality
- Staphylococcus aureus (infection with intermediate or full resistance to vancomycin, MRSA, VRSA)
- Staphylococcus enteritidis (disease due to)
- Streptococcal disease (invasive, Group A)
- Streptococcus pneumoniae (invasive disease)
- Syphilis
- Syphilis (in pregnant women and neonates)
- Tularia
- Tularia
- Typhoid fever
- Tuberculosis
- Typhus fever (disease due to Rickettsia prowazekii infection)
- Typhus fever (disease due to Rickettsia typhi, A. felis infection)
- Vaccinia disease
- Varicella (Chickenpox)
- Varicella mortality
- Venezuelan equine encephalitis virus disease (neuroinvasive and non-neuroinvasive disease)
- Vibrosis (Vibrio infections)
- Viral hemorrhagic fevers (Ebolavirus, Marburg, Lassa, Machupo)
- West Nile virus disease (neuroinvasive disease and non-neuroinvasive disease)
- Western equine encephalitis virus disease (neuroinvasive and non-neuroinvasive disease)
- Yellow fever

You are an invaluable part of Florida's disease surveillance system.
For more information, please call the epidemiology unit at your local county health department or the Bureau of Epidemiology.
Florida Department of Health (FDH) 1-800-342-8377 or visit the Florida Department of Health website at http://www.floridahealth.com.