

SUMMARY OF CONFIRMED INFECTIONS

June 2012

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Syphilis

Test	Total	Test	Total
RPR Reactive	3	TPPA Reactive	11
VDRL Reactive	25	Darkfield Positive	0

New Cases of Syphilis

Stage	Number of Cases	
	June 2012	June 2011
Primary syphilis	0	0
Secondary syphilis	1	3
Early latent	2	1
Late latent	0	1
Total	4 (+1 unknown duration)	5

Source: Wisconsin Division of Health

Gonorrhea Antimicrobial Susceptibility Testing

Number Tested	Decreased Susceptible (DS) / Resistant (R) Antibiotics			
	Ciprofloxacin	Cefixime	Ceftriaxone	Azithromycin
40	2 (R)	0	0	0

Isolates Other Than *N. gonorrhoeae*

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	5	<i>Mycoplasma hominis</i>	Genital	1

Mycobacterial Infections

Age	Sex	Test Results				Identification
		Sputum Smear	Culture	DNA Probe	PCR	
78	M	-	+	+	-	<i>M. avium</i> complex
48	M	-	+	ND	ND	<i>M. abscessus</i>
		-	+	+	ND	<i>M. avium</i> complex
		-	+	+	ND	<i>M. tuberculosis</i> complex
49	F	-	+	-	-	<i>M. xenopi</i>
34	F	-	+	+	-	<i>M. avium</i> complex
		-	+	+	ND	<i>M. tuberculosis</i> complex
70	M	+	+	+	ND	<i>M. tuberculosis</i> complex
37	M	-	+	+	ND	<i>M. tuberculosis</i> complex
42	F	-	+	-	-	<i>M. xenopi</i>

ND = Not Done

Enteric Parasites Identified

Age	Sex	Parasite
23	M	<i>Blastocystis hominis</i>
17	M	<i>Blastocystis hominis</i>
38	F	<i>Blastocystis hominis</i>
39	F	<i>Blastocystis hominis</i>
46	M	<i>Blastocystis hominis</i>
14	F	<i>Entamoeba coli</i>
44	F	<i>Entamoeba coli</i>
		<i>Endolimax nana</i>
14	M	<i>Entamoeba histolytica/Entamoeba dispar</i>
17	F	<i>Entamoeba histolytica/Entamoeba dispar</i>
26	M	<i>Entamoeba histolytica/Entamoeba dispar</i>
39	F	<i>Entamoeba histolytica/Entamoeba dispar</i>
4	M	<i>Giardia lamblia</i>
9	F	<i>Giardia lamblia</i>
18	M	<i>Giardia lamblia</i>
		Hookworm

Reference Cultures

Age	Sex	Source	Identification
16	M	Left Cornea	<i>Acanthamoeba</i> species
21	M	Throat	<i>Moraxella catarrhalis</i>
43	F	Genital	<i>Neisseria gonorrhoeae</i>
22	M	Throat	<i>Neisseria meningitidis</i>

34	M	Stool	<i>Salmonella</i> Bareilly
18	M	Stool	<i>Salmonella</i> Bareilly
26	F	Stool	<i>Salmonella</i> Manhattan
42	F	Stool	<i>Salmonella</i> Oranienburg
13m	F	Stool	<i>Salmonella</i> Typhimurium
4	F	Stool	<i>Salmonella</i> Typhimurium
17	M	Stool	<i>Salmonella</i> Typhimurium

Viruses Detected from Clinical Specimens

Age	Sex	Source	Symptoms	Agent
6m	M	NP	Autopsy	Adenovirus and Cytomegalovirus

Herpes Simplex Virus Isolations

Agent	Number of Isolates
Herpes Simplex type 1	7
Herpes Simplex type 2	9

Molecular Amplification and PCR

Agent	Method	Tested	Positive	% Positive
Influenza Virus	RT-PCR	3	0	0%
Norovirus	RT-PCR	1	0	0%
Enterovirus	RT-PCR	1	0	0%
Bordetella pertussis	RT-PCR	3	0	0%

Chlamydia (CT) and Gonorrhea (GC) Molecular Testing

Source	Tested	Positive	% Positive
Urine	564	78 CT	13.8%
		49 GC	8.7%
Throat swabs	262	1 CT	0.4%
		14 GC	5.3%
Rectal swabs	45	11 CT	24.4%
		3 GC	6.7%
Cervical or urethral swabs	3	0 CT	0%
		2 GC	66.6%

DNA Sequencing: The MHD laboratory uses 16S rRNA and the D2 region of the 26S rRNA genes for DNA sequence-based microbial identification of selective reference bacteria and fungus isolates

Reference Microbe	Age	Sex	Source	Target gene	Final Identification
Bacteria	47	M	Blood	16S	<i>Aggregatibacter actinomycetemcomitans</i>
Bacteria	5	M	Blood	16S	<i>Bacillus megaterium</i>
Bacteria	53	F	Meninges	16S	<i>Chryseobacterium</i> species
Bacteria	53	F	Lung	16S	<i>Lactobacillus</i> species



Diagnostic Testing for Influenza A (H3N2v) Variant Virus—August 8, 2012
Wisconsin State Laboratory of Hygiene

The Centers for Disease Control and Prevention (CDC) has confirmed a number of human cases of influenza due to a novel swine-origin influenza A subtype H3N2 variant (H3N2v) from Indiana, Ohio and Hawaii since July 2012. This is a reassortant influenza virus that contains the Matrix (M gene) from the 2009 H1N1 virus which may confer increased transmissibility.

The performance of commercial rapid influenza detection tests (RIDT) and influenza PCR assays to detect this strain of influenza has not been determined. However, some of these assays may be able to detect this virus.

According to the CDC, molecular assays may not be able to differentiate the H3N2v virus from seasonal influenza viruses:

1. Assays may give a positive influenza A result, but be unable to subtype the virus.
2. May give a false positive for the seasonal Influenza A(H3) virus.
3. May give a positive influenza A result and decreased Ct value for the seasonal H3.

WSLH recommends that clinical laboratories performing influenza testing (PCR, rapid test and virus culture) continue to send to the WSLH (**or the Milwaukee Health Department Lab if you use them as a reference lab**):

1. **ALL of their positive influenza** specimens for confirmatory testing and subtyping.
2. Any specimens that produce **unusual typing or subtyping results** with the influenza PCR test used by your laboratory.

The influenza PCR test and testing algorithm used by WSLH (provided by the CDC) is optimized to detect cases of novel influenza viruses that may be circulating.

It is expected that the surveillance and testing recommendations will change. Updates will be provided in the Wisconsin Laboratory Surveillance Report and on the WSLH website: www.slh.wisc.edu

CDC has additional information available regarding the H3N2 variant virus on their website. The most current information is available at <http://www.cdc.gov/flu/swineflu/influenza-variant-viruses-h3n2v.htm>

Thank you for your continued support of the Influenza surveillance program and if you have any questions or concerns, please feel free to contact Erik Reisdorf (608-262-1021; erik.reisdorf@slh.wisc.edu) or WSLH customer service at (608-262-6386).

Addendum from the City of Milwaukee Health Department Laboratory: Questions or testing if needed at: 414-286-3526, email: mhdlab@milwaukee.gov; Dr. Sanjib Bhattacharyya: sbhatt@milwaukee.gov .

This is an official CDC HEALTH ADVISORY

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Increase in Influenza A H3N2v Virus Infections in Three U.S. States

Summary and Background

Multiple infections with variant* influenza A (H3N2v) viruses have been identified in 3 states in recent weeks. From July 12 through August 3, 2012, 16 cases of H3N2v were reported and confirmed by CDC. This virus was first detected in humans in July 2011. It has also been isolated in U.S. swine in many U.S. states. Since July 12, 2011, there have been 29 cases of H3N2v virus infection, including the 16 cases occurring in the last three weeks. All 29 cases were infected with H3N2v viruses that contain the matrix (M) gene from the influenza A (H1N1)pdm09 virus. This M gene may confer increased transmissibility to and among humans, compared to other variant influenza viruses. All cases have been laboratory-confirmed at CDC. Each of the 16 cases identified since July 12, 2012, reported contact with swine prior to illness onset; in 15 cases, contact occurred while attending or exhibiting swine at an agricultural fair. While the viruses identified in these cases are genetically nearly identical, separate swine exposure events in each state were associated with human infections. There is no indication that the cases in different states are epidemiologically related.

Clinical characteristics of the 16 H3N2v recent cases have been generally consistent with signs and symptoms of seasonal influenza, and have included fever, cough, pharyngitis, myalgia, and headache. No hospitalizations or deaths have occurred among the 16 confirmed cases since July 2012. Public health and agriculture officials are investigating the extent of disease among humans and swine, and additional cases are likely to be identified as the investigation continues.

Novel influenza A virus infection has been a nationally notifiable condition in the United States since 2007. Since that time, human infection with animal-origin influenza viruses has been rare, with ≤6 cases reported each year, until 2011 when 14 cases were identified. While most of the cases are thought to have been infected as a result of close contact with swine, limited human-to-human transmission of this virus was identified in some cases in 2011. Therefore, enhanced influenza surveillance is indicated, especially in regions and states with confirmed H3N2v cases.

Interim Recommendations for the Public

- Persons who are at high risk for influenza complications (e.g., underlying chronic medical conditions such as asthma, diabetes, heart disease, or neurological conditions, or who are pregnant or younger than 5 years, older than 65 years of age or have weakened immune systems) should consider avoiding exposure to pigs and swine barns this summer, especially if ill pigs have been identified.
- Persons engaging in activities that may involve swine contact, such as attending agricultural events or exhibiting swine, should wash their hands frequently with soap and running water before and after exposure to animals; avoid eating or drinking in animal areas; and avoid close contact with animals that look or act ill.
- Patients who experience influenza-like symptoms following direct or close contact with pigs and who seek medical care should inform their health care provider about the exposure.
- Patients with influenza-like illness who are at high risk for influenza complications (e.g., underlying chronic medical conditions such as asthma, diabetes, heart disease, or neurological conditions, or who are pregnant or younger than 5 years, older than 65 years of age or have weakened immune systems) should see their health care provider promptly to determine if treatment with antiviral medications is warranted.

- Influenza viruses have not been shown to be transmissible to people through eating properly handled and prepared pork or other products derived from pigs. For more information about the proper handling and preparation of pork, visit the USDA website fact sheet “Fresh Pork from Farm to Table.”

Interim Recommendations for Health Care Providers

- Clinicians who suspect influenza in persons with recent exposure to swine should obtain a nasopharyngeal swab or aspirate from the patient, place the swab or aspirate in viral transport medium, and contact their state or local health department to arrange transport and request a timely diagnosis at a state public health laboratory.
- Reverse-transcription polymerase chain reaction (RT-PCR) testing for influenza should be considered for patients with influenza-like illness prior to the start of the traditional influenza season in October.
- RT-PCR testing for influenza should be considered throughout the year for patients with influenza-like illness reporting recent swine exposure and for those who can be epidemiologically linked to confirmed cases of variant influenza.
- Commercially available rapid influenza diagnostic tests (RIDTs) may not detect H3N2v virus in respiratory specimens. Therefore, a negative rapid influenza diagnostic test result does not exclude infection with H3N2v or any influenza virus. In addition, a positive test result for influenza A cannot confirm H3N2v virus infection because these tests cannot distinguish between influenza A virus subtypes (they do not differentiate between human influenza A viruses and H3N2v virus). Therefore, respiratory specimens should be collected and sent for RT-PCR testing at a state public health laboratory.
- Clinicians should consider antiviral treatment with oral oseltamivir or inhaled zanamivir in patients with suspected or confirmed H3N2v virus infection. Antiviral treatment is most effective when started as soon as possible after influenza illness onset.

For more information:

- “Interim Guidance on Case Definitions to be Used for Investigations of Influenza A (H3N2) Variant Virus Cases” for state and local health departments is available at <http://www.cdc.gov/flu/swineflu/case-definitions.htm>.
- “Prevention Strategies for Seasonal and Influenza A(H3N2)v in Health Care Settings” is available at <http://www.cdc.gov/flu/swineflu/prevention-strategies.htm>.
- “Interim Guidance on Specimen Collection, Processing and Testing for Patients with Suspected Influenza A (H3N2) Variant Virus Infection” for public health professionals is available at <http://www.cdc.gov/flu/swineflu/h3n2v-testing.htm>, and
- “Interim Guidance for Influenza Surveillance: Additional Specimen Collection for Detection of Influenza A (H3N2) Variant Infections” for state and local health departments is available at <http://www.cdc.gov/flu/swineflu/h3n2v-surveillance.htm>.
- Compendium of Measures to Prevent Disease Associated with Animals in Public Settings, 2011 is available at <http://nasphv.org/documentsCompendiumAnimals.html>

*Influenza viruses that circulate in swine are called swine influenza viruses when isolated from swine, but are called variant viruses when isolated from humans.

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

Categories of Health Alert Network messages:

Health Alert	Requires immediate action or attention; highest level of importance
Health Advisory	May not require immediate action; provides important information for a specific incident or situation
Health Update	Unlikely to require immediate action; provides updated information regarding an incident or situation

HAN Info Service Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, public information officers,
epidemiologists, HAN coordinators, and clinician organizations##