



PIWATCH

Monthly Epidemiology and Preparedness Newsletter

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Florida Department of **Health in Pinellas** County

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Division of **Disease Control and Health Protection**



Disease Reporting

To report diseases and clusters of illness:

Phone: (727) 824-6932 Fax: (727) 820-4270 (excluding HIV/AIDS)

To Report HIV/AIDS by mail: Surveillance Room 3-138 205 Dr. MLK Jr St. N St. Petersburg, FL 33701

Hepatitis A and False Positive IgM Test Results

Hepatitis A

Hepatitis A virus (HAV) is a nationally reportable picornavirus that is spread person-toperson through the fecal-oral route. Since the vaccine licensure in 1995, the incidence of hepatitis A in the United States has decreased significantly from a rate of 12 per 100,000 population in 1995 to 0.4 cases per 100,000 population in 2015.

Case Study

From 2002-2004, the Kentucky Department for Public Health observed an increase in positive IqM anti-HAV laboratory results that did not meet the clinical criteria for the HAV case definition or risk factors. From 269 diagnoses reported to the health department, 113 were confirmed cases and 156 were false positives (58%). Further investigation revealed that the volume of false positives could be contributed to minor variations in sensitivity and specificities of test kits utilized, an overall increase in HAV testing, and an increase in inappropriate testing. Significant characteristics of those diagnosed with false positive acute HAV cases were a documented history of hepatitis A, older age group, cirrhosis, and medication use.²

False Positives

The IgM anti-HAV serological test is the primary screening test for hepatitis A with a sensitivity and specificity of >95%. As a serological test, it can continue to detect antibodies after an infection has passed and can be an indicator of immunity.³ Thus, appropriate testing is paramount for the diagnosis of acute hepatitis A.

The national surveillance definition for HAV requires both clinical criteria and serological confirmation. Clinical criteria include jaundice or elevated serum aminotransferase levels and symptoms such as abdominal pain, loss of appetite, intermittent nausea, vomiting and fatigue. Testing of persons that do not meet clinical criteria lowers the predictive value of the IgM anti-HAV test, and due to the tests high sensitivity may lead to false positive results of acute HAV infections.²

A positive IgM anti-HAV test of individuals that don't meet clinical criteria may be the result of an asymptomatic acute HAV infection, previous HAV infection with persistent IgM, cross-reacting antibodies, or varying commercial kits with low cutoff values.^{4,5} False positives pose a public health concern due to the utilization and potential waste of resources assessing whether contacts require post exposure immunoprophylaxis.² Furthermore, incorrect diagnoses may delay appropriate diagnosis and treatment for patients and incur higher medical costs. For more information regarding testing, surveillance, outbreaks, professional tool and resources visit https://www.cdc.gov/ hepatitis/hav/index.htm.

References:

- 1) Viral Hepatitis. Guidelines for viral hepatitis surveillance and case management. Centers for Disease Control. https://
- www.cdc.gov/hepatitis/statistics/surveillanceguidelines.htm. Updated May 2015. Accessed January 2018. Tarkhashvili N, Thoroughman D, and Humbaugh K. Positive Hepatitis A IgM test results among persons without symptoms or risk-factor history- Kentucky, 2002-2004. Infect Dis Clin Pract. 2007. 15;245-249.
- Fiore, Anthony E. Hepatitis A transmitted by food. Clinical Infectious Disease. 2004; 38:705-715.
- Dembek ZF, Hadler JL, Castrodale L, et al. Positive test results for acute hepatitis a virus infection among persons with no recent history of acute Hepatitis—United States, 2002-2004, 2005, 54(18); 453-456.
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Outbreak Alert: CDC Investigating Multistate Outbreak of E. coli O157:H7

On December 28, 2017, the Centers for Disease Control and Prevention (CDC) released a statement regarding an ongoing Multistate Outbreak investigation of E. coli O157:H7 being performed by the CDC and U.S. Food and Drug Administration. As of the most recent media release on January 10, 2018, a total of 66 cases have been identified between the United States and Canada. In the United States, 24 cases have been identified across 15 states including California, Connecticut, Illinois, Indiana, Maryland, Michigan, Nebraska, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Virginia, Vermont and Washington. Illnesses included in this outbreak started November 15 to December 12, 2017. Of the 24 cases, there has been one death and two cases of hemolytic uremic syndrome. In Canada, The Public Health Agency identified 42 cases of E. coli O157 in five provinces including Ontario, Quebec, New Brunswick, Nova Scotia, and Newfoundland and Labrador. Of the 42 cases, 17 were hospitalized and one death was reported.

The Pubic Health Agency of Canada has linked the source of the illness to romaine lettuce; however the CDC is still working with regulatory partners to identify the source of the outbreak. The CDC is not recommending the avoidance of any food products at the time.

The CDC media statement may be found in the following link: https://www.cdc.gov/media/releases/2018/s0110-update-ecoli.html

The Canadian Public Health Notice may be found in the following link:

https://www.canada.ca/en/public-health/services/public-health-notices/2017/public-health-notice-outbreak-e-coli-infections-linked-romaine-lettuce.html

National Drug and Alcohol Facts Week January 22-28, 2018

National Drug and Alcohol Facts Week (NDAFW) is a national health observance intended to link teens with science based facts about drug and alcohol use. Started in 2010 by scientists at the National Institute on Drug Abuse (NIDA), the fact week is focused on addressing the myths surrounding drug abuse that teenagers are exposed to from the internet, social media, music, and peers.

As part of NDAFW, NIDA scientists are hosting a Drugs and Alcohol Chat Day on January 22. This is a live online chat where high school students can ask any questions regarding drug and alcohol use, including how to help friends and family that are abusing drugs, and the causes of addiction.



Source: https://teens.drugabuse.gov/national-drug-alcohol-facts-week/promote-ever

Community members can play a part in promoting National Drug and Alcohol Fact Week by hosting an event, social media shout outs, and partnering with NIDA to distributing informational resources to teens and parents (free materials available to order).

National Drug and Alcohol Facts Week: https://teens.drugabuse.gov/national-drug-alcohol-facts-week

Register for National Drug and Alcohol Chat Day:

https://teens.drugabuse.gov/national-drug-alcohol-facts-week/chat-with-scientists

National Drug and Alcohol IQ Challenge:

https://teens.drugabuse.gov/quiz/national-drug-alcohol-facts-week/take-iq-challenge/2017

Free materials: https://teens.drugabuse.gov/national-drug-alcohol-facts-week/order-free-materials

Selected Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas County Annual Totals		
	December 2017	December 2016	Pinellas 2017	Florida 2017	2016	2015	2014
. Vaccine Preventable			-				
Measles	0	0	0	3	0	0	0
Mumps	0	0	2	73	0	0	0
Pertussis	5	1	36	368	18	17	19
Varicella	2	3	24	656	74	38	35
. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	2	34	2	3	0
Meningitis (Bacterial, Cryptococcal, Mycotic)	0	0	7	112	7	6	4
Meningococcal Disease	0	0	0	22	0	1	0
. Enteric Infections				<u> </u>			
Campylobacteriosis	20	14	206	4328	146	104	103
Cryptosporidiosis	3	2	40	558	27	49	240
Cyclosporiasis	0	0	6	113	5	3	0
E. coli Shiga Toxin (+)	0	0	7	139	3	2	6
Giardiasis	2	5	45	996	41	30	42
Hemolytic Uremic Syndrome (HUS)	0	0	0	11	0	0	0
Listeriosis	0	0	0	54	2	2	0
Salmonellosis	23	5	279	6564	188	196	216
Shigellosis	5	1	26	1303	19	174	21
. Viral Hepatitis	3	<u> </u>	20		10	111	
Hepatitis A	0	0	0	280	2	4	2
Hepatitis B: Pregnant Woman +HBsAg	0	2	25	473	28	37	21
Hepatitis B, Acute	6	5	51	789	68	57	44
Hepatitis C, Acute	5	2	32	407	49	32	19
. VectorBorne/Zoonoses	5		32	407	70	02	10
Animal Rabies	0	0	2	25	4	1	2
Rabies, possible exposure	14	14	140	3486	131	114	190
Chikungunya Fever	0	0	0	4	1	2	10
Dengue	0	0	0	26	2	3	1
Eastern Equine Encephalitis	0	0	0	20	0	0	0
	1		16	216	11	6	5
Lyme Disease Malaria	0	0	0	58	0	2	3
							
West Nile Virus Others	0	0	0	7	1	1	0
Chlamydia	329	319	4006	n/a	4084	4168	3853
Gonorrhea	117	125	1502	n/a	1560	1439	1295
Hansen's Disease	0	0	0	18	0	0	0
Lead Poisoning	2	4	33	665	32	40	62
Legionellosis	1	1	23	436	19	18	13
Mercury Poisoning	0	0	1	47	0	10	2
Syphilis, Total	26	19	337	n/a	400	289	186
Syphilis, Infectious (Primary and Secondary)	11	7	148	n/a	187	151	75
Syphilis, Early Latent	10	7	116		144	83	61
Syphilis, Early Latent Syphilis, Congenital				n/a	2	3	0
OVERIOR CONTRACTOR	0	0	1	n/a			.
			70	n/a	60	50	E0
Syphilis, Late Syphilis (Late Latent; Neurosyphilis) Tuberculosis	5 1	5 0	72 28	n/a n/a	68 31	52 14	50 25

n/a = not available at this time. Blank cells indicate no cases reported. Reportable diseases include confirmed and probable cases only. All case counts are provisional. Data is collected from the Merlin Reportable Disease database, surveillance systems maintained at the Florida Department of Health in Pinellas County, and Florida CHARTS http://www.floridacharts.com/charts/default.aspx.

^{*}STD data in PRISM is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

^{**}Current HIV Infection data by year of report 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 in Florida. If a case is later identified as being previously diagnosed and reported from another state, the case will no longer be reflected as a Florida case and the data will be adjusted accordingly. Data from the current calendar year (2016) are considered provisional and therefore should not be used to confirm or rule out an increase in newly reported cases in Florida.