



# EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

May 2014

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**For more information, or to add your e-mail address to the distribution list, please contact the Editor.**

## Disease Reporting

**To report diseases and clusters of illness (other than TB/STD/HIV/AIDS)**

**Phone:** (727) 507-4346  
**Fax:** (727) 507-4347

**For TB, STD or HIV/AIDS Reporting**

**Phone:** (727) 824-6932

**Animal Bite Reporting**

**Phone:** (727) 524-4410  
x7665

## Middle East Respiratory Syndrome (MERS)

On Monday May 12, 2014, the Florida Department of Health (DOH) confirmed the first Florida case of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) infection in a patient at an Orlando hospital. The patient is a healthcare worker who resides and works in Saudi Arabia and is visiting the United States. DOH is working closely with hospital officials and the Centers for Disease Control and Prevention (CDC) to ensure appropriate care of the patient and protect the health of all residents and visitors in Florida. At this time, there is no broad risk of MERS-CoV infection for the general public and there is no threat to those traveling to the Orlando area.

### What Healthcare Professionals Should Do:

- Healthcare professionals should immediately report to their local county health department any person being evaluated for MERS-CoV infection as a patient under investigation (PUI)
- As soon as MERS-CoV infection is suspected, a mask should be placed on the patient and the evaluation should continue after the patient has been placed on airborne and contact precautions to prevent any additional exposures.
- Healthcare professionals should evaluate patients for MERS-CoV infection who: have fever and pneumonia or acute respiratory distress syndrome (ARDS), **and either:**
  - a history of travel from countries in or near the Arabian Peninsula within 14 days before symptom onset, **OR**
  - have had close contact with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within 14 days after traveling from countries in or near the Arabian Peninsula, **OR**
  - are part of a cluster of patients with severe acute respiratory illness of unknown etiology in which MERS-CoV is being evaluated.
- Healthcare providers should adhere to recommended infection control measures, including standard, contact, and airborne precautions, while managing symptomatic close contacts, patients under investigation, and patients who have probable or confirmed MERS-CoV infections.

*Information in this document is subject to change and newer versions supersede this article. Guidance and recommendations may change as the situation evolves and we learn more. Complete healthcare provider guidance and updates can be found here: <http://www.floridahealth.gov/diseases-and-conditions/mers/> CDC: <http://www.cdc.gov/coronavirus/MERS/INDEX.HTML> WHO: [http://www.who.int/csr/disease/coronavirus\\_infections/en/](http://www.who.int/csr/disease/coronavirus_infections/en/)*

## May 2014: Lyme Disease Awareness Month

Lyme disease is caused by the bacterium *Borrelia burgdorferi* and can be transmitted to humans through the bite of an infected black-legged tick. Ticks are an important disease vector in Florida and preventing tick bites is the best way to avoid becoming ill.

- Apply repellent such as DEET (N,N-diethyl-meta-toluamide), picaridin, or IR3535 to prevent ticks from attaching to your skin. Repellents with permethrin can be used on clothing, shoes, tents, and gear. Always follow product instructions!
- Check your body and your child's body for ticks after spending time in a place where ticks are likely to be found.
- Check your pet for ticks. Talk to your veterinarian about products that keep ticks off your pets.
- Dress so your skin is covered in light-colored clothing when you are in an area when ticks might be present.
- Prevent tick infestations around your home by landscaping your yard to be a tick-free zone.
- Shower soon after being outdoors. Showering within two hours of coming indoors has been shown to reduce your risk of being bitten by a tick!
- Walk in the center of the trail.

*For more information on Lyme and the prevention of tick-borne diseases, please visit:  
<http://www.floridahealth.gov/diseases-and-conditions/tick-and-insect-borne-diseases/index.html>  
and the Centers for Disease Control and Prevention, Lyme Disease: <http://www.cdc.gov/lyme/index.html>*

# **Lead Exposure and Prevention**

**BY ANDREA LEAPLEY, MPH**

Lead is a heavy metal that, when ingested or inhaled, can cause serious illness in humans. Acute lead poisoning occurs when an individual inhales or ingests a large amount of lead over a small period of time. Chronic lead poisoning occurs because lead does not break down and accumulates in the body as small amounts are ingested and inhaled over time. Lead poisoning is a significant public health problem and it is important for both children and adults to get tested if they are at risk of exposure.

No safe blood lead level (BLL) in children has been identified. In children, lead poisoning can cause learning disabilities, mental retardation, impaired visual and motor functioning, stunted growth, behavioral problems, neurological or organ damage, and hearing loss. In adults, lead poisoning is associated with hypertension and reproductive complications. Lead is also toxic to an unborn fetus because it can cross the placenta and can lead to birth defects or other developmental delays.

There are multiple sources of lead exposure that may increase blood lead levels. Lead-based paint in homes built before 1978, when it was discontinued for residential use, can chip or break down and settle on floors where children play. Renovation of older homes containing leaded materials such as paint, ceramic tile, pipes, or glass can also create lead dust in the environment. Children, especially those under six years of age, are at an increased risk for ingesting the dust as they often put their hands or other objects in their mouths.

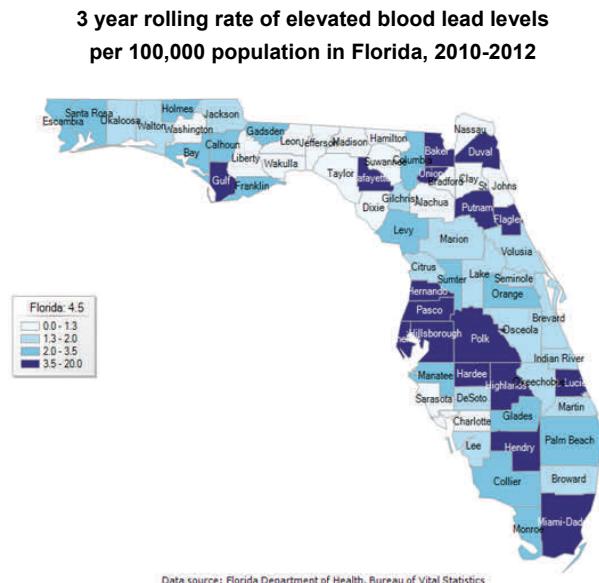
	3 year rolling rate of elevated blood lead levels per 100,000 population in Florida, 2010-2012
Lead-based paint in homes built before 1978	1.5%
Lead dust from renovation of older homes	1.5%
Total lead exposure risk	2.5%

Lead can be brought into homes due to occupations or hobbies such as battery recycling, car repair, industrial painting, engineering, or sandblasting. Furthermore, indoor and outdoor shooting ranges can be a source of lead exposure due to the lead dust created from firing a gun. The dust can be tracked on clothes and shoes to cars, homes, or yards where children or adults may be exposed. A number of consumer products may also contain lead. These include children's toys or jewelry, vinyl mini blinds, lead glazed pottery, fishing lures and sinkers, tile, and ammunition.

In 2012, Pinellas County reported 76 cases of elevated blood lead levels. This was a rate of 8.3 per 100,000 population.

This was significantly higher than the state of Florida, which reported 4.6 cases per 100,000 population. In 2013, Pinellas County reported 69 cases of elevated blood lead levels.

Among these cases, 60 were adults and 9 were children. Many of the adult exposures were occupational while the children were exposed to lead in their environments.



Lead poisoning is preventable! To prevent lead exposures, adults should shower and remove clothing following activities or working with lead-based products. Create barriers between living and playing areas and lead sources. Make sure children don't have access to peeling paint or surfaces painted with lead-based paint that they could chew or put in their mouths. Regularly wet mop floors and window ledges to keep them free of lead dust. Try to prevent children from playing on bare soil and wash children's hands and toys to remove any possible lead dust. The Consumer Product Safety Commission issues recalls for toys and jewelry with unsafe lead levels. More information on recalls can be found here: <http://www.cpsc.gov/en/Recalls>.

**Blood lead levels of 10 micrograms per deciliter of whole blood or greater should be reported to your local health department by the next business day. For more information on lead, please visit the Centers for Disease Control and Prevention's website: <http://www.cdc.gov/nceh/lead/>**

# Selected Reportable Diseases in Pinellas County

Disease	Pinellas	Year-to-Date		Pinellas County Annual Totals		
	2014 April	Pinellas 2014	Florida 2014	2013	2012	2011
<b>A. Vaccine Preventable</b>						
Measles						
Mumps						
Pertussis	1	5	233	17	10	10
Varicella	4	10	180	19	16	21
<b>B. CNS Diseases &amp; Bacteremias</b>						
Creutzfeldt-Jakob Disease (CJD)			6		2	3
<i>H. influenzae</i> (Invasive Disease)	1	4	113	12	7	10
Meningitis (Bacterial, Cryptococcal, Mycotic)		1	42	5	6	7
Meningococcal Disease			15	1		
Streptococcal Disease, Group A, Invasive		9	134	12	6	3
<i>S. pneumoniae</i> , Invasive Disease, Drug Resistant	1	9	222	24	16	22
<i>S. pneumoniae</i> , Invasive Disease, Susceptible	1	9	237	11	25	11
<b>C. Enteric Infections</b>						
Campylobacteriosis	8	42	599	63	59	83
Cryptosporidiosis	2	8	129	19	29	19
Cyclosporiasis			2	5	1	2
<i>E. coli</i> Shiga Toxin (+)	1	1	49	7	8	2
Giardiasis	6	10	279	34	32	27
Hemolytic Uremic Syndrome (HUS)			4	1		
Listeriosis			9		5	3
Salmonellosis	13	47	1011	203	203	225
Shigellosis		12	611	5	18	93
<b>D. Viral Hepatitis</b>						
Hepatitis A	2	2	34	6	4	5
Hepatitis B: Pregnant Woman +HBsAg	2	4	156	17	16	29
Hepatitis B, Acute	2	6	104	39	16	10
Hepatitis C, Acute	3	7	48	17	5	13
<b>E. Vector Borne, Zoonoses</b>						
Animal Rabies			25			2
Rabies, possible exposure	30	67	726	193	201	217
Dengue		1	26	2	3	1
Eastern Equine Encephalitis			1			
Lyme Disease		1	17	8	6	9
Malaria			8	1	2	1
St. Louis Encephalitis						
West Nile Virus			1			
<b>F. Others</b>						
AIDS**	11	41	n/a	119	130	123
HIV**	23	84	n/a	197	177	189
Chlamydia	345	1285	n/a	4141	3812	3863
Gonorrhea	96	415	n/a	1424	1029	1034
Hansen's Disease						
Lead Poisoning: Children < 6 years:	1	2	44	4	2	4
Legionellosis	2	4	60	10	13	13
Mercury Poisoning		2	3			2
Syphilis, Total	15	62	n/a	114	141	132
Syphilis, Infectious (Primary and Secondary)		21	n/a	52	61	66
Syphilis, Early Latent	4	21	n/a	37	47	35
Syphilis, Congenital			n/a			1
Syphilis, Late Syphilis (Late Latent; Neurosyphilis )		4	20	n/a	25	33
Tuberculosis	0	3	n/a	28	17	9
Vibrio Infections		1	19	11	10	11

n/a = not available at this time. Blank cells indicate no cases reported. 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. It has been noted that data from the previous month takes up to an additional month or more to be correctly updated.

\*\*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. For a more detailed explanation on changes in reporting and changes in trends, please contact the Bureau of HIV/AIDS, Data Analysis Section.