



EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

March 2018

Florida Department of Health in Pinellas County

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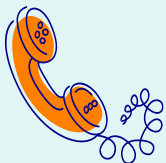
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For more information, or to add your e-mail address to the distribution list, please contact the Editor.

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

National Poison Prevention Week

By Jordan Kratzer
Epidemiology Program Intern

Unintentional poisoning is the excessive ingestion of a substance without the intention to cause harm. A poison can be classified as any substance that causes harm to your body if too much is ingested, absorbed through the skin, or inhaled.¹ Examples of poisons include alcohol, carbon monoxide, arsenic, lead, mercury, medications, household and automotive products, plants, and insect bites and stings. National Poison Prevention Week is observed March 18-24, raising awareness on the burden of unintentional poisoning.



In 2016, the Poison Control Center responded to 2.7 million cases via telephone, of which, 2.2 million classified as potentially dangerous exposures. Of these, children younger than six years old contributed to 46% of poisonings, followed by adults making up 35%, teens with 8%, and finally older children (6-12 years and unknown) making up the final 11%. While teen and adult poisonings are more serious, pediatric poisonings are more frequent. The leading causes of poisonings for all age groups in 2016 were analgesics, household cleaning substances, cosmetics and personal care products, and sedatives, hypnotics and antipsychotics.²

The CDC provides the following tips for awareness and prevention of unintentional poisoning^{2,3}:

- Household products and medications should be kept out of reach of children.
- Chemical products should be kept in original containers.
- Household products should not be mixed, as some chemicals can produce toxic fumes when combined.
- Protective clothing, such as gloves, long sleeves, long pants, and socks and shoes, should be worn when using household chemicals.
- When using household products and cleaners, the area should be well ventilated by opening windows or turning on fans.

What to do in case of accidental poisoning:

- If the victim is not breathing or is collapsed, call 911 immediately.
- If the victim is alert and awake, call the Poison Control Center at 1-800-222-1222.

References:

1. HRSA. Poison help. 2017. <https://www.poisonhelp.hrsa.gov/poison-info/index.html>
2. NCP. Poison statistics: National data 2016. (2018). Retrieved from <https://www.poison.org/poison-statistics-national>
3. CDC. Home and recreational safety. 2015. <https://www.cdc.gov/homeandrecreationalafety/poisoning/preventiontips.htm>

The Aesthetics of Mercury Poisoning

By Dana Elhassani, MPH, CPH
Epidemiologist

Mercury is a natural and odorless element that is used in a wide variety of products, from household thermometers to cosmetic products. Three forms that cause most poisonings are elemental (or metallic) mercury, organic mercury (methylmercury and ethylmercury), and inorganic mercury (mercuric salts). Depending on the route, concentration and duration of exposure, symptoms may manifest differently. For example, short-term exposure to high levels of metallic mercury vapors can cause lung damage, while long-term exposure to lower levels may lead to neurological disturbances, skin rash and kidney abnormalities. Individual nervous systems vary to the effects of mercury and may respond differently based on route of exposure. Elevated mercury levels can be detected in urine, whole blood and hair. The public health dangers of mercury poisoning are frequently mentioned in relation to saltwater fish, shellfish (organic mercury), broken thermometers, and dental fillings (elemental mercury). Other less common sources of mercury exposure are skin-lightening products (inorganic mercury).

While often used for aesthetic purposes, skin-lightening plays a significant role in patient care for individuals with hyperpigmentation disorders. Products with excess mercury may cause dermatological complications such as dermatitis, baboon syndrome, hyperpigmentation, hypopigmentation, pruritus, nail discoloration, malar rash and erythema. Furthermore, elevated mercury levels have been detected in urine samples provided by persons with close contact to someone who use these products, even when they do not use them themselves. Thus, in patients with suspected mercury poisoning, medical histories should investigate the use of cosmetic products of the patient and their close contacts.¹

Mercury is not an active ingredient in skin-lightening products and is typically limited by the FDA to 1 ppm, except for products used around the eye which are limited to 65 ppm. Despite these regulations, a study conducted by Hamann et al. found that of 549 skin-lightening products available for purchase in the United States, Taiwan and Japan, 6% (n=33) contained mercury levels above 1000 ppm and of those 33, 45% contained more than 10,000 ppm.¹

Mercury poisoning is a reportable disease in the state of Florida and is required to be reported to the local county health department within one business day following diagnosis. Through reporting, common sources can be identified and further exposure reduced, if not eliminated.

References:

1. Hamman CR, Boonchai W, Wen L, et al. Spectrometric analysis of mercury content in 549 skin-lightening products: is mercury toxicity a hidden global health hazard? *American Academy of Dermatology*. 2013; 281-287.
2. Agency for Toxic Substances and Disease Registry (ATSDR). Toxicological profile for mercury. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service. 1999.

Wanted: Leaders for a TB-free World

World TB Day on March 24 is an annual event commemorating the day when Dr. Robert Koch announced the discovery of *Mycobacterium tuberculosis*, the bacteria that causes tuberculosis (TB) and one of the top 10 causes of death worldwide. In 2016, 10.4 million people were newly diagnosed with TB and 1.7 million died because of the infection. Tuberculosis can affect anyone; however, it has the greatest impact on those living in poverty, marginalized communities and other vulnerable populations, where accessibility to care and treatment are more difficult. To address these barriers, this year the theme is "Wanted: Leaders for a TB-free World" focusing on the importance of greater community commitment to eliminating TB. Leadership across national, state, and local government agencies, as well as health care and community service organizations are needed to provide education, access to care and treatment for those with TB.

For more information about the World Health Organization's "The End of TB Strategy" visit: <http://www.who.int/tb/strategy/en/>. For more information and resources for World TB Day from the CDC, please visit: <https://www.cdc.gov/tb/worldtbd/default.htm>.

Selected Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas County Annual Totals		
	February 2018	February 2017	Pinellas 2018	Florida 2018	2017	2016	2015
A. Vaccine Preventable							
Measles	0	0	0	0	0	0	0
Mumps	1	1	1	14	2	0	0
Pertussis	1	0	2	48	36	18	17
Varicella	3	4	4	91	24	74	38
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	0	5	2	2	3
Meningitis (Bacterial, Cryptococcal, Mycotic)	1	2	2	24	7	7	6
Meningococcal Disease	1	0	1	8	0	0	1
C. Enteric Infections							
Campylobacteriosis	15	10	29	600	206	137	104
Cryptosporidiosis	1	1	3	71	40	27	49
Cyclosporiasis	0	0	0	0	6	5	3
<i>E. coli Shiga Toxin (+)</i>	0	1	1	107	7	3	2
Giardiasis	4	2	6	151	45	41	30
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0	0
Listeriosis	0	0	1	9	0	2	2
Salmonellosis	9	15	28	573	279	188	196
Shigellosis	1	2	4	171	26	19	174
D. Viral Hepatitis							
Hepatitis A	1	0	1	25	0	2	4
Hepatitis B: Pregnant Woman +HBsAg	2	2	4	69	25	28	37
Hepatitis B, Acute	4	4	10	197	51	68	57
Hepatitis C, Acute	4	2	8	95	32	49	32
E. VectorBorne/Zoonoses							
Animal Rabies	0	2	0	0	2	4	1
Rabies, possible exposure	8	17	22	633	140	131	114
Chikungunya Fever	0	0	0	3	0	1	2
Dengue	0	0	0	2	0	2	3
Eastern Equine Encephalitis	0	0	0	0	0	0	0
Lyme Disease	1	1	1	15	16	11	6
Malaria	0	0	0	6	0	0	2
West Nile Virus	0	0	0	0	0	1	1
F. Others							
Chlamydia	320	348	667	n/a	4006	4133	4168
Gonorrhea	104	90	232	n/a	1502	1566	1439
Hansen's Disease	0	0	0	0	0	0	0
Lead Poisoning	1	3	4	50	33	32	40
Legionellosis	3	1	5	66	23	19	18
Mercury Poisoning	0	0	0	6	1	0	1
Syphilis, Total	20	15	53	n/a	337	400	289
Syphilis, Infectious (Primary and Secondary)	11	7	24	n/a	148	188	151
Syphilis, Early Latent	5	7	16	n/a	116	146	83
Syphilis, Congenital	0	0	0	n/a	1	2	3
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	4	1	13	n/a	72	64	52
Tuberculosis	0	1	2	n/a	28	31	14
<i>Vibrio Infections</i>	0	0	0	18	10	8	11

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.