



Monthly Epidemiology and Preparedness Newsletter

September 2017

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

Possible Rabies Exposure/ Animal Bite Reports: Phone: (727) 524-4410 x7665



Childhood Obesity Awareness Month

By Rebecca Bohinc, Epidemiologist

As children return to school this fall, it is important to consider factors that affect a child's overall health, especially during this transitionary period. September is Childhood Obesity Awareness month, which promotes awareness of obesity among youth in the United States as well as the importance of increasing health promotion activities within the home, school and local community. In the United States, one in every three children is considered overweight or obese as measured by body mass index.¹ Data collected from the National Health and Nutrition Examination Surveys from 2011-2014 indicated that obesity among children ages 2-19 was greatest among Hispanics (21.5%) and non-Hispanic blacks (19.5%). When broken down by age group, obesity was most prevalent among children ages 12-19 (20.5%), followed by children ages 6-11 (17.5%) and children ages 2-5 (8.9%).² The long-term consequences of being overweight from childhood to adulthood include increased risk of high blood pressure, high cholesterol, type 2 diabetes, fatty liver disease and musculoskeletal strain.³

Locally, the Pinellas County Community Health Improvement Plan (CHIP) has defined initiatives to increase the percentage of adults and children who are at a healthy weight and to adopt behaviors that improve long-term health outcomes. To achieve those initiatives, objectives were created to address community level policies, increasing access to nutritious and affordable foods and increasing access to safe environments for physical activity. As of the June 2017 CHIP, the percentage of middle and high school students and the percentage of adults of a healthy weight increased by 2.2% and 4.5%, respectively. Consumption of fruit and vegetables among adults and middle school children also improved as a result of community efforts. Two objectives failed to meet their target goals, including "the proportion of children in grades 1, 3 and 6 with a healthy weight" and "the percentage of adults who remained sedentary within the last 30 days".

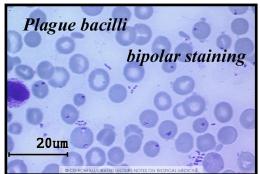
It is important to remember that childhood obesity is preventable. As children adjust to a new routine at school, it is critical to ensure that children have opportunities to incorporate nutritious foods and physical activity into their day. Even small changes in behavior can initiate changes that improve long-term health outcomes. Suggestions to incorporate healthy behaviors in the home are provided below.⁵

- Taking a walk as a family, go swimming, play tag, dance.
- Allow children to help plan and prepare healthy family meals.
- Substitute high-calorie snacks with healthy alternatives such as apples, bananas, blueberries and grapes.

References

- ¹ National Childhood Obesity Awareness Month. Office of Disease Prevention and Health Promotion website. https://healthfinder.gov/NHO/SeptemberToolkit.aspx. Updated September 3, 2017. Accessed September 1, 2017.
- ² Prevalence of Childhood Obesity in the United States, 2011-2014. The Centers for Disease Control and Prevention website. https://www.cdc.gov/obesity/data/childhood.html. Updated April 10, 2017. Accessed September 1, 2017.
- ³ Childhood Obesity Causes & Consequences. The Centers for Disease Control and Prevention website. https://www.cdc.gov/obesity/childhood/causes.html Updated December 15, 2016. Accessed September 1, 2017.
- ⁴ Community Health Improvement Plan Wrap Up Report 2013-2017. Pinellas County. http://pinellas.floridahealth.gov/programs-and-services/community-health-planning-and-statistics/data-and-reports/_documents/pinellas-county-chip-2013-2017.pdf. Updated June 2017. Accessed September 1, 2017.
- ⁵ Tips for Parents Ideas to Help Children Maintain a Healthy Weight. The Centers for Disease Control and Health Promotion website. https://www.cdc.gov/healthyweight/children/index.html. Updated August 9, 2017. Accessed September 1, 2017.

Plague and Pets



Historically referenced as the Black Death, plague is a bacterial infection caused by *Yersinia pestis*, a gram-negative, bipolar-staining, rod-shaped bacterium with a "safety pin"-like appearance. 1-3 Over the course of recorded history, three major plague epidemics have been identified and in all three, rats were the primary carriers. Currently, cases in the United States are sporadic and predominantly occur in the western United States where the primary hosts are prairie dogs, rock squirrels, ground squirrels, chipmunks, and other burrowing rodents. The vector for *Y. pestis* is most commonly the rat flea; however, many other species of fleas, ticks and human lice have been identified as vectors as well. 2

Dogs and cats can also act as hosts for fleas infected with *Y. pestis* and are a common sources of plague infections for pet owners and veterinarians.³ Dogs have been found to be relatively resistant to illness caused by *Y. pestis*, but even

in cases where they become ill, the disease tends to be self-limiting.² On the other hand, cats can become severely ill and can develop all three forms of plague (bubonic, pneumonic and septicemic), with pneumonic posing the greatest risk for those in contact with the infected animal.^{2,3} Transmission from pets to humans can occur though bites, scratches and contact with exudates.²

Yersinia pestis in animals can be identified through microscopy, serology and/or culture.^{2,3} Gram, Wright, Geimsa or Wayson's stain of peripheral blood, sputum or lymph node specimen via microscopy may be used for a presumptive diagnosis.² If an animal is suspected of plague, appropriate biological samples should be collected (please contact your local health department for guidance) and then antibiotic therapy started immediately. Treatment options for dogs and cats include streptomycin (preferred choice), gentamicin, doxycycline, tetracycline, and chloramphenicol. Exposed owners and veterinary staff should consult health care providers to determine the need for prophylaxis and monitor for symptoms for two weeks after contact with infected fleas and mammals.³

References

- Plague: History. Centers for Disease Control and Prevention Website. https://www.cdc.gov/plague/history/index.html. Updated September 14, 2015. Accessed August 17, 2017.
- Colville JL, Berryhill DL. Plague. In: Colville JL, Berryhill DL. Handbook of Zoonoses: Identification and Prevention. St. Louis, MO. Mosby Inc.; 2007: 130-134
- Plague: Information for Veterinarians. Centers for Disease Control and Prevention Website. https://www.cdc.gov/plague/healthcare/ veterinarians.html. Updated September 27, 2016. Accessed August 17, 2017
- Image: http://itg.author-e.eu/Generated/pubx/173/mm files/do 3189/co 68409/kabisa 1538.jpg

MMWR Summary: Occupational Distribution of Campylobacteriosis and Salmonellosis Cases- Maryland, Ohio, and Virginia, 2014

Campylobacter and Salmonella are the two most common causes of bacterial gastroenteritis in the United States. Both illnesses are most frequently transmitted via contaminated food items; however, they can also be transmitted from person to person, animals and environmental sources. Occupational exposure among those who work with poultry has been previously identified as a significant risk factor; however, the risk imposed by other occupations has not been fully assessed. Thus, in 2014, a study was conducted by the Occupational Safety and Health Administration, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health and state health departments, reviewing 1,722 campylobacteriosis and 1,516 salmonellosis cases across Maryland, Ohio and Virginia with available occupational information.

It was found that individuals working in farming, fishing, forestry, health care and technical occupations were at a higher risk for both campylobacteriosis and salmonellosis. This trend was due to the exposure to animals, environmental sources and ill patients. Persons working in food preparation, serving, personal care and service occupations were at a higher risk for salmonellosis, mostly due to exposure to under-cooked and/or contaminated food items. Ultimately, this study provided a more comprehensive assessment of occupational risk, as well as identified other at-risk populations for more targeted education and prevention strategies during epidemiological investigations.

Reference:

Su C, De Perio MA, Fagan K, et al. Occupational Distribution of Campylobacteriosis and Salmonellosis Cases -Maryland, Ohio and Virginia, 2014. Morbidity and Mortality Weekly Report. 2017; 66 (32): 850-853.

Selected Reportable Diseases in Pinellas County

| | Pinellas | | YTD Total | | Pinellas County Annual Totals | | |
|--|-------------|-------------|---------------|--------------|-------------------------------|------|------|
| Disease | August 2017 | August 2016 | Pinellas 2017 | Florida 2017 | 2016 | 2015 | 2014 |
| A. Vaccine Preventable | | | | <u> </u> | | | |
| Measles | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Mumps | 0 | 0 | 1 | 43 | 0 | 0 | 0 |
| Pertussis | 3 | 1 | 28 | 274 | 18 | 17 | 19 |
| Varicella | 0 | 4 | 14 | 447 | 74 | 38 | 35 |
| B. CNS Diseases & Bacteremias | | | | | | | |
| Creutzfeldt-Jakob Disease (CJD) | 1 | 0 | 1 | 20 | 2 | 3 | 0 |
| Meningitis (Bacterial, Cryptococcal, Mycotic) | 0 | 0 | 7 | 81 | 7 | 6 | 4 |
| Meningococcal Disease | 0 | 0 | 0 | 16 | 0 | 1 | 0 |
| C. Enteric Infections | | | | <u> </u> | | | |
| Campylobacteriosis | 27 | 16 | 140 | 2959 | 146 | 104 | 103 |
| Cryptosporidiosis | 1 | 4 | 23 | 310 | 27 | 49 | 240 |
| Cyclosporiasis | 3 | 0 | 5 | 104 | 5 | 3 | 0 |
| E. coli Shiga Toxin (+) | 0 | 1 | 2 | 79 | 3 | 2 | 6 |
| Giardiasis | 3 | 6 | 33 | 708 | 41 | 30 | 42 |
| Hemolytic Uremic Syndrome (HUS) | 0 | 0 | 0 | 8 | 0 | 0 | 0 |
| Listeriosis | 0 | 0 | 0 | 33 | 2 | 2 | 0 |
| Salmonellosis | 31 | 20 | 146 | 3645 | 188 | 196 | 216 |
| Shigellosis | 1 | 1 | 18 | 888 | 19 | 174 | 21 |
| D. Viral Hepatitis | | | | | | | |
| Hepatitis A | 0 | 0 | 0 | 178 | 2 | 4 | 2 |
| Hepatitis B: Pregnant Woman +HBsAg | 3 | 2 | 23 | 335 | 28 | 37 | 21 |
| Hepatitis B, Acute | 4 | 5 | 30 | 497 | 68 | 57 | 44 |
| Hepatitis C, Acute | 2 | 3 | 14 | 240 | 49 | 32 | 19 |
| E. VectorBorne/Zoonoses | | | | <u> </u> | | | |
| Animal Rabies | 0 | 0 | 2 | 25 | 4 | 1 | 2 |
| Rabies, possible exposure | 17 | 15 | 103 | 2239 | 131 | 114 | 190 |
| Chikungunya Fever | 0 | 0 | 0 | 2 | 1 | 2 | 10 |
| Dengue | 0 | 0 | 0 | 15 | 2 | 3 | 1 |
| Eastern Equine Encephalitis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lyme Disease | 6 | 4 | 13 | 136 | 11 | 6 | 5 |
| Malaria | 0 | 0 | 0 | 41 | 0 | 2 | 3 |
| West Nile Virus | 0 | 0 | 0 | 2 | 1 | 1 | 0 |
| F. Others | | | | 1 . | | | |
| Chlamydia | 380 | 410 | 2895 | n/a | 4084 | 4168 | 3853 |
| Gonorrhea | 144 | 160 | 1060 | n/a | 1560 | 1439 | 1295 |
| Hansen's Disease | 0 | 0 | 0 | 13 | 0 | 0 | 0 |
| Lead Poisoning | 4 | 3 | 20 | 532 | 32 | 40 | 62 |
| Legionellosis | 3 | 5 | 13 | 259 | 19 | 18 | 13 |
| Mercury Poisoning | 0 | 0 | 0 | 27 | 0 | 1 | 2 |
| Syphilis, Total Syphilis, Infectious (Primary and | 26 | 35 | 256 | n/a | 400 | 289 | 186 |
| Secondary) | 12 | 13 | 112 | n/a | 187 | 151 | 75 |
| Syphilis, Early Latent | 8 | 17 | 83 | n/a | 144 | 83 | 61 |
| Syphilis, Congenital | 0 | 0 | 3 | n/a | 2 | 3 | 0 |
| Syphilis, Late Syphilis (Late Latent; Neurosyphilis) | 6 | 5 | 58 | n/a | 68 | 52 | 50 |
| Tuberculosis | 4 | 3 | 25 | n/a | 31 | 14 | 25 |
| Vibrio Infections | 2 | 1 | 5 | 167 | 8 | 11 | 10 |

n/a = not available at this time. 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.

^{*} Florida tracks cases of HIV/AIDS. For the most up to date data, please visit: http://www.floridahealth.gov/diseases-and-conditions/aids/surveillance/index.html