

EPI WATCH

Monthly Epidemiology Newsletter



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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) 484-3865 (excluding HIV/AIDS)

To report HIV/AIDS by mail: Surveillance Room 3-138 205 Dr. MLK Jr St. N

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Monkeypox Case Reported in Texas

by Becky Bohinc, MPH, CPH

On July 15, 2021, the Centers for Disease Control and Prevention (CDC) and the Texas Department of State Health Services identified a confirmed case of human monkeypox in a United States resident. The individual was the first confirmed case in the US since an outbreak that occurred in 2003. The case had recently returned to the United States after a trip to Nigeria. Increased surveillance and public health efforts have been initiated in Nigeria in effort to identify sources of exposure and monitor close contacts of the recent case. Contacts in the United States are also being monitored.

Monkeypox virus was first discovered in 1958 when a pox-like outbreak occurred among monkey research colonies. It was not until 1970 that the first human case was identified in the Democratic Republic of Congo (DRC). Since then, human cases of monkeypox have been reported from 11 African countries with the DRC and Nigeria reporting the highest numbers of documented cases. The reservoir host for the virus has not been identified but African rodents are suspected to play a role in transmission. The 2003 outbreak in the US stemmed from prairie dogs that were comingled with imported African rodents. The prairie dogs were sold as pets prior to displaying signs of illness, causing an outbreak of 47 human cases across six states.

Although primary transmission occurs from an infected animal to human, person-to-person transmission is possible with prolonged, close contact to large respiratory droplets. Humans can be exposed through direct contact with blood, bodily fluids, or cutaneous or mucosal lesions of infected animals. The incubation period can range 5-21 days but is often within 7-14 days. The virus enters the body through broken skin, the respiratory tract, or mucous membranes causing symptoms of fever, chills, headache, muscle ache, backache, exhaustion, and swollen lymph nodes. A rash often occurs within 1-3 day of illness and typically begins on the face before radiating to other parts of the body. Individuals are considered infectious just prior to their onset of illness through the complete course of the rash illness when all lesions have crusted and fallen off.

The monkeypox virus is part of the *Orthopoxvirus* genus that also includes the virus that causes smallpox and the virus used for the smallpox vaccine. The smallpox vaccine has been shown to provide a degree of protection against the spread of monkeypox and multiple observational studies suggest even up to as much as 85% protection. However, the elimination of routine smallpox vaccinations has allowed a new generation to become susceptible to monkeypox infections. Prevention measures including avoiding contact with high-risk animals, materials in contact with sick animals, isolation of close contacts, proper hand hygiene and isolation of infected patients are key to controlling spread.

For more information, please visit CDC Monkeypox

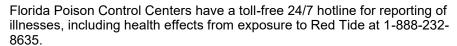
Red Tide Update - Pinellas County

by Rachel Ilic, MPH, CIC

The Florida Fish and Wildlife Conservation Commission reported that as of August 18 that a bloom of the Red Tide organism, *Karenia brevis*, persists on the Florida Gulf Coast. A total of 99 samples detected *K. brevis*. Bloom concentrations (>100,000 cells/liter) were observed in six samples from Pinellas County. *K. brevis* was observed at background to high concentrations from and offshore of Pinellas County. Fish kills suspected to be related to Red Tide were reported in Pinellas County, mostly on the Gulf Shore.

Respiratory irritation continues to be reported and visitors to county beaches are advised to take the following steps:

- Do not swim around dead fish.
- If you have chronic respiratory problems, be careful and consider staying away from the shore as Red Tide can affect your breathing.
- Do not harvest or eat molluscan shellfish and distressed or dead fish from areas with Red Tide. If fish are healthy, rinse fillets with tap or bottled water and throw out the guts.
- Keep pets and livestock away from water, sea foam, and dead sea life.
- Residents living in beach areas are advised to close windows and run the air conditioner (making sure that the A/C filter is maintained according to manufacturer's specifications).
- If outdoors, residents may choose to wear paper filter masks, especially if onshore winds are blowing.





For information about Red Tide and links to other resources, visit the <u>Florida Department of Health in Pinellas County Red Tide website</u>

For additional information on the locations where Red Tide has been found, please visit the <u>Florida Fish and Wildlife Research website</u>

Locally-Acquired Melioidosis Cases Reported in the United States

By Andrea Leapley, MPH, CIC

Melioidosis is a disease caused by the bacterium *Burkholderia pseudomallei* and most commonly occurs in tropical climates, particularly Southeast Asia and Northern Australia. In the United States, the bacteria only occur naturally in Puerto Rico and the U.S. Virgin Islands. The bacteria is most often found in contaminated soil or water and can infect humans and animals though ingestion, inhalation, or through contact with contaminated soil, especially through skin abrasions. A few cases of person-to-person transmission have been documented but it is exceedingly rare. The symptoms of melioidosis depend on the type of infection but can include localized pain or swelling, fever, ulceration, abscess, cough, chest pain, high fever, headache, anorexia, respiratory distress, abdominal discomfort, joint pain, disorientation, weight loss, stomach or chest pain, muscle or joint pain, and seizures. Anyone can contract melioidosis but persons with diabetes, liver disease, renal disease, thalassemia, cancer or immune-suppressing conditions not related to HIV, and chronic lung disease are at increased risk. The infection can be treated with appropriate antibiotic therapy.

Between March and July, the Centers for Disease Control and Prevention (CDC) have identified four cases of melioidosis in United States residents from Georgia, Kansas, Texas, and Minnesota. Two of the cases were adults, two were children, and two have died. Whole genome sequencing found that the strains, most closely related to strains often found in South Asia, match closely and indicate a common exposure. None of the cases have traveled outside of the continental U.S. More than 100 samples from soil, water, and food from the cases' homes were tested but none have been positive for *Burkholderia pseudomallei*. It is currently believed that the most common source is an imported product, such as food, drink, personal care, cleaning product, or medicine, as the bacteria has been found in wet or moist products in countries where the bacteria is endemic.

The CDC is asking providers to monitor for acute bacterial infectious that do not respond to regular antibiotic treatment and to consider melioidosis, regardless of whether the patient has traveled outside of the United States, even in children with no underlying health conditions.

For more information, please see the most recent Health Alert Network notification

Select Reportable Diseases in Pinellas County

Sciect Report		T DISCUSCI						
	Pin	Pinellas		YTD Total		Pinellas Annual Totals		
Disease	July 2021	July 2020	Pinellas 2021	Florida 2021	2020	2019	2018	
A. Vaccine Preventable								
Measles	0	0	0	0	0	1	7	
Mumps	0	0	1	17	1	7	10	
Pertussis	0	0	1	31	8	27	32	
Varicella	5	1	16	183	18	33	67	
B. CNS Diseases & Bacteremias								
Creutzfeldt-Jakob Disease (CJD)	1	0	1	11	0	3	1	
Meningitis (Bacterial, Cryptococcal, Mycotic)	1	1	2	42	6	7	9	
Meningococcal Disease	0	0	1	11	3	1	1	
C. Enteric Infections								
Campylobacteriosis	15	17	138	2172	252	310	264	
Cryptosporidiosis	0	2	18	170	44	64	34	
Cyclosporiasis	7	0	7	123	9	28	4	
E. coli Shiga Toxin (+)	4	0	9	307	10	24	15	
Giardiasis	2	0	15	319	28	52	41	
Hemolytic Uremic Syndrome (HUS)	0	0	0	3	0	1	0	
Listeriosis	2	0	1	21	2	2	1	
Salmonellosis	19	16	63	2637	176	201	233	
Shigellosis	5	1	1	236	19	22	40	
D. Viral Hepatitis		•						
Hepatitis A	1	1	1	134	4	377	113	
Hepatitis B: Pregnant Woman	1	1	4	197	40	24	14	
Hepatitis B, Acute	3	2	31	260	103	72	52	
Hepatitis C, Acute	6	6	43	720	18	82	40	
E. Vector Borne/ Zoonoses								
Animal Rabies	0	0	0	45	1	2	1	
Rabies, possible exposure	13	10	79	2008	128	128	130	
Chikungunya Fever	0	0	0	1	0	0	0	
Dengue	0	0	0	8	0	3	0	
Eastern Equine Encephalitis	0	0	0	0	0	0	0	
Lyme Disease	2	0	2	93	11	22	14	
	0	0	0	19	2	5	3	
West Nile Virus	0	0	0	2	0	0	0	
Zika Virus Disease	0	0	0	0	0	3	2	
F. Others								
Chlamydia	359	330	2425	n/a	3982	4588	4422	
Gonorrhea	171	125	1140	n/a	1640	1537	1439	
Hansen's Disease	0	0	0	6	0	0	0	
Legionellosis	2	4	23	433	35	43	37	
Mercury Poisoning	0	0	2	8	1	1	1	
Syphilis, Total	45	33	335	n/a	469	479	438	
Syphilis, Primary and Secondary	26	13	150	n/a	224	213	190	
Syphilis, Early Latent	16	9	121	n/a	161	191	158	
Syphilis, Congenital	0	1	2	n/a	5	6	2	
Syphilis, Late Syphilis	3	0	62	n/a	89	69	88	
Tuberculosis	1	1	10	n/a	24	23	33	
Vibrio Infections	3	1	6	125	12	18	6	

^{*}YTD up to July 31, 2021. n/a = not available at this time

Reportable diseases include confirmed and probable cases only. All case counts are current and 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 STARS is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.