Vibrio cholerae infection after near-drowning in an eastern New Mexico pond

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A 12-year-old boy was rescued on July 4, 2017, after a near-drowning at Hillcrest Park pond in Clovis, New Mexico. As a complication, the boy acquired a *Vibrio cholerae* infection; local authorities confirmed the source of the bacteria was from the pond. For this reason, access to the pond has been blocked, and the water will be drained. Ultimately, the patient did not survive.

Vibrio infections or vibriosis refer to infections caused by bacteria that belong to the Vibrionaceae family, which includes microorganisms such as *V. cholerae*, *V. vulnificus*, *V. parahemolyticus*, etc. These *Vibrio* spp. may cause a wide spectrum of diseases. *Vibrio cholerae* is a curved, motile Gram-negative bacilli found in estuarine and marine environments. The isolated *V. cholerae* from this patient was classified as non-toxigenic; this is important for public health purposes because cholera epidemics can be caused only by *V. cholerae* that is able to produce cholera toxin (serogroups O1 & O139).

In the United States, V. cholerae infections are uncommon. In 2014, the CDC reported 80 cases of non-toxigenic V. cholerae (5 patients died); most of them were food borne related (usually seafood), and they represented only 6% of the total cases of vibriosis. Although the most feared infections are the ones caused by the epidemic strains, non-toxigenic Vibrio cholerae has been reported as a cause of gastroenteritis, skin and soft tissue infections, and bacteremia. Vibrio cholerae is usually susceptible to tetracyclines, quinolones, macrolides, and third generation cephalosporins; aggressive supportive care may also be required in severe disease. Physicians need to consider non-toxigenic V. cholerae infections in patients with significant exposure to water in ponds and lakes. Submitted 9/2/2017.

http://krqe.com/2017/07/16/family-friend-says-clovis-boy-who-contracted-cholera-from-pond-has-died/. Accessed 8/31/2017.

Prairie dog plague

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 $oldsymbol{T}$ he Lubbock Avalanche Journal reported that plague decimated two colonies of prairie dogs at the Muleshoe National Wildlife Refuge in July 2017. This outbreak killed nearly 100% of the prairie dogs in each colony, and the area was closed to the public. Sylvatic plague in prairie dogs is caused by Yersinia pestis. These outbreaks occur every 3-4 years; the infection is passed by fleas and contact with infected tissue and fluid. Multiple other wild animals and domestic animals, such as cats and dogs, can become infected if they have contact with the infected fleas or the remains of dead prairie dogs. This infection can be passed to humans from flea bites and from secretions from sick animals, but this event is guite uncommon. The last time it occurred in Texas was in 2006. However, there have been three cases in Santa Fe County in New Mexico this year. The public should avoid prairie dog colonies during



Cynomys ludovicianus



Yersinia pestis

these epizootic outbreaks, take precautions to avoid fleabites, and avoid sick animals, including domestic pets. Submitted 7/10/2017.

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