

County of Santa Cruz

HEALTH SERVICES AGENCY

POST OFFICE BOX 962, 1080 Emeline Ave., SANTA CRUZ, CA 95061-0962 TELEPHONE: (831) 454-4000 FAX: (831) 454-4488 TDD: Call 711

Public Health Division

PUBLIC HEALTH ADVISORY

To: All Healthcare Providers in Santa Cruz County

From: Arnold S. Leff, MD, REHS, County Public Health Officer

Subject: Aeromonas infection
Date: August 13, 2018

Current Situation: In late July, *Aeromonas* was identified in the stool of an out-of-state traveler who developed gastrointestinal symptoms following a visit to Santa Cruz County. From July 15-19, a large group of friends and family traveled to Santa Cruz County, visiting several sites throughout the area. Of the twenty travelers, seven developed gastrointestinal symptoms, including diarrhea and inappetence, with about half the cases' symptoms progressing to vomiting after several days. The confirmed *Aeromonas* case is an infant whose symptoms persisted for 11 days, until antibiotics were administered with symptoms largely resolving within 12 hours. Currently, the *Aeromonas* infection is suspected to have been locally acquired during the trip.

All cases deny recent consumption of seafood. The group of travelers report several potential points of exposure, including a Felton RV/campsite and Santa Cruz city's Main Beach and San Lorenzo River mouth. Additional lab results are pending as several of the travelers are still ill, including one child with intussusception. Environmental sampling of the potential sites of exposure is in progress.

Santa Cruz County providers are being asked to consider *Aeromonas* infection for patients with diarrhea (often watery) and progression to vomiting, especially in, but not limited to, persons with recent exposure to fresh, brackish, or potentially contaminated water, or consumption of seafood.

Background: The genus *Aeromonas* consists of gram-negative rods widely distributed in freshwater, estuarine, and marine environments. Contact with any fresh or brackish water body is the most common source of human infection. The risk of infection can be reduced by minimizing wound exposure to and oral ingestion of natural water sources (lakes, rivers, streams, ponds, and bays) during warmer summer months. The organisms can cause a wide spectrum of disease syndromes, but diarrheal disease ("traveler's diarrhea") is the most common manifestation.

Epidemiology: Mesophilic aeromonads have a global distribution and have been isolated from a variety of species (fish, reptiles, amphibians, mammals, humans) and aquatic environments, including fresh water, brackish water, surface water, drinking water, polluted waters, and waste water effluent sludge. Aeromonads are not generally considered marine organisms but can be found in marine systems that interface with fresh waters and can survive at all but the most extreme salt concentrations. *Aeromonas* species can grow to large numbers and generally peak in the warmer temperatures of the summer months.

Diagnosis: Aeromonads are not routinely identified in most microbiology laboratories as part of the normal protocol for isolating stool pathogens. For cases in which *Aeromonas* is suspected, the medical provider should order a stool culture for *Aeromonas / Plesiomonas*, with reflex sensitivity.

Treatment: Most cases of *Aeromonas*-associated diarrhea are self-limiting and can be managed with supportive therapy. Antibiotics may be of value in patients with severe diarrhea and/or immunosuppression; however, antimicrobial susceptibility varies across *Aeromonas* species. Antibiotic therapy is also indicated in situations of wound infection and bacteremia.

Reporting: *Aeromonas* infection is not routinely reportable except in the case of outbreaks, which are always reportable. However, given the situation, the Santa Cruz County Communicable Disease Unit would like to better understand the prevalence and transmission among residents and travelers. Please report cases to the Communicable Disease unit by calling (831) 454-4114 and faxing a Confidential Morbidity Report (CMR) to (831) 454-5049. www.santacruzhealth.org/CDUnit

Additional Information: https://www.uptodate.com/contents/aeromonas-infections

Health Alert: conveys the highest level of importance; warrants immediate action or attention. **Health Advisory:** provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

