



Cape May County Department of Health

6 Moore Road, Cape May Court House, NJ 08210

Shewanella Algae Fact Sheet

What is *Shewanella algae*?

Shewanella are gram-negative motile bacilli bacteria that are typically found in marine environments throughout the world, usually in warmer waters. *Shewanella algae* is the species thought to cause most infections in people, although human infection is very rare and is most often associated with persons who are immunocompromised. *Shewanella* infections are not reportable to the Department of Health and specific testing may not be requested so the number of human infections, while rare, is unknown.

What are the symptoms?

Shewanella algae has been reported to cause a variety of symptoms, including ear infections and skin and soft tissue infections. Additionally, serious infections of the blood and bone have been reported. *Shewanella algae* are often found together with other bacteria, which has clouded the clinical significance of *Shewanella* bacteria in causing human illness.

How do people become infected with *Shewanella algae*?

Shewanella algae naturally lives in warmer marine environments. In 2008 the USDA Agricultural Research Service reported finding these bacteria in the Delaware Bay, but it has also been reported in many locations worldwide. It has also been found in raw oysters. Infection routes with *Shewanella* bacteria is similar to that of *Vibrio* bacteria – through exposure to seawater or through the consumption of raw oysters. It is not spread from person to person.

How is *Shewanella algae* diagnosed?

Laboratory tests are necessary to diagnose an infection with *Shewanella algae*.

How is *Shewanella algae* treated?

Although it is named *Shewanella* “algae”, it is not an algae. It is a bacteria and is treatable with common antibiotics. Some skin infections may also require surgical therapy and drainage.

How can I prevent *Shewanella algae* infections?

The most common clinical syndrome described in the literature is infection of the skin and soft tissue, associated with chronic ulcers or other breaks in the skin. If you have open wounds, you may want to avoid exposure to seawater until the skin is healed. Similar to preventing infection with *Vibrio* bacteria, persons with weakened immune systems should not eat raw oysters, but should always cook them thoroughly before eating.

References

- Holt, HM, Gahrn-Hansen, B, and B Bruun. *Shewanella algae* and *Shewanella putrefaciens*: clinical and microbiological characteristics. *Clin Microbiol Infect* 2005; **11**: 347-352.
- Holt, HM, Sogaard, P, and B Gahrn-Hansen. Ear infections with *Shewanella alga*: a bacteriologic, clinical and epidemiologic study of 67 cases. *Clin Microbiol Infect* 1997; **3**: 329-334.
- Khashe, S, and M Janda. Biochemical and Pathogenic Properties of *Shewanella alga* and *Shewanella putrefaciens*. *J Clin Microbiol* 1998; **36**: 783-787.
- Myung, DS, Jung, YS, Kang, JK, Song, YA, Park, KH, Jung, SI, Kim, SH, and KH Shin. Primary *Shewanella algae* Bacteremia Mimicking *Vibrio* Septicemia. *J Korean Med Sci* 2009; **24**: 1192-4.
- Richards, G, Watson, M, Crane, E, Burt, I, and D Bushek. *Shewanella* and *Photobacterium* spp. In Oysters and Seawater from the Delaware Bay. *Appl Environ Microbiol* 2008; **74**: 3323-3327.

If you are concerned about your health, contact your personal healthcare provider.