

Brucellosis in Marine Mammals & Affects in Marine Corps

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Introduction: Brucella infections have recently been recognized in seals, sea lions, walruses, dolphins, porpoises, whales and an otter. This organism appears to be widespread in marine mammals, and has probably been endemic in these populations for a long time. The symptoms included headaches, fatigue and severe sinusitis, and resolved completely after antibiotic treatment.

Method: this review article is based on valid & reliable journals, eBooks and search engines (PubMed, Google scholar).

Result: Brucella has never been documented in humans after direct exposure to marine mammals, though there has been a single case of occupational exposure in a laboratory worker that was obtained after working with isolates from an infected dolphin. Marine mammal isolates of Brucella can infect terrestrial mammals, but the frequency of this event is unknown. Some polar bears, which feed on marine mammals, are seropositive for Brucella, and there are concerns about possible impacts on this species. Transmission of Brucella is poorly understood in marine mammals; with little direct evidence to support any route of infection. There is little or no information about the significance of infection in each species. Brucella has been found in asymptomatic animals, stranded or dead animals with lesions and, rarely, animals that are ill. There have been only 3 cases globally linking Brucella infections to consumption of raw seafood, so there is little to no risk of exposure to humans through the consumption of raw fish or other raw seafood. The morbidity and mortality rates are unknown. There are no reported cases where Brucella infection was associated with swimming.

Conclusion: Brucella appears to be widespread in marine mammal populations. Culture-positive or seropositive animals have been found in the North Atlantic Ocean, the Mediterranean Sea. As a caution, people should not swim with open wounds or in the immediate area where a stranded animal is found. Cooking seafood kills the Brucella bacterium. Thus surveillance in maritime missions in the face with brucellosis is obligatory for the Corps.

Keyword: Brucellosis, Marine Mammals, Infection