



Photo by Jonna Mazet

Safety measures to prevent injury and infections:

Obtain the recommended training, and follow all of your institution's safety procedures for safe animal handling



Wear gloves and other protective gear when handling animals and specimens



Avoid contact with animals if you are ill



Use additional safety equipment when risks of acquiring an infection are high



Use necropsy, husbandry and laboratory procedures that minimize the risk of cuts and injuries



Consult your physician before working with marine mammals if you are pregnant or have other health concerns



Wash hands thoroughly after animal and specimen contact

Knowledge and careful work practices are your best defense!

What you can do:

Care must be taken to **avoid all possible routes of exposure to marine mammal infections**. Although bites and contact with existing wounds are the most common routes, infections can occur through your mouth, eyes, respiratory system and skin.

Report any animal bite, scratch, or other significant exposure to marine animal blood, saliva, or other excretions to the appropriate supervisor.

If you develop an illness or other condition that could be caused by exposure, be sure to **tell your physician that you work with marine mammals**.

Resources for more information:

1. Full report available from the UC Davis Wildlife Health Center at www.wildlifehealthcenter.org
2. "Public Health" by Cowan et al. in L.A. Dierauf and F.M.D. Gulland, *CRC Handbook of marine mammal medicine 2nd ed.* 2001, Boca Raton, FL: CRC Press
3. The Centers for Disease Control and Prevention www.cdc.gov
4. National Institute of Environmental Health Science: Biological Safety <http://www.niehs.nih.gov/odhsb/home.htm>

Working with Marine Mammals and Your Health



Photo by Deborah Gabris

A guide for marine mammal workers and rehabilitation volunteers

Important information to keep you aware, safe, and healthy

Provided by:

U.S. Marine Mammal Commission
National Marine Fisheries Service
Wildlife Health Center, UC Davis

Important information about marine mammals

Like most animals, marine mammals can carry microbes (bacteria, viruses, fungi) that can cause illness in humans. Many marine mammals that appear healthy and normal can carry organisms that are dangerous to humans.

Marine mammals have been shown to carry many of the pathogens we associate with food poisoning, such as *E. coli*, *Salmonella*, and *Listeria*. Like other wildlife, seals and sea lions can shed the protozoan, *Giardia* in their feces. *Giardia* can cause diarrhea and other symptoms in humans. In rare cases, marine mammals may be infected with very dangerous pathogens, like the rabies virus and the organism that causes tuberculosis.

Pathogens known to be transmitted from marine mammals to people

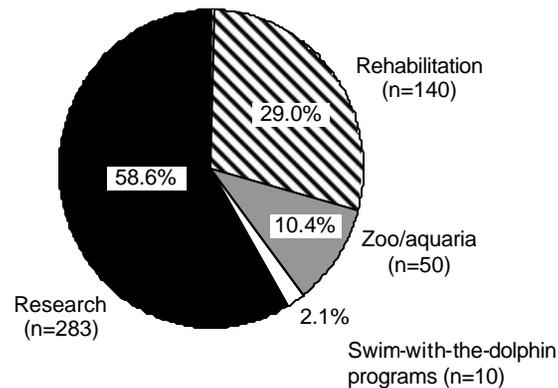
Mycoplasma found in seals can cause “seal finger” in humans. This painful and potentially serious disease can result from a seal bite or the infection of a pre-existing wound. Diligent hand washing is the best defense with infections often responding to tetracycline treatment.

Seal pox is a disease of stranded seals and can be encountered in rehabilitation centers. It can cause pox sores in humans that may persist for up to a year. There is no known effective treatment.

Leptospirosis contracted from seals and sea lions can cause serious disease in humans.

Reported injuries and illnesses in people who work with marine mammals

A total of 483 marine mammal workers responded to a recent survey about their health. The majority of respondents identified research as their primary type of marine mammal contact.



The survey showed that injuries and work-related illnesses are common.

In fact, **over half (54%) of workers reported having at least one injury or illness** that they believed directly resulted from contact with marine mammals. Most were cuts, scrapes, bites, and rashes. About 1 in 10 (11%) marine mammal workers reported developing **seal finger**.

Injury occurred in over half (52%) of workers while handling marine mammals or tissues. Of those injuries, over a third (36%) were severe (e.g. deep wound or fractured bone).

Several dangerous infections were reported by marine mammals workers, including **tuberculosis, leptospirosis, and brucellosis**.



Photo by Erica Dold

Regardless of experience and training, marine mammal workers are at risk of injury and infection.

Exposure to marine mammals can mean exposure to the infections they carry.