Care and Use of Turtles & Tortoises

The Occupational Health and Safety Program is designed to inform individuals who work with animals about potential zoonoses (diseases of animals transmissible to humans), personal hygiene, and other potential hazards associated with animal exposure. This information sheet is directed toward those involved in the care and use of turtles and tortoises.

Potential Zoonotic Diseases

The overall number of disease-producing agents from the turtle family to humans is relatively low. There are, however, agents that are endemic to this species. In general, humans acquire these diseases through aquarium water or through the handling of feces. An important feature of many bacterial and protozoal organisms is their opportunistic nature. The development of disease in the human host often requires a preexisting state that compromises the immune system. If you have an immune-compromising medical condition or you are taking medications that impair your immune system (steroids, immunosuppressive drugs, or chemotherapy) you are at-risk for contracting zoonotic diseases and should consult your physician. The following is a list of potential turtle and tortoise zoonoses.

Salmonellosis: Is a disease caused by the bacteria species Salmonella. It is one of the most common zoonotic diseases in humans. Birds and reptiles (especially iguanas) are the animals most frequently associated with Salmonella. Most people typically contract the disease by consuming food or water contaminated with the bacteria. Symptoms include diarrhea (usually watery and occasionally bloody), nausea, vomiting, fever, chills, and abdominal cramps. If the bacteria leaves the blood stream and enters the central nervous system, meningitis and or encephalitis may develop. Salmonellosis is a very serious disease in humans, especially for young children and people with compromised immune systems. Antibiotics are the standard treatment.

Campylobacter: This is a gram negative bacterium that has a worldwide distribution. Although most cases of human campylobacteriosis are of unknown origin, transmission is thought to occur by the fecal-oral route, through contamination of food or water, or by direct contact with infected fecal material. The organism has also been isolated from houseflies. Campylobacter is shed in the feces for at least six weeks after infection. Symptoms are acute gastrointestinal illness: diarrhea with or without blood, abdominal pain, and fever. It may cause pseudoappendicitis and, rarely, septicemia and arthritis. Usually it is a brief self-limiting disease that can be treated with antibiotics.

Allergic Reactions to Turtles and Tortoises:
Human sensitivity to turtles and tortoises in the laboratory setting is rare. It remains possible however, to become sensitized to their proteins through direct contact.

**How to Protect Yourself**

- **Wash your hands.** The single most effective preventative measure that can be taken is thorough, regular hand washing. Wash hands and arms after handling turtles and their aquarium water, and after handling tortoises. Never smoke, drink or eat in the animal rooms or without washing your hands.

- **Wear gloves.** If you are in a situation where you will spend a significant amount of time with your hands immersed in water or if you have any cuts or abrasions on your hands or arms, you should wear sturdy, impervious gloves.

- **Seek Medical Attention Promptly.** If you are injured on the job, promptly report the accident to your supervisor even if it seems relatively minor. Minor cuts and abrasions should be immediately cleansed with antibacterial soap and then protected from exposure to live animals and aquarium water. For more serious injuries or if there are any questions, employees should report to Occupational Health Services.

- **Tell your physician you work with turtles or tortoises.** Whenever you are ill, even if you’re not certain that the illness is work-related, always mention to your physician that you work with turtles or tortoises. Many zoonotic diseases have flu-like symptoms and would not normally be suspected. Your physician needs this information to make an accurate diagnosis. Questions regarding personal human health should be answered by your physician.

**Contact**

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