

Frogs

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

Potential Injury and Zoonotic Diseases

Aside from food poisonings, the overall incidence of transmission of disease producing agents from frogs/newts to humans is low. There are a number of agents that are found in frogs/newts and aquarium water that have the potential to be transmitted to humans. In general, humans contract frog/newt borne disease through ingestion of infected frog/newt tissues or aquarium water, or by contamination of lacerated or abraded skin. An important feature of many of the disease causing agents 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 a frog/newt borne disease and should consult your physician or the Occupational Health physician.

The zoonotic diseases associated with care and handling frogs/newts include the following:

Sparaganosis: This bacterium inhabits the intestinal tract of many animals and humans. Sparaganosis occurs worldwide and is easily transmitted through ingestion, either direct or indirect. Common symptoms of the illness are acute gastroenteritis with sudden onset of abdominal pain, diarrhea, nausea and fever. Antibiotic treatment is standard treatment for the illness. Prevention is through good personal hygiene and protective clothing.

Salmonella: Salmonellosis is a bacterial disease caused by the bacterium *Salmonella*. Many different kinds of *Salmonella* can make people sick. Most people have diarrhea, fever, and stomach pain that start 1 to 3 days after they get infected. These symptoms usually go away after 1 week. Sometimes, people have to see a doctor or go to the hospital because the diarrhea is severe or the infection has affected their organs. Animals can carry *Salmonella* and pass it in their feces. People get salmonellosis if they do not wash their hands after touching the feces of animals. Click here for more information.

Other diseases: Other diseases that can be spread through working with fish are *Plesiomonas spp., Pseudomonas fluorenscens, <u>E. coli</u>, Klebsiella spp. Edwardsiella*

tarda, <u>Streptococcus spp.</u>, Staphylococcus spp., Clostrium spp, Erysipelothrix spp., Nocardia spp., and <u>Cryptosporidium</u> through the ingestion of contaminated water.

Allergic Reactions

Human sensitivity to human frog/newt proteins in the laboratory setting is rare. It remains possible, however, to become sensitized to frog/newt proteins through inhalation or skin contact.

How to Protect Yourself

- Wear gloves and wash your hands.
- Wear respiratory protection. If respiratory protection is worn, it is mandatory that individuals enroll in the Respiratory Protection Program through EHS.
- Wear protective clothing. Avoid wearing street clothes when working with animals.
- Seek medical attention if you are injured. Contact your supervisor and Occupational Health and Safety to be instructed as to where to go to seek medical attention.
- Enroll in the Occupational Health and Safety Program. Update your information on an annual basis to ensure proper medical surveillance.