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Valdosta State University Institutional Animal Care & Use Committee

Standard Operating Procedure Number 011

PREVENTION OF ZOO NOTIC DISEASES

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**PURPOSE :** This Standard Operating Procedure (SOP) provides information on zoonotic diseases, the transmission of diseases that are communicable to humans through the handling of laboratory animals, Valdosta State University's policy on training of animal use and animal care staff, and the wearing of protective garments designed to aid in the prevention of zoonoses.

**DEFINITIONS :**

**Allergen** - A substance, usually a protein, which can cause the immune system to react as if infected with a cold virus. Cats, rabbits, mice, rats, birds, and guinea pigs are the most frequently implicated allergy-causing species.

**Animal** – Any live non-human vertebrate animal used or intended for use in research, training,



infection. Viral infection has been shown to alter ciliary function, with a decrease in beat frequency and subsequent stasis of secretions.

Nematodes – Nematodes are simple roundworms. Colorless, unsegmented, and lacking appendages, nematodes may be free-living, predaceous, or parasitic. Many of the parasitic species cause important diseases of plants, animals, and humans.

The National Institute for Occupational Safety and Health (NIOSH) - The federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. NIOSH is part of the CDC in the US Department of Health and Human Services.

Protozoa - There are over 50,000 species of protozoa, of which one fifth (some 10,000 species), are parasitic. They infect vertebrates and invertebrates, and some are even parasitic in plants. Parasitic protozoa are, in general, small, have short generation times, high rates of reproduction, and a tendency to induce immunity to reinfection in those hosts that survive. Structurally, a protozoan is equivalent to a single eukaryotic cell.

Psittacosis - An acute chlamydial (intracellular bacteria) disease that causes fever, headache, myalgia, and pneumonia-like respiratory illness. Associated with inhaling feather dust and dried bird droppings.

Zoonotic diseases (zoonoses) - Diseases that are communicable from animals to humans under natural conditions.

**OCCUPATIONAL ANIMAL EXPOSURE** : Both research and non-research animals have the potential to cause injury, transmit zoonotic disease, and/or cause allergic reaction to those who have contact. These animal hazards can occur by either direct contact from handling an animal or just by being in close proximity, i.e., working in or passing through an animal housing room.

**TRAINING OF LABORATORY ANIMAL CARE STAFF** : Staff members or qualified students who have occupational exposures to research and non-research animals will be provided with the appropriate awareness training. The responsibility for providing training or ensuring that staff members and students are trained is assigned to the Principal Investigator. Training must include routes of disease transmission, disease or allergy signs and symptoms, appropriate use of personal protective equipment, waste handling, and emergency contacts. The Office of Environmental and Occupational Safety (OEOS) is available to assist in the training process as needed. Records of training must be submitted to OEOS for each person working with or around research and non-research animals. w icd ( n ) 6 ( v





letters NIOSH on it, it is not approved for these standards. If respirators are required for the work performed, a Respiratory Protection Program must be established through the Office of Environmental and Occupational Safety. The required elements of a respirator program include medical evaluation, fit testing, training, and equipment maintenance.

- ◆ Gloves . Gloves are recommended to prevent contact allergy to rodents and to prevent potentially infective material from getting on the skin or through cuts and breaks in the skin. Two types of gloves are typically used—latex and vinyl. Only latex is an effective barrier against infectious materials.
- ◆ Surgical Scrub . A surgical scrub or soap that contains a medical grade disinfectant should be used to wash the hands after handling animals and to cleanse scratches and bites. Label directions should be followed, including observing of appropriate contact times.
- ◆ Eye Protection. Protective glasses should be worn to prevent contaminated materials from making contact with the eyes.

ORGANISMS PRIMARILY CAUSING DIARRHEA:

The following organisms may cause diarrhea and dehydration. The conditions can usually be prevented by good hygiene, which includes wearing latex gloves, washing hands *before and*

~~after~~ ~~the~~ ~~use~~ ~~of~~ ~~the~~ ~~animal~~ ~~and~~ ~~the~~ ~~surrounding~~ ~~environment.~~ ~~For~~ ~~more~~ ~~information,~~ ~~contact~~ ~~the~~ ~~Office~~ ~~of~~ ~~Environmental~~ ~~and~~ ~~Occupational~~ ~~Safety~~ ~~at~~ ~~300~~ ~~89~~ ~~6123~~ ~~v.6.957~~ ~~(h)~~ ~~HR~~ ~~C~~ ~~6~~ ~~116~~ ~~9~~ ~~(b)~~ ~~3~~ ~~(2)~~ ~~2368~~ ~~Th~~ ~~T~~ ~~v~~ ~~(1)~~ ~~N~~ ~~1~~ ~~SEM~~ ~~18~~ ~~316~~ ~~43~~ ~~31223~~ ~~(n)~~ ~~10~~ ~~600~~



