

Personnel

Item 2 – Occupational Health Policy for Individuals with Animal Contact

Subsection 2.3 – Occupational Risks of Working with Guinea Pigs

Allergies

Background: Allergic reactions to guinea pigs primarily involve urine allergens, although dander, fur and saliva can also be associated. The amount of allergens in the air is directly proportional to the number of animals in the room and the amount of work activity.

Diagnosis: Skin testing can be performed, but is not administered routinely. History of previous sensitivities to other allergens might indicate increased risk of developing sensitivity to guinea pigs. Allergic symptoms include sneezing, nasal congestion, itchy eyes, cough, wheezing, shortness of breath, or hives.

Prevention: Opening cages and manipulating animals in a HEPA-filtered, laminar flow hood is probably the best method of decreasing aerosol exposure. Dedicated clothing (lab coat) and gloves worn only when working with animals is also effective in decreasing exposure. Good personal hygiene is important, especially frequent hand washing. Surgical masks are probably not very effective in preventing exposure. For those with known sensitivity, an OSHA-approved dust-mist respirator should be worn, but these require specific fitting to the user.

Bites and Scratches

Background: Guinea pigs tend to be very docile and therefore bites are rare. Scratches are more common, but this is usually due to the animal not feeling comfortably restrained and struggling, not from aggression.

Prevention: Good handling techniques are most important. Thick, protective gloves are really unnecessary since they make handling more awkward and will result in the animal struggling more. Gentle, supportive handling should eliminate all but the occasional accidental scratch.

Treatment: Wash thoroughly with an antibacterial soap and water. Complete an incident report. Seek medical attention if there is excessive bleeding, pain or joint involvement. If swelling, discoloration, chronic pain or any discharge develops, seek medical attention immediately.

Other Risks

Non-Specific Pathogen Free Guinea Pigs: There are a few diseases that can be carried by animals not from commercial research sources (pet stores for example) and passed to humans. Lymphocytic choriomeningitis, Leptospirosis and Ringworm are a few examples. The Department of Laboratory Animal Resources should be notified if noncommercial source guinea pigs are to be utilized and can provide further information on any of these diseases.

Additional Information

Books:

Occupational Health and Safety in the Care and Use of Research Animals, Institute for Laboratory Animal Resources, National Research Council. National Academy Press, 1997.

Viral and Mycoplasmal Infections of Laboratory Rodents: Effects on Biomedical Research,
Bhatt, Jacoby, Morse III, and New, eds. Academic Press, 1986.
The Biology of the Guinea Pig, Wagner & Manning, eds. Academic Press, 1976.

Videos:

The Humane Care and Use of The Guinea Pig and Rabbit, Laboratory Animal Training
Association, 1992.

Internet:

<http://clueless.ucdavis.edu/> - This is the laboratory animal occupational health information
provided by the University of California – Davis; compiled by Dr. Phil Tillman.

If you have any questions or would like additional information, please contact Dr. Robert Quinn, Director
of the Department of Laboratory Animal Resources at 4-6563.

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