

STEPS TO REDUCE ALLERGIC REACTIONS TO ANIMAL ALLERGENS

Introduction

Allergic reactions among people in contact with or near animals include watery eyes, breathing difficulties, nasal discharge, coughing, sneezing, skin reactions (swellings and itching, and anaphylaxis. Months or years may pass before people become sensitized and react to certain or several species. Allergens may be urinary, serum, salivary, or skin proteins, or other substances associated with animals.

Predisposition to Allergies

Persons may be more likely to develop allergies because of their genetic background, intensity and duration of contact with allergens, failure to protect oneself with physical or pharmacologic barriers, working in high ammonia level environments, and smoking tobacco. These predisposing factors indicate preventive measures.

Prevention and Treatment

Medical treatments and desensitization procedures for allergies are within the professional jurisdiction of a physician, therefore antihistamines, bronchodilators, nasal sprays, allergy “shots,” and pulmonary function tests are not discussed further here.

Preventive measures to take within an animal facility include:

1. Installation and maintenance of adequate ventilation and air filtration that remove allergens from the workspace. Poor ventilation is indicated by high room odor levels. Susceptible persons should avoid poorly ventilated rooms.
2. Wearing protective clothing and equipment that reduces one's contact with allergens. Such clothing and devices include long hem and sleeve “lab” coats, hair covers, latex (or nitrile) gloves, a special face mask that filters fine particles, and eye shield. Such protective attire should be left behind or discarded when leaving the animal space. “Used” attire should not be reworn before laundering.
3. Handling animals so that they do not bite or scratch. Such contact is a certain means of allergen transmission.
4. Avoiding bedding dust and excreta reduces aerosolization of allergens.
5. Working with the animals in experimental procedures in a well-ventilated area away from the animal cages.

6. Working with animal in a low ammonia, low humidity environment, as these substances may transit allergens.
7. Reporting allergies to a supervisor and to a health professional as soon as the discomfort is apparent so proper precautions can be taken to avoid further exposure.