

New Entry Procedures for Animal Rooms

Effective July 1, 2001

Personal Protective Equipment (PPE) practices are a result of a recent assessment conducted by the Office of Environmental Health and Safety (OEHS), Department of Employee Health, and YARC. The new procedures are being implemented to minimize exposure of personnel and protect the health status of your animal colony. The following entry practices were agreed upon as outlined below.

Some of the new procedures may differ from current practices*. A detailed rationale for the proposed changes to room entry practices is found below.

These changes will take effect July 1, 2001.

Questions about these changes should be directed to the Quality Assurance Veterinarian, Nirah Shomer (nirah.shomer@yale.edu), 5-2531. If you have questions regarding occupational health and safety, please contact Regulatory & Safety Services, Randi Prete (randina.prete@yale.edu), 5-4722.

PPE Highlights

- A clean **gown****, provided by YARC, **must be donned when you enter the animal unit.**
- **Gloves** must be worn when handling cages or animals.
- **Shoe covers** will no longer be required in most rodent rooms
- A **new room order system** will be implemented, in which rooms will be grouped by “risk rank”.

***Note:** PPE requirements for working with **hazardous** agents *in vivo* will not change. These requirements are defined on a case-by-case basis by OEHS. Please follow the instructions noted on the hazard signs posted on the animal room door.

****Note:** YARC will provide all required protective clothing. Laundered gowns will be located in a storage bin labeled as “CLEAN.”, at the entry point of each animal unit. Upon exit, used gowns should be placed in the laundry bin labeled “DIRTY”. In addition, autoclaved gowns will be located inside Full Service rooms for use in handling Full Service animals. **Please note that protective clothing worn in the animal facility may not be worn outside the animal facility, including public or patient areas.**

New Room Order system for rodents

In addition to changes in PPE requirements, you will notice a change in the room entry orders for rodents: instead of a strict linear entry order, each room will be assigned a "Risk Rank" from 0 (very low risk) to 10 (high risk, e.g. viral outbreak, quarantine). Rooms with the same risk rank will occupy the same place in the room order even if they are in different animal units. Personnel may move freely between rooms of the same risk rank, or may proceed from low-risk to high risk rooms. All room doors will be marked with the risk rank, so that an investigator can readily determine the order for room entry, even if he/she has rodents in different facilities. Rank listings for each animal unit will be located at the unit entrance and the rank of each room will be posted on the room door. Questions about room ranks should be directed to the Quality Assurance Veterinarian, Nirah Shomer (nirah.shomer@yale.edu).

Sample sign: This room is a rank 3. You cannot enter this room if you have been in any higher-numbered rooms today, but you can enter if you have been in rooms of rank 1, 2, or 3. Once you have been in this room, you cannot move backwards down the room rank, but you can go to other rooms of higher rank.

Room: _____ Room Rank: **3**

NO ENTRY if you have been in rooms of Rank 4 or higher today
You may not re-enter Rooms of Rank 1 or 2 after you leave this room



Questions or comments? Please contact Nirah Shomer, the QA veterinarian (nirah.shomer@yale.edu, 5-2531)

Summary of entry requirements

Species/	Activity	Gown	Gloves	Shoe covers	Mask	Hair cover	Eye protection
*Rodent-Full	enter room	✓	✓				
	handle animals	sterile	✓				
*Rodent-Basic	enter room	✓	✓				
	handle animals	✓	✓		✓	recommended	
**primate	enter or handle	✓	✓	✓	✓	recommended	✓
rabbit	enter or handle	✓	✓	✓			
dog	enter or handle	✓	✓	✓			
cat	enter or handle	✓	✓	✓			
aquatics	enter or handle	✓	✓				
sheep/goat	enter or handle	✓	✓	✓			
pigs	enter or handle	✓	✓	✓			
***ferret	enter or handle	✓	✓	***✓	✓		

Notes:

***Rodents** - (rats, mice, gerbil, hamster, guinea pig):

Shoe covers are no longer required in most rooms. Special circumstances, determined by the QA veterinarian, may warrant their use- in this case, the shoe cover requirement will be indicated on the door sign).

****NHP:** For entry gown, gloves, long-sleeved shirt (legs must also be covered), mask, shoe covers (over solid toe shoes), hair cover (recommended), and eye protection (type of eye protection varies based on tasks to be performed)

*****Ferret:** (+ shoe covers for social housing)

Summary:

A clean, **YARC-provided gown**, donned at the facility entry, is required for entry to all rooms

Gloves are required to touch cages (even if unopened) or animals in all rooms

Shoe covers are required to enter rooms housing dogs, cats, NHPs, pigs, rabbits, ferrets, and sheep.

Masks are required for handling rodents in BASIC SERVICE rooms, and to enter rooms containing ferrets or NHPs

Hair covers are recommended in BASIC SERVICE rooms and highly recommended to enter rooms containing NHPs

Rationale for entry requirements:

Requirements for entry into animal rooms are based on risk assessment that includes many factors such as the species, housing mode, immune competence, pathogen status, compliance history, and trafficking of animals and people within the room.

Gowns: A clean, YARC-provided gown is required for FACILITY entry. An autoclaved gown is required to handle animals in FULL SERVICE rooms.

Wearing a clean, dedicated gown into the animal facility offers protection against inadvertent exposure of animals to fomites on your street clothes. Leaving the gowns in the facility protects against cross-contamination between facilities, and also protects the general public against allergens or other hazards that may be carried on soiled lab coats if investigators were to transit through public areas while wearing or carrying soiled PPE. OEHS has requested that all users don gowns upon facility entry if there is a risk of users touching soiled caging in the hallways.

Shoe covers: Shoe covers will no longer be worn in most rodent rooms. Shoe covers are required for entry into rooms containing all other species housed at Yale. Although shoe covers can, when properly used, decrease the risk of disease transmission, almost all rodents in YARC facilities are now housed in individually ventilated cages. The true barrier to pathogen transmission is at the cage level. Under the current operating circumstances, our evaluation is that shoe covers do not provide extra protection in standard rodent rooms (they will still be used for containment in BL2 rooms). Removing the shoe cover requirement standardizes entry requirements across all Yale facilities and may actually decrease risk to the mice under our current operating conditions.

Masks: Masks are required for handling basic service rodents, and for entry into primate and ferret rooms. Masks are no longer required in full service rodent rooms.

Masks are not recommended for full service rooms, as animals in these rooms are handled only in a biosafety cabinet, and a mask offers no significant additional protection for the mice or for the user. In contrast, we DO recommend masks for Basic Service rooms, as these animals are handled in the open, and the mask offers a significant level of protection against dust, aerosolized bedding, etc.

Hair covers: Hair covers are required in primate rooms only. They are recommended in basic service rodent rooms.

Hair covers are not recommended for Full Service rooms for the reasons stated for masks. Hair covers are recommended but not required for Basic Service rooms. Hair covers offer protection against rodent allergen exposure by reducing the amount of dust, etc being carried out of the animal room in the hair. In addition, hair covers offer protection against hairs contaminating the animal cage (which should not occur in a biosafety cabinet). Hairs that contaminate the cage while handling basic service mice on a bench top might act as fomites, and human hair is also a significant hazard to mice, as a single strand can wind around a mouse limb, cut off the circulation, and lead to loss of the limb.