

## **Biological Control Rules for the UWM School of Freshwater Sciences**

The establishment of biosecurity rules at the School of Freshwater Sciences (SFS) are intended to protect our live aquatic vertebrate assets from disease organisms (bacteria, viruses, and other pathogens). These pathogens may enter the building as a result of the many different research operations at UWM SFS. These rules will apply to laboratories or facilities within SFS that have been approved by the UWM Institutional Animal Care and Use Committee (IACUC) for holding aquatic vertebrates. These rules will also apply to areas within SFS where fish carcasses and remains are handled, stored, or transferred. Specific exceptions can be requested in writing to the Aquatic Vertebrate Organism (AVO) Committee and will be considered on a case-by-case basis. Violations of these rules will be referred to the Attending Veterinarian and Chair of the AVO Committee who will determine whether the Dean of SFS should be notified.

### **Building Plan**

Some rooms and quarantine bays identified in the list of aquatic animal facilities at SFS are medically separated fish farms. Consequently, all general biosecurity rules listed below are followed in addition to other procedures to guarantee that these rooms remain pathogen free. All movements of fish in or out of these facilities must be accompanied by the appropriate paperwork and are subject to periodic inspection and fish farm permit renewals. All individuals who use the facilities at SFS should be informed about the special precautions that are taken to protect these facilities.

Rooms that are not medically separated fish farms but are included in the list of aquatic animal facilities at SFS (including DNR facilities) must also follow the principles listed below for biosecurity purposes.

Temporary housing facilities may follow these rules or their own biosecurity plans, or may be exempt depending on the nature of the facilities.

### **Disinfectants**

Disinfection is necessary for the control of pathogens and mandatory to meet the objectives of these rules. The choice of disinfectants should be based on their effectiveness in a particular situation, EPA and USDA approval for that application, specific pathogens targeted, and environmental or worker safety risks. The following disinfectants have been suggested by the Wisconsin Department of Agriculture, Trade and Consumer Protection Division of Animal Health (DAH 056) as being effective against

the pathogen that causes viral hemorrhagic septicemia (VHS) in fish. Other methods of disinfection will be considered for inclusion on this list if proposed in writing to the UWM IACUC.

- Virkon® Aquatic (follow the manufacturer's suggested use, but no lower than 1% concentration)
- Virkon® S (follow the manufacturer's suggested use, but no lower than 1% concentration)
- Sodium hypochlorite (household bleach; 100-1,000 ppm, minimum 10-minute contact time; must be neutralized prior to disposal in areas other than the sanitary sewer)
- Iodophor (100-250 ppm for 10 minutes)
- Formaldehyde (1.0% for 16 hours; note that formaldehyde is **not** recommended for standard use as a disinfectant due to its carcinogenic effects; if required, formaldehyde may only be used for disinfection purposes by trained professionals)
- Formic acid (pH less than 4 for 24 hours)
- Sodium hydroxide (pH greater than 12 for 7 hours)

### **General Rules**

1. All tools, boots, and other equipment used in the field should be thoroughly disinfected (using the disinfectants described above) if stored in an aquatic animal facility. If possible, items used in the field should not be used in any aquatic animal facility.
2. Equipment used to transport fish should be thoroughly cleaned and disinfected (using the disinfectants described above) after use and prior to storage in any aquatic animal facility.
3. The doors to all aquatic animal facilities must remain locked at all times.
4. Each aquatic animal facility should designate a single door for entry and exit for normal daily operations.
5. Areas of increased risk of pathogen dispersal (such as access points to quarantine areas and anterooms for the biosecure facility) require the use of sanitizing footbaths and/or soaking mats (e.g., sanistride mats) or shoe covers. All personnel must step and tread through the sanitizing footbath or mat upon entering and leaving these areas. Personnel who bypass these additional measures may be subject to revocation of access to these areas. Any wheeled conveyance using these access points must have all wheels and floor contact surfaces sanitized prior to entry or exit.
6. Movement of supplies and equipment to and from medically separated areas, quarantine suites, or the biosecure facility must follow all general principles of biosecurity. Wheeled conveyances shall not pass the medical separation lines, unless all wheels and floor contact surfaces have been sanitized prior to entering and leaving the area.
7. Upon entering a medically separated aquatic animal facility, all personnel must put on booties or change their shoes. Shoes and booties shall remain within a single aquatic animal facility and should not be used elsewhere. Shoes or booties worn

outside the facility must be disinfected (using the disinfectants described above), or disposed of, upon re-entry.

8. All personnel must sanitize their hands with liquid hand sanitizer (or wash with soap and warm water) prior to, or immediately after, entering the medically separated aquatic animal facility and when leaving the medically separated aquatic animal facility if they were handling animals or anything that came into contact with animals (e.g., nets, water, siphons) while in the facility. If hand sanitizer is used when leaving a facility, hands should also be washed with soap and warm water at the first opportunity.
9. All personnel who handle fish carcasses or tissue samples brought into the SFS must sanitize their hands with liquid hand sanitizer (or wash with soap and warm water) when done, regardless of where the work is conducted. If hand sanitizer is used when leaving a facility, hands should also be washed with soap and warm water at the first opportunity.
10. Any incident, accident, or injury that occurs on University property, requires notification to a PI or supervisor. Incidents that occur within an animal use facility must also be reported to the Animal Care Program. Supervisors are required to complete the "Employer's First Report of Injury or Disease" form, as well as the "Supervisor's Accident Analysis and Prevention Report" and, if applicable, the "Supervisor's Evaluation of Repetitive Motion and/or Materials Handling Activities" located within the same form. The injured employee needs to complete the "Employee's Work Injury and Illness Report" form. All forms are found on the US&A website: <https://uwm.edu/safety-health/forms/> Send completed reports to the [accident-reports@uwm.edu](mailto:accident-reports@uwm.edu) within 24 hours after being notified of a work-related injury or illness. For questions related to worker's compensation, please contact the Central Human Resources office at (414) 229-4463.

### **User and Guest Access to Aquatic Animal Facility (AAF) Locations**

Please refer to the IACUC *Guidelines on Public Access to the Aquatic Animal Facilities at the School of Freshwater Sciences at UWM* for definitions, procedures, exclusions, and contact information regarding public tours and guest access. Below is a brief summary of the user categories and possible access levels. When making a determination of defining a user and access category, refer to the full policy, rather than this informational summary. The full policy is accessible on the Animal Care Program website: <https://uwm.edu/animal-care/guidelines/>

	Authorized User	Authorized Staff	Guest	SFS Administrative Staff
Description	Principal Investigator (PI) with an active IACUC approved protocol for a designated AAF. No exceptions.	Persons under the <u>direct supervision</u> of an <b>Authorized User</b> (examples: technicians, animal caretakers, graduate/undergraduate students)	Person with a <u>scientific/research/education related</u> need for entering a designated AAF	
Received all required animal handling/safety training	Yes	Yes	N/A	N/A
Enrolled in UWM Occupational Health Program for Animal Users	Yes	Yes	N/A	N/A
Tours:				
Lead/accompany public tours	Yes	Yes(1)	No	Yes(2)
Escort guests	Yes	Yes(1)	No	No
Authorize tour	Yes	No	No	No
Must be accompanied	No	No	Yes	No

NOTES:

1: For their AAFs only

2: If authorized user(s) has given them permission

***Revision History***

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