

AQUACULTURE BIOSECURITY

VECTORS: PEOPLE ON YOUR FARM



HOW PEOPLE ON YOUR FARM CAN SPREAD DISEASE

People working on or visiting aquaculture farms or hatcheries can bring disease-causing organisms onsite. This includes those with direct animal contact, such as farm personnel, family members, aquatic health professionals, nutritionists, and personnel from extension or government agencies. Visitors without direct contact with aquatic animals, such as maintenance staff, groundskeepers, contractors, transport drivers, delivery drivers (e.g., for fuel, feed, or packages), tourists, or customers, may also pose a risk. Pathogen transfer from people can occur through contact with hands, bodies, clothing, footwear, or any equipment used. This handout describes actions you can take to reduce pathogen transfer by people on your farm.



HOW TO MANAGE AND PREVENT PATHOGEN INTRODUCTION

Control, Limit, or Restrict Access to Animal Areas

- Limit the number of entry points onto your farm for easier monitoring. Place gates at farm entrances, when possible.
- Establish a biosecurity perimeter (e.g., fencing, signage) for animal production areas.
- Clearly mark areas that are off-limits or where protective clothing is required and limit access to quarantine and production areas.
- Post signs to explain biosecurity procedures (e.g., use protective clothing, wash hands, use foot baths, no hands in tanks). Ensure signs are in languages that frequent visitors understand.
- Have visitors park vehicles in a designated area away from animal locations and check in with farm personnel upon arrival.
- All visitors should sign a log sheet. Ask them to provide information on any previous aquatic animal contact.
 - People who own aquaculture species or visit or work on other aquaculture farms may carry disease organisms onto your farm.
 - These high-risk visitors should not have contact with your animals or animal areas.



People Allowed Access to Aquatic Animal Areas

- Establish a clearly visible biosecurity line (e.g., a line of separation or clean-dirty line) at entrances to animal production areas to indicate specific biosecurity actions are required.
- Provide dedicated footwear or waders and disinfectant foot baths at animal area entry and exit points.
- Provide hand washing facilities (ideally a sink with running water and soap).
 - Require hand washing for anyone entering or moving between different production areas on the farm.
 - Post signs in animal areas to promote handwashing before and after animal contact.
- When visitor access is allowed, have visitors wear clean clothing and footwear or disposable boots. Reduce or prohibit direct animal and production water contact.
- Provide trash cans to collect used disposable footwear, outerwear, and gloves.



Employees Working in Aquatic Animal Areas

- Ensure all employees understand the farm biosecurity plan and procedures and their responsibility for its implementation.
 - Assign a staff member to serve as the biosecurity manager and oversee on-site biosecurity activities.
 - Ensure farm staff are trained to implement farm visitor policies, including monitoring, questioning, or preventing visitor entrance to the farm when needed.
- Have employees wear clean clothing and dedicated footwear, waders, or dive gear (if applicable) on your farm.
 - These items should be cleaned and disinfected before and after access to animal areas.
 - If possible, have laundry facilities available to wash work clothes on-site.
- Manage production units so the most susceptible classes are cared for first.
 - For example, if an employee works with multiple age classes, younger age classes should be managed first (e.g., larvae, then juveniles, then broodstock).
 - Animals in quarantine or known-diseased animals should be cared for last.
- Post signs informing personnel of animal containment units with disease or those undergoing treatment.



BIOSECURITY ASSESSMENT CHECKLIST

Use the following checklists to identify biosecurity actions you currently use or can use to manage and reduce disease introduction risks from people with access to your farm and animals.

Control, Limit, or Restrict Access to Animal Areas

YES	NO	BIOSECURITY QUESTION
Y	N	Do you limit the number of entry points onto your farm?
Y	N	Are gates placed at farm entrances?
Y	N	Do you have an established biosecurity perimeter for animal production areas (e.g., fencing, signage) clearly designating areas that are off-limits or where protective clothing is required?
Y	N	Do you limit people allowed on your farm, particularly those accessing animal areas?
Y	N	Do you have signs posted to inform visitors of farm biosecurity procedures?
Y	N	Are signs available in languages understood by visitors?
Y	N	Is a designated parking area away from animal areas available for visitors and employees?
Y	N	Do you require visitors to check in with farm personnel upon arrival?
Y	N	Do you require that all visitors sign a log sheet when allowed to enter the farm?

People And Employees Accessing Aquatic Animal Areas

YES	NO	BIOSECURITY QUESTION
Y	N	Do you have a clearly visible biosecurity (clean-dirty) line at animal production area entrances?
Y	N	Do you require that visitors and employees wear clean clothing and footwear/waders/dive gear when working with animals?
Y	N	Do you provide foot baths, farm-dedicated footwear, waders, or dive gear?
Y	N	Do you provide a disinfection area for these items to be cleaned and disinfected?
Y	N	Do you require cleaning and disinfection of items before and after access to animal areas?
Y	N	Do you provide handwashing stations for those allowed access to animals or animal areas?
Y	N	Do you post signs promoting handwashing before and after animal contact?
Y	N	Are employees trained on the farm biosecurity plan and procedures, and their responsibility for its implementation, including farm visitor policies?
Y	N	Do you have a staff member designated as a farm biosecurity manager?
Y	N	Do employees care for the most susceptible classes of animals first?
Y	N	Are signs posted for animal containment units with disease or undergoing treatment?

FOR MORE INFORMATION

Find additional resources on the [Aquaculture Farm Biosecurity website](https://www.aphis.usda.gov/farm-biosecurity/aquaculture), including disease transmission pathway tip sheets, biosecurity assessment questions, a biosecurity plan template, and farm biosecurity signs.



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