

# Personal biosecurity for livestock farm visits

From Drovers Cattle Network

Recent animal health problems in [Asia and elsewhere](#) keep pointing to the need to reconsider our defense against emerging animal diseases. In the last decade, biosecurity has often been talked about in agriculture, but practiced haphazardly. Animal biosecurity covers a variety of management strategies aimed at preventing viruses, pathogenic bacteria, parasites and toxins from coming in contact with livestock. Done right, producers practicing biosecurity are using an all hazards approach, meaning their efforts help reduce the risk of a number of potential risks, including security risks.

In reality, animal health issues impacted by biosecurity are very important. For example, consider the impact of hairy heel warts on the dairy industry. Hairy heel warts are infectious foot lesions that cause lameness in cattle. The infectious agent that causes heel warts is transferred from farm to farm by the movement of infected animals or equipment and people in contact with an infected farm. Preventing the spread of heel warts is a matter of biosecurity. The [1996 NAHMS](#) dairy study suggested that more than 17% of the dairy cattle in the U.S. were infected with heel warts. At the same time, it has been [estimated](#) that each case of heel warts costs \$88 to treat and each lame animal loses 2.4 pounds of milk production for each day of lameness. Do the math and it becomes apparent that there are millions of dollars lost annually because of inadequate biosecurity practices. How would things have turned out differently if we had been using more stringent biosecurity practices since the 1970's when heel warts first emerged in the U.S.? While the fight against heel warts goes on, the next emerging disease in the U.S. may cost even more in the long run if we cannot bring biosecurity issues under control. Developing biosecurity habits to reduce the risk from many animal disease problems are habits worth creating.

Good biosecurity programs focus on a number of management controls for visitors to the farm representing a major biosecurity risk for all livestock operations. The difficulty with addressing potential risks from visitors is that biosecurity tends to be subject to personal interpretation by both farm visitors and farm management. In the end, human nature usually wins out, and in most cases each party tacitly decides that unless one side or the other makes a point of it, everyone can agree biosecurity wasn't that important that day. It is as important for farm owners to expect visitors to the farm to abide by the biosecurity protocols put in place by the farm, as it is for farm visitors to plan for biosecurity protocols on every farm they may visit. Expectations for visitors can be tactfully and specifically spelled out in a [visitor policy](#)

For the farm owner or manager, biosecurity risk is about who the visitor is. Ohio State University Extension's factsheet [On-Farm Biosecurity: Traffic Control and Sanitation](#) by Extension veterinarians, Drs. Gary Bowman and William Shulaw breaks visitor risk into three basic classifications: High, Medium and Low risk.

- Low risk visitors, would include those who in general have little or no contact with livestock and as such, present very little risk of transferring diseases to the farm.
- Medium risk visitors include those who routinely visit farms but have little or no contact with animals. People such as salesmen, delivery people and mechanical contractors.
- High risk visitors would include veterinarians, livestock haulers, livestock-owning neighbors or employees, and anyone else who has close contact with animals and their bodily discharges.

Farm entry precautions therefore, could be on an increasing scale, beginning with low risk visitors and growing as the potential risk grows. In other words, because the high risk visitors represent a greater threat to the farm business, their entry precautions and biosecurity protocols should be much more stringent than the low risk visitor. For example, Drs. Bowman and Shulaw suggest the [precautions](#) low risk visitors should include:

- Ask visitors to wear freshly laundered outerwear and clean shoes or boots. You should provide disposable plastic boots and coveralls as an added precaution.
- Do not rely heavily on disinfectant footbaths. They are unreliable unless boots are thoroughly scrubbed before immersion. And the disinfectant properties are only valid if the boots are in the disinfectant for adequate contact time. Contact time required varies by product.
- Do not allow visitors to enter pens or feeding areas or to contact animals, if possible.
- Do not allow visitors to bring food with them.
- When visitors leave, provide a plastic bag for disposable items and ask them to wash their hands before leaving.

The medium risk visitor's greater contact with off farm livestock creates a greater potential risk of disease transfer to the farm. Drs. Bowman and Shulaw indicate that the [precautions](#) for medium risk visitors should begin with those of the low risk visitor and also include:

- Wear clean or disposable coveralls and boots if there is any contact with feed, animals, soil, or manure.
- Equipment should be cleaned and disinfected before coming to the farm and before leaving if there is any contact with feed, animals, soil, or manure.
- Dirty boots should be THOROUGHLY cleaned and disinfected, and coveralls should be removed and placed in a plastic bag or other container before the visitors reenter the vehicle to prevent the transfer of pathogens to other farms.

The high risk visitor group includes some of the most important management consultants and technicians who regularly visit the farm. They also represent a much higher risk of contamination. Consequently, the high risk visitor has the greatest responsibility for reducing or deflecting the risks associated with their visits. [The Ohio State University Extension Factsheet](#) specifies that the precautions for high risk visitors begin with those used by the low and medium risk groups and should also include:

- Vehicles should be clean and free of visible manure on tires and wheel wells. Livestock trucks and trailers should be cleaned and disinfected prior to arriving at the farm.
- Visitors should arrive with clean clothing, boots and equipment. Equipment and instruments that have direct animal contact should be cleaned and disinfected before and after visiting the farm.
- Disposable sleeves and gloves and other disposable or disinfectable clothing should be worn whenever there is direct contact with animal discharges or tissues.
- Clean and disinfect dirty equipment and footwear with an appropriate disinfectant before leaving the farm. To prevent contaminating transport vehicles, soiled coveralls should be removed and bagged before people reenter the vehicle. Hands and forearms should be washed with antibacterial soap

- Farm employees who have livestock at their own home should report to work clean and in clean clothes that have not been exposed to their own livestock. They could provide their own clean coveralls.

*(Note that in several instances Drs. Bowman and Shulaw point to the use of disinfectants. More information on the cleaning and disinfection and the selection of disinfectants can be found in the Michigan State University Extension Bulletin: [Biosecurity Guide for Livestock Farm Visits](#) (E-2842) by Dr. Daniel Grooms D.V.M.)*

In addition to the others already mentioned, there are two precautions that should be exercised for all visitors to livestock farms. First, all visitors should be screened prior to entry to determine if they have visited another country with the last 7 days. This precaution is part of a [visitor's policy](#) to exclude people who have recently visited countries outside the U.S. where foreign animal diseases such as [Foot and Mouth Disease](#) are present.

The second precaution is the companion piece to the visitor's policy, the [visitor's log](#). Every person who visits a farm should be required to "sign in" to indicate that they were present on the farm that day. The visitor's log is intended to provide the farm owner a record, should it be needed, of farm visitors for forensic use if there is ever a large scale animal disease outbreak. It is also useful in determining the numbers of visitors and the basis of risk they represent. The log points to the human links between farms during a disease outbreak and can play a role in determining how long a farm is quarantined.

Biosecurity precautions on livestock operations can play a significant role in the health and wellbeing of both the farm animals and the farm business. Their use on farms will have long term impacts. More information on farm gate biosecurity can be found at the website of [Michigan's Biosecurity Stop Sign Campaign](#).

*Source: Dean Ross, Theodor Ferris, Daniel Grooms, Michigan State University Extension, Department of Animal Science, Department of Large Animal Clinical Sciences*