



# Veterinary Science Information

## Biosecurity Risk Assessment for Farm Visitors and Exhibitions

Biosecurity is a series of management steps taken to prevent or reduce infectious disease introduction of into a herd or flock. Frequently biosecurity management procedures can help to prevent the spread of infectious disease within animal groups on a farm or with animal products leaving the farm. Everyone from animal producers through consumers of animal products have a vested interest in promoting sound biosecurity practices on farms. Visitors and agricultural service personnel should be proactive and to ensure their actions do not jeopardize biosecurity of farms they visit or service. Animal exhibitions are important venues for educating the public regarding livestock. Animals that return to the farm following shows or sales could be a source for bringing infectious agents onto a farm.

### How is biosecurity risk recognized?

Risk of introducing infectious disease is complex in animal agriculture systems. Risk is determined by the relative pathogen (infectious organism) prevalence of the in the herd, number of susceptible animals, and likelihood that new infections will be established. Disease risk classification is based on such diverse factors as pathogen virulence, environment, geographic distribution, economic impact, population dynamics, different animal species interactions, and susceptibility of individuals, strains, or lines. Animal diseases have been placed in four risk groups. (1) Unlikely to spread, cause mild and usually enzootic (always present at some level in the population). Normally no official control programs. (2) Limited spread, moderate disease, enzootic and may be part of a control program. (3) Can spread rapidly, causes serious disease, may be enzootic or exotic (foreign animal disease-not in the US). Control programs in place, and treatment and prevention usually available. (4) Can spread very rapidly, causes severe disease, enzootic or exotic, strict control programs in place. Treatment and prevention are difficult or not effective. Domestic diseases that are of most concern under normal circumstances are in level 2 and 3. Biosecurity level (5) is a special category employed by USDA personnel when very severe level 4 exotic diseases are encountered.

### What are the likely causes for disease spread?

New animals entering a herd or flock or direct contact with infected animals are the most likely ways to introduce disease. Animals, animal products, or animal secretions most often spread infectious diseases. Therefore, biosecurity programs should always include strict risk assessment protocols for herd additions or contact with animals. Animals returning from exhibitions or contact between people and animals at exhibitions can also be a biosecurity concern. People can transport infectious diseases on their clothes and on occasion on their skin or mucous membranes. Ag service personnel can also present biosecurity concerns if equipment or products are carried from farm to farm without proper precautions.

### How can I tell if I am a risk or if my herd is at risk?

Veterinary Extension at Penn State has developed several risk assessment forms that allow interested and concerned individuals to judge how risky their actions may be for spreading organisms of biosecurity concern. Extension personnel are encouraging all producers and the public to take biosecurity seriously and help make our herds and flocks safer, reduce animal suffering, help to continue to increase the quality of animal agriculture products, and improve the sustainability as well as the profitability of our farms. An example of a risk assessment form is shown on the back. For additional information on biosecurity or risk assessment please contact any member of Veterinary Extension or visit our web site.

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## Risk Assessment for Ag Service Personnel, Visitors, and Neighbors

<b>Risk concern</b>	<b>Low Risk</b>	<b>Moderate Risk</b>	<b>High Risk</b>
Number of farms visited per day	One farm per day with minimal animal contact	More than one farm per day with little animal contact	Many farms or animal facilities per day with animal contact
Protective clothing	Clothing laundered between farms, nylon outer shells, disposable or sanitized boots	Unsoiled clothing or boots may be worn between sites	Clothing or boots are not cleaned or sanitized between sites
Dropping off materials and supplies	Materials or supplies are left in areas with little or no animal or feed contact	Materials or supplies are left in areas where animals or feed might come into contact	Materials or supplies are left in areas where animals or feed are likely to come into contact
Animal ownership	Does not own or care for similar species type at home	Similar species at home, but a different production type	Owens or cares for a similar production type or species
Contact with potentially infected animals	Contact with healthy animals but no contact with sick animals	Contact with healthy animals first, and then some contact with sick	Works with highly infected or exposed animal group
Work in animal or feed contact areas	Does not work in animal contact or feed areas	Minimal exposure, protective clothing, clean equipment	Works in animal or feed contact areas without clean clothing or clean equipment
Foreign Travel	Does not travel outside of the US or Canada	Limited travel outside of US to Canada, Mexico or Europe with minimal animal contact	Travel to numerous countries and /or with animal contact
Foreign Visitors	Foreign visitors are prohibited from contact with animals or feed	Foreign visitors may be in animal or feed contact areas after adequate quarantine	Visitors permitted without screening
Biosecurity Knowledge	Understands and promotes	Not an advocate	Little appreciation

## Risk Assessment for Livestock Exhibitions

<b>Risk Concern</b>	<b>Low Risk</b>	<b>Moderate Risk</b>	<b>High Risk</b>
Purchased animals	Screening tests, +quarantine for 30 days after purchase	Minimal screening, quarantine ~ 15 days	Little or no screening and no quarantine or < 7 days
Protective outer clothing	Clothing and boots worn on home farm are not worn to other animal facilities	Clean clothing with disposable boots or sanitized boots worn between animal facilities	Clothing and boots worn on home farm and to different animal facilities
Immunizations	Timely, comprehensive plan coordinated with veterinarian	Immunizations based on show requirements but not necessarily part of a comprehensive plan	Haphazard immunization schedule not professionally supervised
Animal Transportation	Haul personal animals in your own truck or trailer	Haul animals in someone else's vehicle that has been cleaned or sanitized	Haul animals in someone else's vehicle that has not been clean or sanitized
Equipment at exhibition or sale	Only use feeding, watering, grooming equipment on your own animals	Equipment is cleaned before it is shared between animals	Equipment is shared without cleaning or sanitation
Contact of the public with exhibition animals	People are not permitted to pet or feed animals	Allow petting but feeding is discouraged	Public is allowed to pet and feed animals
People snacks and hand washing	Eating or drinking not permitted near livestock. Hand washing convenient, advocated	Eating/drinking discouraged in animal or feed areas. Hand washing available but not advocated.	Eating/drinking in animal or feed areas. Hand washing not convenient nor mentioned
Isolation after exhibition	Animals are isolated for at least 15 days after exhibition	Animals are isolated for >7 but <15 days after exhibition	Animals are not isolated or are isolated for <7 days after exhibition

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