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#### **Introduction:**

The federal-state-industry National Pseudorabies Virus (PRV) Eradication Program is an unprecedented effort in swine disease eradication by federal and state animal health officials with input from the nation's pork producers.

PRV has been one of the most costly of all swine diseases. It has been estimated to cost U.S. producers over \$30 million annually through vaccine costs, testing, abortion, illness, loss of productivity and access to some foreign markets. This estimate does not include subclinical respiratory or reproductive problems caused by PRV in concert with other diseases.

Discussions about the possibility of eradicating PRV first began in 1975. A national control and eradication program for PRV was officially kicked-off on January 1, 1989. As the eradication program nears completion, it is essential that all pork producers continue to be aware of the risk of infection and to implement the production practices that will protect their herds.



National Pork Board as implemented by the National Pork Producers Council. ©2000 National Pork Producers Council

#### Biosecurity

#### . What is Biosecurity?

A Biosecurity is rules and procedures implemented to protect the health of the herd and avoid entry of new disease agents (viral, bacterial, fungal or parasitic) into the herd. The presence of disease diminishes the efficiency of the pig, creates added labor, and decreases profitability.

A key element of biosecurity is attitude. It is disciplining oneself to be aware of risks and take immediate steps to manage this risk. Redundancy in preventative steps are important because there will be breakdowns in an individual prevention.

### What is the purpose of a biosecurity program?

First, to limit the chance of exposing a swine herd to disease. Second, to contain any disease that does occur to one's herd. The biosecurity guidelines are designed to maintain the healthiest swine possible. This is accomplished by a strict program that minimizes the risk of disease introduction potential. Each person that has contact with the pigs participates to provide sanitary conditions and clean facilities.

The most important method of maintaining the separation of pigs and disease is to avoid the introduction of disease carrying animals into healthy populations. This is the reason so much of biosecurity policy revolves around animal movement and transportation.

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#### What are the key components of a biosecurity program?

A Since most disease agents enter through live animal introduction and/or contaminated transport, these are the highest priority. Transport contamination occurs when trucks hauling infected pigs (market, cull sows, feeders, weans) are not cleaned, disinfected and dried before contacting pigs or premises of another farm.

# If live animals are a primary risk factor what steps are helpful for prevention of PRV introduction?

a. Receive animals only from a known PRV negative source.

- b. Have your herd veterinarian discuss with the source herd veterinarian the PRV testing history of the source herd and other herds in the immediate area.
- c. Isolate all incoming animals for at least 21 days away from your herd.
- d. Test all isolated animals for PRV 14-30 days post arrival.

### What are the highest risks of PRV introduction?

A Studies done at the University of Illinois have shown that the two principal causes of the spread of PRV are direct contact between infected pigs and the transmission of any material (i.e. manure, bedding) that may harbor the virus.

#### O. Does the risk vary with transport?

A. Owners who hire transport are estimated to have five times the risk of another herd becoming infected with PRV compared to those who own their own trucks.

#### Why is there higher risk if producers hire transport?

A. First, these trucks are more likely to have hauled PRV infected pigs or contacted PRV infected pigs on loading facilities at a slaughter plant. Second, frequently these trucks are hauling pigs daily or more often. This leaves little time to clean, disinfect, and dry properly. Third, there may be sharing of the truck by more than one producer to fill a load to reduce transportation costs. Fourth, off-farm truckers often help producers load the pigs and there is a possibility of an individual carrying PRV into the operation on clothing or boots.

## If producers own their own truck, will this eliminate transport risk?

No, the key is proper cleaning, disinfection, and drying. Studies have shown that producers owning their own trucking vehicle but without cleaning after offsite visits have an eleven times higher risk of PRV than a producer owning a truck with cleaning and disinfecting.

#### How can a producer manage this transport risk?

First, select a trucker that is aware of biosecurity and who cleans and disinfects vehicles between farms. Second, have your veterinarian meet at least twice a year with the transport company to review proper cleaning, disinfecting, and drying procedures. Make your veterinarian part of the biosecurity training and have your herd veterinarian or a veterinarian inspect the truck wash quarterly. Third, visually inspect trailers before loading. Reject trailers that are not properly cleaned. Fourth, have your veterinarian review the proper steps to prevent contamination of your facilities during loading steps.

#### How can truckers clean and disinfect trailers in inclement weather?

A Trucks must be washed, disinfected and dried in a heated building.

## Are these biosecurity measures important to diseases other than PRV?

Yes, there are other viral, bacterial, fungal and parasitic diseases that infect pigs and decrease performance. The risk of introduction is similar and thus these steps will reduce the risk.

#### Does biosecurity help manage more than one disease?

Yes, biosecurity deals with all methods of disease introduction. It is helpful for a producer to meet with his staff and veterinarian to list all entry and exit portals for the farm. This list is quite long including:

- New animals
- Slaughter
- Feeders
- Weaners
- Equipment
- Supplies
- Loading chute
- Culls animals
- Deads
- Trucks
- People
- Varmints
- Pests
- Staff lunches
- Site location
- Feed
- Water