

Preventing PRRS from Establishing in Utah Swine

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Porcine Reproductive and Respiratory Syndrome (PRRS) is considered the most important disease affecting swine operations in North America and internationally. There has been no evidence of cross-infection to humans since discovery of PRRS in the U.S. in 1987. However, swine operations in many of the “swine producing states” are being severely affected economically. Some Utah producers are beginning to detect PRRS in their herds, including an outbreak in one

commercial herd that was depopulated to clean up the problem. Urgent action is needed to prevent further spread of the disease, to stabilize and eventually eradicate PRRS from any swine herds now infected.

The greatest threat of introducing PRRS to swine in Utah is from the import of swine or semen from infected herds. Many swine are currently imported into Utah for use by youth but without the required testing, vaccination, health certificate and entry permit number. The greatest threat of spreading the disease within Utah is when swine are exhibited at shows or fairs and then returned to their original herd or moved to another swine operation.

To help prevent further spread of the PRRS virus, USU Extension Service, Utah Pork Producers

Association and Utah Farm Bureau Federation strongly recommend implementation of the following guidelines:

1. All swine producers, including 4-H and FFA youth and others, observe and abide by Utah regulations for importation of swine. These regulations now require that all swine entering Utah for breeding or exhibition (regardless of age) be blood test negative for brucellosis, pseudorabies, and PRRS; be vaccinated for leptospirosis and erysipelas; and be listed on a health certificate with an entry permit number obtained from the Utah Department of Agriculture and Food. 801-538-7164
2. Testing of semen for PRRS is not required by regulation but is strongly recommended. The boar stud can send a semen sample to a laboratory for PCR testing of that specific collection at the same time they send the semen to the producer for AI use and the producer could receive the faxed results prior to use. It would cost approximately \$20-\$25 per sample tested, plus shipping and reporting fees. This would provide a 99% assurance of safety of the semen. Some studs which were testing samples on just a weekly basis have become infected and resulted in devastating effects for the receiving herd. It is important that each boar collection be tested prior to use.
3. Beginning in 2005, all swine shows and exhibits be established as terminal markets. This would mean that swine brought onto any show premises are destined for slaughter. There would be no exceptions, including individual animals that are too light, too heavy or sifted for other reasons. This would also include any farrowing sow and piglets used as an exhibit; requiring they be kept in quarantine until all were eventually taken to slaughter.



Comments on these recommendations and other ideas are welcomed by the Utah Pork Producers Association or the Utah Farm Bureau.

PRRS – The Disease

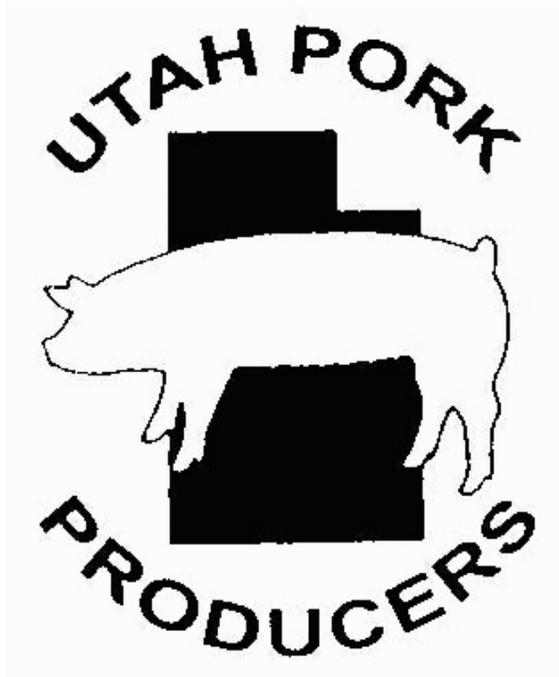
In the late 1980s, outbreaks of a previously unrecognized disease of swine were reported in the United States. Similar reports emerged from Europe in 1990. Numerous causes for the outbreaks were investigated. A new RNA virus, designated Lelystad Virus (LV) in Europe and Porcine Reproductive and Respiratory Syndrome

virus (PRRS) in the U.S., was identified as the cause of the outbreaks in 1991. Evidence collected by evaluating stored blood samples showed that the virus was present in pig populations as early as 1979. The source of the original virus has not been determined. It appears that the advent of larger herd sizes and increased movement of swine and swine semen during the 1980s and 1990s facilitated the spread of the virus within and between countries. There has been no evidence of cross-infection to humans.

The severity of PRRS virus infection can vary widely and range from a near complete lack of clinical signs to devastating outbreaks of reproductive and respiratory disease. Clinical signs in the breeding herd may include anorexia (off-feed), fever, lethargy, nervous signs, purplish discoloration of the ears and vulva, and abortion. Litters born to recently infected dams may have increased rates of mummification, still births, and weak-born piglets. Piglets in these litters may carry the virus for an extended period. Boars infected with PRRS virus can show signs similar to sows. Infection

does not usually impact the fertility of the semen, but the virus can be found in the ejaculate of boars for several months after being infected. Newborn piglets infected with the virus can demonstrate severe respiratory disease. Nervous signs as well as anorexia and lethargy have also been reported. Other common diseases of young pigs may become more prevalent and severe during a PRRS outbreak. In an experimental setting, piglets infected with PRRS virus often show minimal clinical signs. However, in a field setting, PRRS virus infection frequently has a more pronounced effect due to its interaction with the pig's environment, immune status, and concurrent diseases. (Abstracted from 2003 PRRS Compendium, National Pork Board.)

In 1995, PRRS related pneumonia in show swine in Texas became a serious problem. There are two likely ways the PRRS virus became so widely disseminated: 1) direct contact between uninfected and persistently infected, virus shedding show swine during shipment and the many events that brought animals into direct contact; and 2) artificial insemination with PRRS-infected semen. Semen can now be routinely tested to insure that it is free of the PRRS virus. The spread of PRRS among show pigs can be prevented by requiring that all swine shows be terminal markets. It is important that we make every reasonable effort to control and ultimately eradicate this serious swine disease from Utah.



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