

Porcine Reproductive & Respiratory Syndrome
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We would tell you the following about the risk of transmission with PRRS positive semen:

- 1) Reproductive system adapted viruses are higher risk as they are shed in the semen at higher rates.
- 2) Our work would indicate that if you don't remove sows from the herd within 48 hours of mating with infected semen you are too late. Culling sows bred to infected semen less than 48 hours post breeding results in about a 75% chance that you will save the herd. 3) Culling of sows bred to the suspect semen has to be done often before confirmatory testing is complete.
- 4) They do go positive in the serum before the semen so how you detect positives is a big deal to predict risk. In the US we know that we if we don't test daily (serum normally >30% of the boars collected) then we have a higher risk of transmission to the sow herds. Historically if we don't catch it right away in the boars then the sow herds get infected. In the US today we often hold semen until we have PCR test results back on the boars for PRRS prior to using it.
- 5) Depending on what you find in national sow herd testing it might be useful to look at some of the area control programs that we have used in the states to get regions stabilized and then in some cases remove the virus.
- 6) It is likely that some, but not all the customer herds will be infected so you are likely to have infected and non-infected herds near each other. Preventing the "secondary outbreak" will be really important. That is where we struggle in the US. One infection in an area could lead to 10 more because of all the connections between herds.
- 7) Vaccination in positive herds, where there is known exposure, can provide a measure of protection but the protection is not complete. In negative herds there will be some reproductive cost to vaccinating naïve animals in pregnancy.
- 8) In the US we did not make much progress until we starting managing PRRS in region and not on individual farms. In a regional program vaccinating herds that are likely to be exposed can help stabilize the region by slowing the movement of the virus between infected and naïve herds. Depending on what the final picture looks like you might have a very different plan but I would think that I would only vaccinate naïve herds if they were at really high risk of being infected.