What Oregon pig growers need to know about PRRS viral infections

Why is there so much interest in this viral pig diseases all of a sudden?

Recently, there has been one confirmed case of PRRS viral infection in a pig in Oregon. **Several more have tested positive for Circovirus**.

Where did the virus come from?

Historically, Oregon has enjoyed a very low prevalence of PRRS virus in its pig population. This is probably because Oregon has a very low density swine population and most producers are small scale. We probably have some isolated swine herds within our borders that have harbored PRRS virus for years but it has not become widespread. Recently, a truckload of growers was imported into Oregon from the Midwest. It was one of these imported pigs that died and tested positive for the PRRS virus. Where swine are produced intensively, such as the midwest and southeast, PRRS-infected herds are very common. There are no requirements for PRRS testing for pigs moving from one state to another as long as the pigs appear healthy at the time of inspection.

What exactly is the PRRS virus and what does it do to pigs?

PRRS stands for porcine reproductive and respiratory syndrome. It is a virus that has been around at least since the1980s when it was know as Mystery Pig Disease since the cause of illness produced by the virus was unknown. In the early 1990s the virus was identified as the cause of Mystery Pig Disease and renamed PRRS.

PRRS infections cause a variety of problems in pigs ranging from mild to severe. In herds without immunity to the virus sows may suffer from a depressed appetite and fever and pregnant sows may abort in late pregnancy or give birth the premature litters. Weaners and growers are usually most severely affected but even these pigs may not show any signs at all. Those that become sick will generally go off feed and become “fuzzed up”. They may have a cough, and especially if they become infected with other disease-causing organisms, may develop severe pneumonia and die or waste away over a course of several weeks.

How is the PRRS virus spread?

The major way virus is spread is by direct contact between infected and uninfected pigs. The more intensive the swine operation the more likely the virus is to spread between pigs. The sow is the reservoir animal for PRRS and can pass the virus to her unborn piglets who in turn pass the virus to other pigs after weaning. Actually, although PRRS is infectious, meaning it is caused by a disease-causing virus, it is not highly contagious. There are instances where infected pigs are penned with uninfected pigs and the uninfected pigs remain free of the virus despite close association with infected pigs known to be shedding virus.

There are other ways the virus is spread. It can be carried on trucks and trailers that have become contaminated with virus from infected pigs. The virus can even be carried on a workers hands, boots, or clothing for a short (less than an hour) period of time. Virus can be transferred from one pig to another by using instruments (castration, detailing, milk teeth cutters, and needles) on an infected pig followed by use on an uninfected pig.

If a pig is infected with PRRS virus how long can it be a risk for infecting other pigs?

Although many pigs remain infected with the virus for life they actually only shed the virus for a short period of time. Younger animals tend to shed virus longer than older animals. Generally, shedding occurs for only 30-60 days after initial infection but in rare cases can continue for up to 5 months. Boars can also shed virus in their semen but usually only do so for a few weeks but there have been boars that have shed virus in their semen for up to 6 months. All semen used for AI should be periodically tested for PRRS virus.

How is PRRS diagnosed?

In order to confirm a diagnosis of PRRS laboratory testing must be done. Many diseases can resemble PRRS and often PRRS viral infections co-exist with other infections. It is very difficult to obtain the appropriate specimens for testing from live animals. Therefore, suspect pigs are often sacrificed in order to make a diagnosis. Blood testing can only indicate the presence of antibodies against the virus. If the pig's dam or the pig itself was previously vaccinated or infected with PRRS it will blood test positive. A blood test cannot tell if a pig is currently infected or shedding the virus.

Can this virus harm other livestock or people?

No! With the exception of mallard ducks, PRRS virus only infects swine. It poses no threat to humans or other animals and in no way makes eating pork a threat to human health.

What can I do to protect my herd from becoming infected with PRRS virus?

If you buy pigs, insist that they originate from a source known to be negative for PRRS. Physical separation of potentially infected and uninfected pig enterprises is probably the most effective control measure and producer can take.

What other biosecurity measures can I take to protect my pigs from PRRS?

The virus cannot tolerate heat or drying but can survive up to 11 days in water. It generally survives less than 1 day on plastic or stainless steel surfaces, shavings, feed, and clothing. Cleanliness, dryness, and disinfection with Virkon® S (Antec International)

of all surfaces that may have had contact with infected pigs will remove environmental sources of infection. Also, insects such as flies and mosquitos should be controlled.