



Porcine Circovirus

Frequently Asked Questions for Fair Exhibitors

What is Porcine Circovirus Disease (PCVD)?

Porcine circovirus disease (PCVD) is the term for a viral disease of pigs that has recently emerged as a major problem in the United States (U.S). The disease is caused by Porcine Circovirus Type 2 (PCV2). Not all pigs will develop clinical signs of PCVD. However, most swine are infected with PCV2.

What are the symptoms and how are pigs affected?

Pigs affected may experience increased mortality, poor growth, and weight loss, progressing to the level of severe thinning, and weakness between 5 to 14 weeks of age. Also pigs can develop enlarged lymph nodes, skin rashes, difficulty breathing, jaundice, fever, stomach ulcers, diarrhea, or sudden death may occur.

How prevalent is PCV2 in swine?

While most swine are infected with PCV2, only a smaller portion of pigs show signs of the disease. It is important to note that while most pigs are **infected** with PCV2, only a percentage of pigs become **affected** with clinical signs.

How is it transmitted?

Exposing pigs to other pigs or boots, clothing, or equipment that has been around other pigs greatly increases the risk for disease transmission. Visible bodily secretions (blood, urine, feces, or mucus) from pigs can contain infectious disease organisms.

What triggers this disease?

It is not fully known why some farms or locations have clinical signs of the disease while others do not. A combination of PCV2 presence, management, and environmental conditions may play a role, but it not understood at this point.

Should we test for it?

Most pigs are positive on a blood test and this does not mean they will show clinical signs. Confirmation of the disease is currently done by testing tissues from dead pigs at a diagnostic lab and should be coordinated with your veterinarian.

What do we do if we know a pig has the disease?

If a positive test is confirmed, it does not imply the pig will be fully affected by the disease. However, if the pig is exhibiting clinical signs, removal of the pig from its pen mates or the rest of the herd is recommended.

Vaccination

Vaccination programs need to be modified to each swine operation and should be developed in consultation with local veterinarians, Extension personnel, and other swine producers. Remember that vaccination only raises a pig's level of resistance. If other important management procedures are neglected, even this elevated level of resistance may be inadequate to prevent disease.

Can I use antibiotics to help prevent it?

Since PCVD is a viral disease antibiotics use for prevention or therapy of infected animals directly will not help. However, while antibiotics do not directly prevent PCV2, they may reduce other bacterial challenges. This may help the pigs overall immunity and health status which may lower the incidence of clinical signs.

What other ways are there to prevent mortality from PCVD?

While management changes do not always prevent mortality from PCVD, some changes can lower stress and help limit mortality.

- **Farrowing** - Clean and disinfect farrowing house between batches, wash sows and treat for parasites prior to farrowing, and limit cross-fostering to only that which is necessary within the first 24-hours of farrowing.
- **Growing pigs** - Clean and disinfect pens prior to use, lower stocking density use solid partitions between pens, allow adequate feeder space and access to water, manage air quality, and temperature control to meet the needs of the pig and do not mix groups of pigs.

Are certain genetic lines more susceptible to disease?

There is some evidence that certain genetic lines may have more resistance. However, clinical signs have been seen in large and small operations as well as crossbred hybrid lines and purebred breeding stock. While there may be differences between genetic lines, no pig is exempt from the disease.

Is it more evident in gilts or barrows?

There is some evidence that barrows have a higher risk of developing PCVD. However, gilts can be affected as well and there is no way to predict if an individual barrow or gilt will develop clinical signs.

Do we need to quarantine pigs that are traveling when we bring them back home?

It is always recommended that pigs are quarantined when exposed to swine outside of the home herd to prevent potential disease transmission. However, if facilities are not available for quarantine, your risk for transmission to the pigs not exposed off farm increases just like for any transmittable disease.

Can we buy pigs at sales this spring?

Yes. Swine are always at greater risk of disease exposure when co-mingled with other swine at livestock sales. However, proper communication with breeders about their herd health status should be part of your discussions before purchasing swine from that location.

Can we go to spring shows and the county fair?

Yes. However, owners of livestock attending spring shows need to be aware of the potential risks of disease transmission when attending these fairs. The risk this year is elevated because of PCVD. This is similar to every year in which various diseases may spread through these events. Procedures to reduce risk include changing clothing and shoes worn at the show before exposure to your pigs. Also make sure any clothing or shoes are cleaned prior to exposure to your pigs.

What are tips for minimizing stress on pigs when traveling and being at shows and sales?

We always encourage pig comfort when transporting pigs to minimize stress. Providing proper bedding or cooling and managing airflow in the trailer or pick-up hauler is critical. At the show, maintaining comfort by using bedding, cooling devices, providing fresh water at all times, and feeding adequate levels to reduce stress are critical.

Are we going to lose all of our hogs?

In herds that have clinical PCVD outbreaks, death losses can be as high as 30% but can vary substantially from group to group, with some groups experiencing low mortality. In addition, a percentage of pigs will have lost substantial weight but do not die. The remaining pigs may have experienced some growth depression, but generally grow and perform normally.

Do we need to make our county fair totally terminal?

It is recommended every year that co-mingled hogs at fairs not be returned home since the potential for disease transmission is greatly increased. However, livestock owners need to be aware of the risks involved and make their own decisions. This year the risk is increased due to PCVD concerns.

Will testing be a good marketing tool for selling pigs this spring?

No. Since most pigs in the U.S. are infected with PCV2, testing is not needed. A positive test for antibody or PCV2 on pigs without clinical signs is not predictive of future development of disease. Again, the reasons for pigs developing clinical signs of the disease are not known.

Do I need to become a “clean” confinement facility or “shower in - shower out facility?”

Proper sanitation is always recommended to minimize disease transfer. It is recommended that a shower is taken and different clothes are worn when traveling between swine farms. If there are visible bodily secretions (blood, urine, feces, mucus) from the pigs on the coveralls or clothes, the coveralls or clothes should be changed and cleaned before exposure to other pigs. Hand washing or wearing disposable gloves or boots is another way of minimizing transfer.



How far do we need to separate pigs of different weights or that have been at a show from those that have not?

Pigs seem to have the greatest risk of exposure between the weights of 40 to 100lbs. Therefore, separation of pigs from different herds or those shown at various spring shows from the rest of the herd is recommended. At minimum, prevention of nose-to-nose contact and exposure to all bodily fluids is recommended. Of course greater separation distances will minimize risk of disease exposure but distances of as little as ten feet can significantly reduce risk. Care should be taken to minimize exposure of isolate pigs by caretakers going back and forth between the main herds.

Can humans contract this disease?

PCV2 has not been shown to infect humans or other livestock species.

Disinfectants

Selection of an appropriate surface disinfectant is governed by several factors, including the type of surface to be disinfected, temperature, weather conditions, effectiveness against specific disease causing organisms, and the time required for the disinfectant to inactivate the agent. The efficacy of most disinfectants is impaired by the presence of organic material, and thorough cleaning prior to their application is critical. Consult your veterinarian or technical representative of the company manufacturing the disinfectant for specific recommendation.

CDFA Animal Health Branch
Headquarters - (916) 900-5002
Redding District - (530) 225-2140
Modesto District - (209) 491-9350
Tulare District - (559) 685-3500
Ontario District - (909) 947-4462
USDA-APHIS-VS (916) 854-3950 or (877) 741-3690

For more information, please click the following:
[Animal Health Branch](#)
[Biosecurity and Your Pig Project](#)
[Materials for Swine Exhibitors at Fairs](#)