

## Porcine Epidemic Diarrhea Virus – What does it mean to my swine project?

The pork industry is currently dealing with a very nasty virus that is ripping through the swine herds of the United States. Porcine Epidemic Diarrhea Virus (PEDV) is related to the transmissible gastroenteritis (TGE) virus of which you may have heard about previously. The PEDV is related to TGE, however, it is different enough from the TGE virus that our pigs do not have immunity to the PEDV. The PEDV was first identified in this country on May 17, 2013 and has rapidly spread across the country. Since our pigs have never been exposed to the virus, the disease has moved quickly from herd to herd. The PEDV does not affect humans or other livestock.

All ages of pigs are susceptible to this disease and the biggest danger is to baby pigs less than 17 days of age where mortality or death rate is almost 100%. In older pigs, the disease is also very severe, but the death rates are much, much lower. The disease will show up as severe diarrhea and vomiting and seems to last from 4 to 7 days in most cases. If you have a pig that is showing these signs it is essential to call your veterinarian and do the testing to identify if this is PEDV. Samples your veterinarian will most likely take will be samples of the diarrhea and swabs of the pig's saliva. Currently there is no vaccine for this disease, but several companies are working hard to develop one. The only treatment is to support the animal during the vomiting and diarrhea. Supporting care should include a dry, clean, warm, and draft free housing. Support your pig during this illness by providing clean, high quality, free choice water. The addition of electrolytes you can get from the feed store is a good option and in the case of an emergency, the use of electrolyte drinks such as Pedialyte, Powerade, or Gatorade for example will also work. Isolating a sick pig is extremely important in preventing the spread of the disease to other pigs.

The PEDV is very virulent and can exist in the environment for a significant amount of time. It is transmitted in the feces and can be shed by an animal for up to 4 weeks, so that means that sick animals need to be kept away from healthy animals for 4 weeks. The virus thrives in cooler environments, but also is viable to temperatures of 140 to 160 °F. The time it takes for an animal that is healthy to get the disease once exposed is 12 to 24 hours.

The best way to prevent PEDV is biosecurity. This disease is transmitted via direct contact with sick animals or fomites which are objects that have become exposed to the manure of a sick animal. Fomites or objects that can transmit the disease can be items such as clothing, boots, brushes, trucks, trailers, and many other items that come in contact with the manure. Keeping your pens and tools clean are essential, be very vigilant in cleaning up manure. Restricting people who have been around other pigs from coming in contact with your pigs should be considered. If you do have an animal that is sick, use buckets and other items only for the sick pig and do not bring it around healthy animals. Using disposable booties and coveralls exclusively for working around sick animals is a good idea. The use of disinfectants can help in controlling the virus, but remember before you disinfect you must make sure all of the manure is cleaned out. After disinfecting the item or area, it should be allowed to dry to insure the destruction of the virus.

The best prevention for this disease is common sense and implementing good biosecurity practices. If you have questions or need more information contact your county agent or you may contact me at 970-491-6642 or at [brett.kirch@colostate.edu](mailto:brett.kirch@colostate.edu)

A good source of current information about PEDV can be found at: <http://www.pork.org> - Click on the PEDV symbol on the home page.