

# Porcine Epidemic Diarrhea Virus



## Bio-Security!

(some findings to-date from University of Minnesota study of PEDV epidemic)

- About 10 times the number of positive sites reported pig additions from another site in the operation compared to negative sites
- About 3.5 times the number of positive sites reported borrowing equipment from another site compared to negative sites
- About 2.5 times the number of positive sites reported seeing a moderate to severe problem with birds near the site compared to negative farms
- About double the percentage of positive sites had dead haul vehicles visit the site in the two weeks preceding infection
- About 20% more negative sites used disinfectant on the chute floor in between every loading or unloading of pigs compared to positive sites

PEDV was first reported in USA May 2014

Similar to TGE (Transmissible Gastro-Enteritis - a viral disease swine producers and veterinarians have successfully managed for decades)

Spread by vectors carrying the virus around, especially by tracking mud, manure, and such from one place to another

Reports of herds experiencing 50-80% mortality in piglets; sows with fevers and off-feed a few days

TGE vaccines do not seem to provide protection.

There is no effect on food safety; no effect on humans.

Be vigilant with cleaning and disinfecting your vehicles and people! This goes a long way to preventing bringing anything unwanted home with you. (There are many bugs out there that can cause similar problems).

Another factor to consider: if this pig does happen to be carrying this (or any other problem that you don't want at home), hauling stress may create a situation where the cause manifests itself as a problem within a few days of the movement.

Improve your odds of not spreading it to your home stock. Isolate incoming pigs for a couple of weeks when you do get it home. Maybe even pull through a car wash an hour or 2 away from home and hose everything down.

## Did you know?

- ◆ PEDV was first diagnosed in Asia many years ago and made its way into the United States around March 2013?
- ◆ 1 million hogs are being transported on a daily basis in the United States?
- ◆ 6 million piglets have been lost to PEDV?
- ◆ Shoes, clothing, gloves, feeders, troughs, vehicles, trailers and other animals can contaminate your herd?
- ◆ It could take up to 30 days for an animal to show any signs of illness?
- ◆ The more piglets lost to this disease will cause a future shortage of hogs which will cause an increase in the cost of pork?
- ◆ That petting one animal and then touching another without washing your hands increases the chances of spreading a disease?
- ◆ For a disinfectant like bleach, alcohol or Lysol to work properly, it is recommended that it remain on the surface for at least 10 minutes to be effective?
- ◆ When you pile wet soiled dirt, saw dust or bedding, the surface on the outside might appear dry but, the inside of the pile will remain wet and provide an ideal environment for bacteria, viruses and fungus to grow?
- ◆ The most effective way to prevent the spread of a disease is to maintain good hygiene as well as a clean and controlled environment?



## Contact Us

### Arizona Department of Agriculture Animal Services Division

1688 W Adams St  
Phoenix, AZ 85007  
(602) 542-0942  
LFleming@azda.gov

Visit us on the web:  
<https://agriculture.az.gov/>



## PEDV

Arizona Department of  
Agriculture



## What is PEDV

PEDV stands for Porcine Endemic Diarrheal Virus.

PEDV is a swine virus that does not affect humans and is not a food safety concern.

It can affect adult swine and yearlings but seems to be most severe in nursing piglets.

This virus can cause severe diarrhea and dehydration in piglets ultimately leading to death.

- ◆ Death rates of 70%-100%

## How is it spread

- ◆ Oral/Fecal route of transmission
  - ◇ Eating from areas where fecal matter is present.
- ◆ Improper cleaning/sanitation of
  - ◇ Pens
  - ◇ Feeders/Troughs
  - ◇ Trailers
  - ◇ Shoes

## Why is this important

It is important for you to understand what this disease is and how it is spread because...

- ◆ More than likely, your hogs are a very valuable asset for one if not all of the following:
  - ◇ Income
  - ◇ Agriculture education (4-H/FFA)
  - ◇ Personal gain (food)

No matter what your reason, if you lose your pig; you lose a very valuable asset.

Therefore, you need to protect your investment by educating yourself and all those involved with your herd.

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*“An investment in  
knowledge pays the best  
interest.”*

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*- Benjamin Franklin*

## What can you do

One of the most commonly reported causes of the spread of this disease is the trailer the pigs are transported in. Therefore, properly cleaning, disinfecting and drying out the mode of transportation is extremely important.

This disease can be spread not only by what the pigs are exposed to inside the trailer but on the outside as well for example; vehicle tires, clothing and soles of shoes. For this reason, it is recommended that there is minimal contact between outside sources and your herd.

Designate one pair of shoes that you wear only in your pig pens and the immediate area. For outside sources, invest in shoe covers and coveralls that they must put on before entering your pig pens.

Proper cleaning is crucial to your success in avoiding the spread of this disease. When removing contaminated saw dust/bedding, you should avoid piling. Designate an area to spread it out to air dry and spray with a disinfectant and/or burn. Drive your vehicle and trailer through a car wash every time you use it and allow plenty of time for it to dry before entering on your property.

If you transport existing swine to a show or you are bringing a new one home, you should not allow commingling to occur for 3-4 weeks to avoid cross contamination.

Vaccinations are currently being tested for efficacy and may soon become available for use.

In the mean time, if you have any piglets die for unknown reasons and/or they show any signs of illness; please contact your local veterinarian and the Arizona Department of Agriculture for diagnostic testing and vaccination availability.