

## Porcine Epidemic Diarrhea Virus

### WHAT IT IS

- A coronavirus related to transmissible gastroenteritis virus (TGEV) and to porcine delta-coronavirus (PDCoV)
- Causes widespread, acute, severe watery diarrhea in pigs
- Symptoms can also include vomiting, loss of appetite, and death (up to 100% in nursing pigs)
- It is a REPORTABLE disease

### WHAT IT IS NOT

- It only infects pigs
- It cannot infect humans
- It is not a food safety issue

### HISTORY

PEDV has been present in Europe and Asia for many years but has recently made its way into the US. On November 13, 2014, state veterinarians discovered the first known case of PEDV in the State of HI. The affected farm was located in Waianae on the island of Oahu. A quarantine order was issued for the island of Oahu, restricting movements of pigs from the west side of Oahu (Makaha, Waianae, and Nanakuli) as well as any pig movements from Oahu to neighboring islands to prevent the spread of the disease. Since then surveillance testing has detected the presence of the virus on swine farms elsewhere in the State.

### CURRENT SITUATION

In early June 2017, the disease was detected on a different farm in Waianae, when it began experiencing losses in nursing pigs. Department of Agriculture

veterinarians are engaged in controlling this disease outbreak at this time.

### HOW DO PIGS GET INFECTED?

PEDV is transmitted fecal-orally. Pigs are either directly infected by contaminated feces or indirectly by contaminated feed, equipment, vehicles, or people.

### OK I THINK MY PIGS ARE INFECTED...WHAT NOW?

Contact your local Animal Disease Control Branch veterinarian immediately:

Big Island	(808) 933-3307
Kauai Oahu	(808) 483-7108
Maui Molokai Lanai	(808) 873-3559
Statewide Extension Veterinarian	(808) 956-3847



### HAWAII DEPT. of AGRICULTURE

Animal Disease Control Branch  
99-941 Halawa Valley Street  
Aiea, Hawaii 96701

Phone: (808) 483-7106  
Fax: (808) 483-7110

**HOW DO I STOP THIS DISEASE FROM SPREADING TO MY FARM?**

Unfortunately, the current available vaccines are not useful for preventing illness in naïve herds, but they may be useful in herds that have already been infected. Zoetis and Harris both manufacture a modified-live vaccine that can help boost immunity in previously exposed herds.

**Biosecurity of every farm is very important.**

Monitoring and controlling the ins and outs of a farm will help to minimize exposure of a herd not just to PEDV but to other infectious diseases as well.

Ins	Outs
<ul style="list-style-type: none"> <li>• new animals</li> <li>• feed/garbage deliveries</li> <li>• people</li> <li>• vehicles</li> <li>• pests</li> </ul>	<ul style="list-style-type: none"> <li>• products</li> <li>• waste</li> <li>• people</li> <li>• vehicles</li> </ul>

**STEPS TO MINIMIZE YOUR RISK OF INFECTION**

1. Limit foot and vehicle traffic on your farm (post signs to control incoming traffic)
2. Keep a record of all visitors to the farm
3. Create a **LINE OF SEPARATION** that separates clean areas from dirty areas
4. Have all personnel use clean equipment and PPE (personal protective equipment), wash hands, and make sure to clean and disinfect footwear
5. Have a good rodent control program in place
6. Do not allow feral pigs near your herd (build fences, ensure barns are secure, etc.)
7. Properly clean and disinfect vehicles and equipment before and after entering your own or other farms (remove organic material, use an appropriate disinfectant, allow adequate contact time)
8. Ensure proper disposal of any infected animals

**SUMMARY**

PEDV is a reportable serious disease affecting pigs. Please contact the Hawaii Department of Agriculture Animal Disease Control Branch with any questions or for further information regarding PEDV.

Document created by Chelsea Monroe, Jenee Odani, DVM, DACVP, and Vance Kawakami, DVM, MPH.

**CLEANING AND DISINFECTION**

- Remove all visible dirt, manure, debris. Most disinfectants are less effective when a large amount of organic debris (feces, dirt, etc.) is present
- Wash areas to be disinfected (use scrub brushes as needed)
- Rinse and allow area to DRY
- Apply disinfectant (the following disinfectants have been shown to be effective against PEDV, but others may also be effective. Please contact your local HDOA veterinarian for more information)
  - 1-Stroke Environ
  - Sodium hypochlorite (bleach)
  - Synergize®
  - Tek-Trol®
  - Virkon-S®
- Allow for appropriate contact time (most disinfectants need to stand for at least 10 minutes in order to be considered effective)

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