

Porcine Deltacoronavirus positive cases in the US: Where are we today?

J.M. Sanhueza, C. Vilalta, E. Geary, P. Fioravante, C. Corzo
 Veterinary Population Medicine, University of Minnesota

Key Points

- Porcine Deltacoronavirus (PDCoV) was first reported in the US in 2014.
- Monitoring of PDCoV cases showed that it is still present in pig herds from the United States.
- PDCoV testing and reporting must continue in order to increase our understanding of the disease.

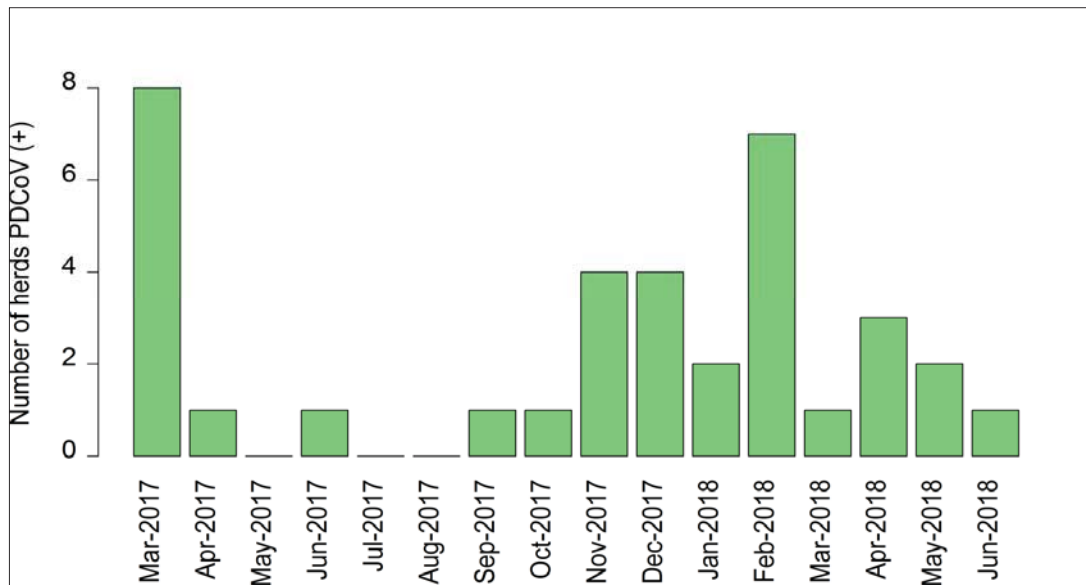
Introduction

Porcine Deltacoronavirus (PDCoV) was first reported in Hong Kong pigs during 2012 (Woo et al., 2012). Two years later it was reported in the United States (Marthaler et al., 2014; Wang et al., 2014). The complete genome of a United States' PDCoV isolate was characterized by Marthaler et al. (2014), which was ~99% similar to a virus detected in Hong Kong. Clinical signs may be similar to Porcine Epidemic Diarrhea (PED) and Transmissible gastroenteritis coronavirus (TGEV). These include acute diarrhea, that can be accompanied by mild to moderate vomiting, which ultimately can cause dehydration and death especially in neonatal pigs (Jung et al., 2016). Participants of the MSHMP have continued to communicate PDCoV cases in pig herds. In this science page, a description of PDCoV cases from March 2017 and onwards is presented.

Results

PDCoV continues to be present in the United States swine herd. Since March, 2017 PDCoV cases have been passively reported to MSHMP. Over this period of time, 37 cases have been reported by six participant systems. From those 37 cases, one did not have a date of testing. Figure 1 summarizes the monthly number of PDCoV cases. Although in March 2017 eight PDCoV cases were communicated, in the subsequent seven months only four cases were reported. This represents 33% of the PDCoV cases for the first eight months of reporting. Since November 2017, 24 PDCoV cases were communicated to MSHMP, representing 67% of the reported cases.

PDCoV still occurs in the US at an apparent low number of reported cases. Swine producers and veterinarians must stay vigilant for clinical signs compatible with PDCoV and continue to test for this pathogen.



References

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