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Is the story of a PEDv "re-infection" in Indiana a difference maker for the hog market? We don't think so simply because the occurrence is not new — or at least not new to us. This may be a case of us (and others!) assuming that everyone knew what was going on when they really did not but . . .

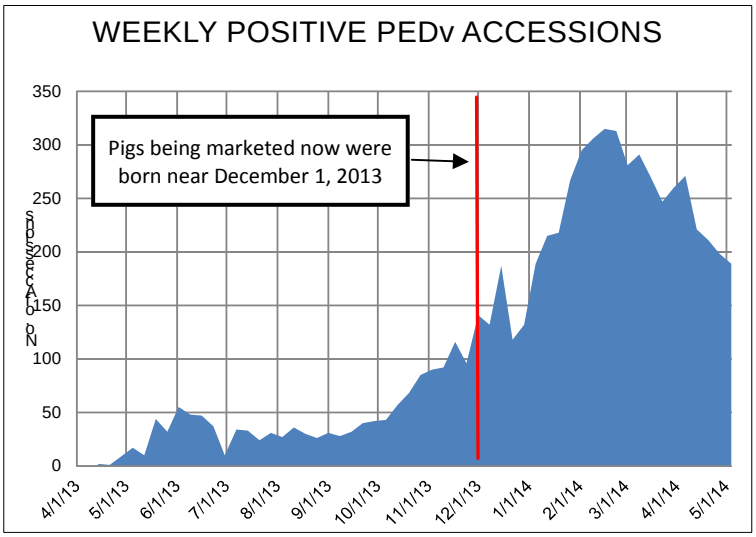
Reuters published a story yesterday about a second outbreak of PEDv (porcine epidemic diarrhea virus) on an Indiana farm, claiming that it fuels concerns that the disease will be "harder to contain than producers and veterinarians had expected." The Reuters story claimed that this is the first farm to "confirm publicly" a re-break of the disease. The entire Reuters story can be found by CLICKING HERE.

That "confirm publicly" part may in fact be so but based on our contacts in the industry, this is certainly not the first farm to see the disease either continue to cause piglet death losses beyond the normal 3-5 week period or to re-emerge after the farm had initially believed it had the disease under control. Subsequent death losses are not usually as high as they are in an initial PEDv outbreak but they are certainly not trivial. Anecdotal evidence suggests that somewhere between 20 and 30 percent of infected farms do not get back to pre-PEDv output levels.

These "chronic" farms are one of the reasons for the huge amount of uncertainty regarding piglet loss numbers and expected slaughter hog number six month hence. Part of that confusion is that the samples submitted to a veterinary diagnostic lab upon the first suspicion of PEDv would, if they in fact prove to be positive, constitute an "accession" in the data we have used to measure the disease's spread. That initial accession would very likely represent near-100% death loss among newborn pigs for 3-4 weeks. The re-break would also constitute an "accession" but death losses, according to our sources, are usually lower as some sows' immunity levels are high enough that they pass protective antibodies on to their newborn pigs. So , in terms of supply impacts, one accession is not necessarily the same as another. That's the reason we have used the case accession numbers only to represent the disease's activity level across time and have not tried to directly imply loss numbers from accession data.

The Reuter's story also claims that control efforts have been based on "an assumption" that a once-infected pig will develop immunities that protect it for several years. Our information indicates that control efforts have been based on "a hope" that such immunities would exist but that any assumption of such immunities was likely killed months ago.

Animals respond to an infectious agent by producing antibodies that fight the agent and allow the animal to recover. Those antibodies stay around for some period of time in case the same infectious agent is encountered again. Some — small pox in humans, for instance — last forever. Some — the common cold in humans, for instance — usually don't last that long. Pigs have proven to have a reasonably long-lasting (3 years or so) immune response to transmissible gastroenteritis (TGE), a disease caused by a coronavirus similar to the virus that causes PEDv. Animal health officials had hoped the PEDv immune response would be similar to that of TGE but that has not panned out. The failure, though, may not be the fault of the animals' immune responses since PEDv is one of — if not the — most prolific virus yet encountered in terms of replicating itself. That ability to multiply may simply be introducing so much virus into the environment that the immunity levels of some animals are overwhelmed, causing recurring cases or outright re-breaks.



The most immediate issue is the question of just how many pigs were lost during those big accession weeks in February, March and early April. Some of those accessions were re-breaks but we don't know how many. And some cases in the field may not have been submitted to vet labs and thus are not represented in the accession data.

There are three longer-term issues. First, will a vaccine become available? That would be best but, historically, consistently effective vaccines for coronaviruses have been difficult to make. Second, will management practices (biosecurity, cleaning, control of other potential vectors such as feed ingredients, etc.) improve enough to control PEDv? The focus on feed ingredients in Canada has seemed to help control its spread there. Hog producers are smart people who will improve the situation but there may be a limit to what they can accomplish without a vaccine. Finally, at what point will the industry decide that the supply shortages can only be overcome by expanding the sow herd? That will obviously be a critical juncture as it will involve substantial capital outlays and set the stage for large supplies should a PEDv solution be subsequently found.

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