55% → 3% incidence!!

Yes, we had 55% (388 / 709) reported PEDv incidence from July 1, 2013 through June 30, 2014 and we have had 3% (23 / 737) from July 1, 2014 to date. How can we explain such improvement? Factors that come to mind include:

- better biosecurity
- different feed ingredients
- different weather than last year
- more herd immunity in the national herd

We are asking participants to answer a short survey to see if we might gain some insight on possible explanations. The questions will revolve around:

- Visitors to the site
- Feed ingredients and biosecurity,
- Transport
- Dead stock removal
- Feral animals, rodents & birds
- Herd immunity
- Other comments / changes

Are farms that have had an outbreak in the past at higher risk of breaking again?

Our data points in that direction. See the figure above which shows the cumulative incidence of breaks and re-breaks since the start of the current PEDv season. Since July 1, 2014 we have had 23 sow farms reported as new infections. Of these 23, 17 are re-breaks. So of 431 farms that have recorded a previous outbreak and were negative on July 1, 2014, 17 have had another break (3.94%) to date. This compares to only 6 breaks in 312 (1.92%) farms that had never experienced a break. Comparing these two risks suggest that a herd that has had a previous outbreak is approximately twice as likely to re-break as herds in our database that have never had an outbreak. This difference was NOT statistically significant (2 tailed Fisher’s Exact p=0.135) but we’ll continue to watch the numbers which will be significant if the trend continues.

In conclusion, we are investigating possible explanations for our decrease in overall incidence (55% → 3%). And while the risk of re-breaks was low, it was approximately double (p=0.135) that observed in herds that have never broken before.

None of this awareness would be possible without the participation of our farmers and veterinarians. Thank you.