

Weekly report changes

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Keypoints:

- We have implemented changes in the report: removing those charts that were not adding that much information or were redundant.
- We are currently working on a new PED visualization and will be exploring different options to deliver insightful information.

With the start of the MSHMP new year we have implemented several planned changes to the Weekly Report. Our goal is to provide better visualization of the accumulated data while focusing on graphs and charts that we feel best represents the data shared by participating producers.

Towards this end, we have removed “Chart 4 – PRRS quarterly count of breaks by status”. The PRRS Chart 4 combined elements of “Chart 3- PRRS cumulative incidence by sow herd status at time of infection for the year” and “Chart 5 – PRRS EWMA Analysis for years 2009-2018”. The EWMA and Epidemic Threshold lines are the same in both charts.

Chart 4 displayed the trend of breaks by status, showing that farms with statuses in the 2 categories, Positive Stable with vaccine (2vx) and Positive Stable with field virus (2fvi), and by Positive Stable (2) break the most frequently. This trend has been particularly evident since 2010.

Chart 4 showed the slight changes in the trend over time, unlike Chart 3, which shows the cumulative statuses of the current year. The primary change displayed was an increase in breaks of status 2vx farms and a decrease in breaks of 2fvi status farms. However, the chart does not communicate the drivers behind these changes, like shifts in industry preference for vaccine over field virus. Because of this, it can be easily misinterpreted as meaning that this change is due only to disease dynamics. Since 2013 producers are using vaccines more than field virus. This can also be seen in the MSHMP “Chart 2 – PRRS aggregate prevalence of sow herds”. We believe that this trend in Chart 4 can be easily misinterpreted and has been stable for long enough that it is no longer informative.

We have also removed “Chart 3 – PED quarterly incidence of infection by history of previous infection”. Again, the EWMA displayed in Chart 3 is the same as “Chart 4 – PED EWMA Analysis for years 2013-2018”. Most farms that break with the PED have had the disease in the past. The farms that are new instances of PED may genuinely be new, or may be farms where the MSHMP database lacks enough historical data to show old breaks. Because of this we do not feel the map is a genuinely useful assessment of the data.

By deleting PRRS Chart – 4 and PED Chart – 3 we have been able to extend the PRRS and PED Exponentially Weighted Moving Average graphs to allow for clearer visuals and the continued growth of those maps.

Over the next few months we will be exploring a variety of charts and visualizations analyzing the MSHMP PED data. We welcome requests, suggestions, or questions on what types of visualizations would be beneficial and interesting.