

Average time sites stay in a naïve PRRSV status: Preliminary Results

Mariana Kikuti, Cata Picasso, Emily Geary and Cesar Corzo
Morrison Swine Health Monitoring Project
University of Minnesota

- Up to February 2021, 209 breeding herd moved to a PRRS naïve status a total of 259 times.
- On average, sites remained naïve approximately two years before changing to a different status.
- Most naïve sites moved to an active PRRSV break status in an average one and a half years.

A common hesitation for producers to implement an elimination strategy for PRRS is the uncertainty of how long the herd remain naïve. Here, we aimed to assess for how long farms that choose to eliminate PRRSV from their herds remained as a naïve status (e.g., status 4). A total of 1317 sites from 40 systems were assessed from the beginning of the MSHMP up to February 2021. The total number of days between the initial change to status 4 and the next change in status was calculated. Sites that still remained in status 4 up to the end of the study period were censored on February 26, 2021.

During this period, 209 sites (141 from the Midwest, 44 from the South, 10 from the Northeast, 2 from the West, and 12 not informed) moved to the naïve status 259 times (34 from status 1, 14 from status 2, 13 from status 2fvi, 11 from status 2vx, and 187 from status 3). The ones that moved from status 3 to status 4 were mostly coming from a status 2 (n=143), with some from status 1 (n=12), 2fvi (n=11), 2vx (n=6), and 11 with missing information on their status prior to status 3. On average, sites remained in status 4 for 728 days (approximately two years) before changing to a different status (Figure 1). The minimum time in status 4 was 7 days in three sites. Among those, two ended with a change to a status 1 (active PRRSV break) and one to status 2vx. The maximum number of days in status 4 was 3901 days (over 10 years and ongoing). Most (n=146; 56.37%) status 4 events ended with a change to status 1 (active PRRS break), followed by 96 status 4 events (37.07%) that continued as such throughout the end of the studied period. Few of the status 4 events ended with a change to status 2vx (n=9), status 3 (n=2), or depopulation (n=1). Information on the new status was not available for five status 4 events that had ended during the studied period. For sites that move to status 1, the median time to the new introduction was 525 days.

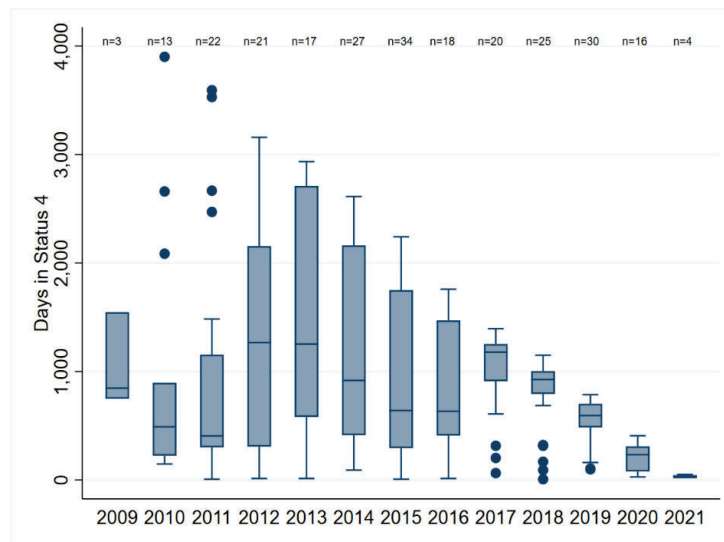


Figure 1. Number of days naïve by year since the site reached status 4. For instance, in 2009, three farms reached status 4 and those farms remained as such during 749-1,547 days (up to 4 years).

Although it seems like 75% (upper limit of each box in the boxplot) of the change to status 4 events have been decreasing throughout the years, meaning sites are staying less time in status 4, cautious interpretation is needed since new status 4 events are more likely to have been censored at the end of the study period. Still, this provides initial information on how frequently sites are striving for elimination, how long can they maintain its naïve status, and the from/to status involved.