

A Review of MSHMP’s Report PED Chart 3: PED Outbreak History The MSHMP Team

Key Points:

- The MSHMP PED Chart 3 shows the PED break history for all farms that break with PED during the current year.
- 5-20% of farms that break with PED have a history of PED breaks in the previous year, and only 0-8.57% of sites that broke with PED have experienced PED breaks for the 3 consecutive years.
- Chart 3 suggests that breeding sites that break with PED are not constantly the same over time.

During the 2016-17 MSHMP year we introduced a graph to our weekly report known as PED Chart 3 in response to the recurring question of: do farms breaking with PED have repeating histories of infection? Therefore, we built a graph where the horizontal-axis which is shown at the top indicates the number of farms that have reported a break in the current MSHMP season. New farms are added throughout the year as they report a break. On the vertical-axis we list each of these farms’ PED history in past seasons. Outbreaks are colored in blue and when a darker tone is used it indicates that a farm has had more than one outbreak within the year. Grey indicates that no data available for that farm and white shows that the farm did not break that year.

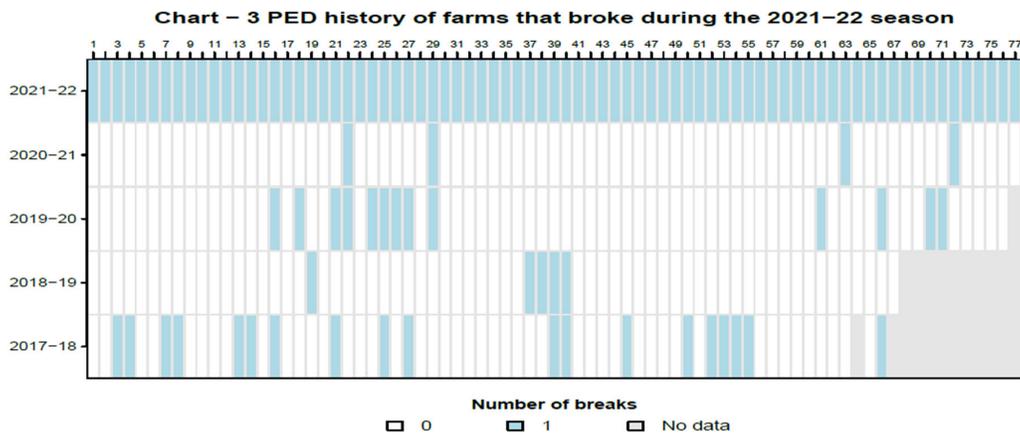


Figure 1: Chart 3 PED history of farms that broke with PED current year up until May, 2022

By tracking the PED history of farms that break in a given year, we can visualize whether farms that break have consistently struggled with PED in the past. Table 1 breaks down the total number of infected farms in each season, and the percentage of those farms that broke with PED in previous years. A point to note is that the 2021-2022 MSHMP year number of farms, listed here as 77 farms, is not yet complete as we have not reached the end of the MSHMP year. However, as can be seen on the MSHMP PED Incidence Chart, it is still the highest count of total breaks since 2013-14.

When looking at the percentage of farms from each year that broke in previous years, we can see that few farms break repeatedly over the course of several years. Table 2 highlights the fact that a farm breaking 3 consecutive years in a row is uncommon.

MSHMP Year	Total Breaks	Percentage of Breaks In Years Prior to MSHMP Season			
		1 Years	2 Years	3 Years	4 Years
2021-22	77	5.2%	15.6%	6.5%	24.7%
2020-21	35	8.6%	8.6%	14.3%	14.3%
2019-20	39	2.6%	33.3%	5.1%	28.2%
2018-19	35	20.0%	28.6%	8.6%	8.6%
2017-18	70	8.6%	12.9%	28.6%	74.3%

Table 1 (above): Total of farms that broke with PED per year, and the percentage of them that broke in previous years.

Table 2 (right): Percentage of farms that broke 3 consecutive years in a row, including the current year. For example, this year, 2.6% of the farms that broke also broke during both 2020-21 and 2019-20.

Year	Broke 3 Consecutive Years
2021-22	2.60%
2020-21	0.00%
2019-20	0.00%
2018-19	8.57%
2017-18	8.57%