

Association between season and time to stability (TTS) for PRRS virus

Key point:

- Mean and median TTS were not significantly different for herds that broke from October – March vs April - September.

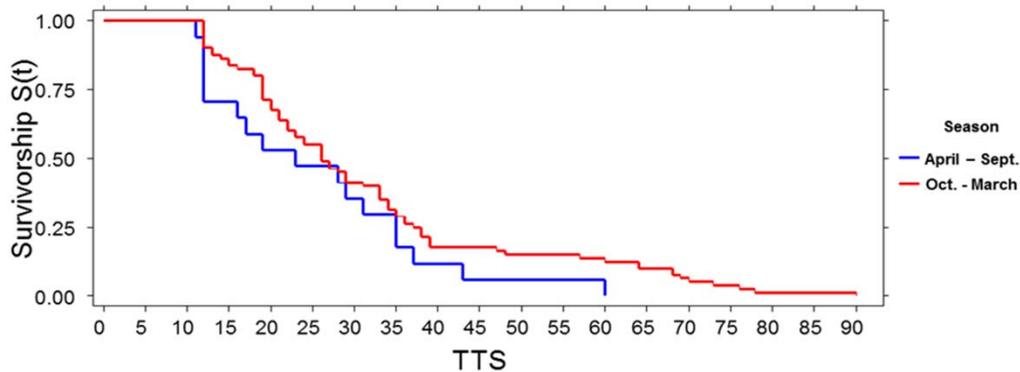
Last Friday we reported the correlation of time to stability (TTS) for herds having two consecutive PRRS breaks. We found that TTS_1 and TTS_2 were significantly correlated ($r=0.42$; $p=0.001$). We also reported that status 2fvi and 2vx had similar TTS for break 1 and break 2.

This week we studied the association between season when the farm broke and time to stability. In the same subset of 97 farms, 80 were infected during October-March and 17 farms during April-September. Mean and median TTS were slightly lower (25.4 and 23 weeks) during summer breaks compared to 31.8 & 26 weeks in winter (Table 1) but these differences were not statistically significant ($p = 0.47$).

Table 1: TTS by PRRS Status at exposure during Oct.–March (n= 80) and April–Sept. (n=17)

Season	Mean (median) TTS by PRRS Status at exposure					
	2fvi	2vx	2	3	4	All farms
October – March (Winter)	22.1 (19.5)	21 (19)	44 (44)	36.1 (33)	39.3 (29)	31.8 (26.0)
April – September (Summer)	18.4 (12)	20 (20)	-	28 (28)	36.2 (33)	25.4 (23.0)

We plotted TTS by season of the outbreak (Figure 1). Herds that broke in summer (April–Sept.) took longer to become stable, but again this difference was not statistically significant.



This lack of a strong seasonal association differs from what we reported for PEDv (SHMP Report 2014/15.42). This may reflect differences in the influence that environment has on transmission. Survival of PEDv in the environment appears to have a major role in perpetuating spread within a farm, but not with PRRSv.

This is a preliminary analysis of a selection of the SHMP data. In the coming weeks, we will report TTS by system (to participants only) in an analysis of the entire data set.

Thank you for your participation and ongoing support.

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