

quire a higher rate of transmitters. If a producer is calving a high percentage of cows in the fall, this would concentrate heat detection into a narrow window of time, requiring more transmitters for this period and transmitters being shelved at other times of the year. There is also a learning curve associated with interpretation of the HeatWatch™ data, primarily the incidence of false positives and individual herd default settings to meet the producer's management style and needs. This would mean individuals evaluating the system's data will still be met with some breeding management decisions, as this is not the "perfect system" nor is the data clearly "black and white".

There is clearly the need for more controlled studies to address these problems and define the strengths and weaknesses of the system. Our ongoing research efforts at Virginia Tech are encouraging and will hopefully address some of these concerns.

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Abstract

Persistence of bovine herpesvirus-1-specific antibodies in cattle after intranasal vaccination with a live virus vaccine

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To study the development and persistence of circulating antibodies directed against bovine herpesvirus-1 (BHV-1) induced by vaccination, approximately 80 per cent of the seronegative cows in four partly seronegative dairy herds were vaccinated once with a temperature-sensitive live virus vaccine. Most (83 per cent) of the vaccinated animals developed antibodies to BHV-1 within two months after the vaccination. In the same period, 21 per cent of the unvaccinated control

cattle also seroconverted, suggesting that the vaccine virus had been transmitted to them. Thirty months after they had been vaccinated 91 per cent of the vaccinated animals with responded still had detectable antibodies. The results suggest that vaccine-induced antibodies may persist for years and thus may interfere with control programmes for BHV-1 which are based on serological monitoring.