

## Effects of Post Calving Disease on Fertility

---

Calving interval can greatly influence the profitability of a dairy herd, so it is important to get cows pregnant in a timely manner following calving. However, cows experiencing a disease during the transition period often take longer to become pregnant and have more services per conception. An article in the *Journal of Dairy Science* from the University of Florida<sup>1</sup> quantified the incidence of post calving diseases and determined their effects on fertility of dairy cows.

In this research, 957 cows were followed through the calving process and incidence of disease or disorders were recorded. Dystocia, twins, stillbirths, and retained placenta were grouped and termed calving problems. Incidence of metritis/endometritis, mastitis, lameness, and digestive and respiratory problems were recorded through 30 days in milk. Blood samples were analyzed for metabolic markers to diagnose sub-clinical disease and estrous cyclicity was determined by ultrasound of ovaries.

Overall 38% of the cows had at least 1 clinical diagnosis and 59% had at least 1 sub-clinical diagnosis. Of the cows clinically diagnosed as sick, 10.8% had more than 1 incidence. Of those with a sub-clinical diagnosis, 25.8% were recorded as having multiple diseases. Overall, 27% of the cows were considered healthy, while 32.7% had a single disease and 40.3% had multiple diseases. Cows considered healthy were more likely to exhibit signs of estrous at 49 days than cows with recorded clinical or sub-clinical diseases. A record of metritis, respiratory or digestive problems was associated with a reduced observance of estrous by 49 days in milk. The research suggests that management during the transition period to reduce incidence of diseases can have a profound impact on reproduction during the subsequent lactation.



<sup>1</sup>Ribeiro, E. S., F. S. Lima, L. F. Greco, R. S. Bisinotto, A. P. A. Monteiro, M. Favoreto, H. Ayres, R. S. Marsola, N. Martinez, W. W. Thatcher, and J. E. P. Santos. 2013. Prevalence of periparturient diseases and effects on fertility of seasonally calving grazing dairy cows supplemented with concentrates. *J. Dairy Sci.* 96:5682-5697.