Letter to the editor: Clarification on USDA-Animal and Plant Health Inspection Service estimates: A comment on Wilson et al. (2010)

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In a recent article, Wilson et al. (2010) referred to USDA-Animal and Plant Health Inspection Service (APHIS) estimates for Johne's disease (USDA, 2008). The authors were correct in their statements regarding the percentage of dairy operations in the western region (CA, ID, NM, TX, and WA) of the United States where producers had confirmed, through their own testing efforts, *Mycobacterium avium* ssp. *paratuberculosis* (MAP) infection at 13%. However, the authors compare this estimate to their own milk-based prevalence study. Wilson et al. (2010) reported that 39% of operations had at least one bulk tank milk sample test positive for MAP. These 2 estimates are not comparable: they are based on 2 different source populations and each had very different goals. The Wilson study was designed to estimate herd-level prevalence of MAP in Utah and adjacent areas, and the USDA-APHIS estimate to which Wilson refers was primarily designed to estimate the percentage of producers in the western United States that reported testing positive for MAP. The National Animal Health Monitoring System's (NAHMS) Dairy 2007 study, which was the source of the USDA estimate referenced, asked dairy producers if they had performed testing and confirmed disease on their operation during the 12 mo prior to the interview. Only 35% of all dairy operations reported testing for MAP infection at the time of the study, and of these, 12.8% of operations in

the western region reported that they confirmed MAP infection via laboratory testing. This is much different than performing a study designed to estimate herd-level prevalence of disease. An estimate of herd-level prevalence was also determined during the NAHMS Dairy 2007 study and is reported in the same report the authors referenced (USDA, 2008). Results of testing during the NAHMS Dairy 2007 study estimated that more than 70% of dairy operations in the western region were infected with MAP. This prevalence estimate provides a more applicable comparison to the Wilson et al. (2010) estimate. However, even these prevalence estimates are not directly comparable to those of Wilson et al. (2010) because culture of composite fecal (environmental) samples was used in the NAHMS study, whereas ELISA and PCR testing were performed on milk in the study of Wilson et al. (2010).

The take-home message from both studies is that the herd-level prevalence of MAP infection should be of concern to dairy producers. Producers should implement strategies to decrease the disease if present on their operations or reduce the risk of purchasing the disease through herd additions.

REFERENCES

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