

USDA Review of Montana's Brucellosis Management Program, 2022 – Recommendations: Montana Department of Livestock Response

June 9, 2023

The Montana Department of Livestock (DOL) staff is grateful for the time United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS) Ruminant Health Center (RHC) and Field Operations personnel invested in reviewing Montana's Brucellosis Management Program. The DOL appreciates the support of their requests of the RHC regarding an updated Brucellosis Regionalization Risk Assessment, support through continued brucellosis program funding, and support for investigations of means to update diagnostic protocols that might minimize the impact of diagnostic indecision on commerce. Finally, the DOL is grateful for the specific recommendations made by the RHC to maintain and improve the Brucellosis Management Program.

Review Objectives

- I Review the adequacy of the state's brucellosis rules and infrastructure to prevent the spread of brucellosis beyond the Designated Surveillance Area (DSA).
- II Assess the enforcement of state and federal brucellosis rules.
- III Assess cattle surveillance, diagnostics/laboratory capability, and producer education and cooperation.
- IV Assess wildlife surveillance and risk mitigation activities.
- V Evaluate DSA boundaries, testing, and movement restrictions for overall effectiveness.

USDA Review Team Key Recommendations and DOL Responses

1. *Develop a better system/strategy to monitor testing compliance associated with animal movements to achieve more real-time compliance.*

Response: The DOL enthusiastically agrees that minimizing the interval between animal movement and compliance assessment will facilitate both enforcement and education. We have embarked on a tiered approach in the effort to reduce the animal movement to compliance assessment interval. Compliance assessment requires collation of data from three sections within the DOL – Brands Enforcement Division, the Animal Health Bureau, and the Montana Veterinary Diagnostic Laboratory Bureau. Each unit runs on a different computerized information system. Combining data from these three systems presents challenges that require reengineering of the information systems on which the DOL operates.

The current method of compliance assessment matches movements and sales documented by brand inspection certificates and certificates of veterinary inspection (CVIs) with brucellosis testing records. The existing information systems available to the DOL require manual data extraction which means that compliance assessment must wait until movement data entry is

complete before diagnostic tests are matched to movements. This process currently requires a significant amount of manual data manipulation.

The DOL Information Technology (IT) Bureau is currently developing and testing a brand inspection information system that will shorten the interval between brand inspection and data capture. The current schedule is to roll that brand inspection information system out for general use in August 2024. When that system is operating, the DOL will shorten the interval between brucellosis testing, livestock movement, and compliance assessment.

The DOL IT Section is also participating in a larger Montana state government initiative to move operational data into an on-line analytical processing system. When such a system is built, compliance assessment will occur as the brucellosis testing data become available (hours to a few days) and the movement data become available (days to a few weeks for brand inspections and CVIs), and the DOL AHB compliance staff have time to review result sets of movements that have not yet been successfully mapped to brucellosis test results.

The DOL has articulated a vision for real-time (point of inspection) brucellosis program compliance assessment. The key functionality for a system capable of point of inspection compliance assessment is finding official identifiers among livestock presented for movement that do not have test results with the last 30 days for movements occurring from February 16 to July 15 or since July 16 for movements occurring from July 16 through February 15. That functionality depends on the ability of mobile information systems to accomplish two tasks. The first task is to read all the official identifiers in a set of cattle presented for movement at the speed of commerce. For the information systems technology currently available, this means successful refinement and broad (near universal) adoption of Ultra High Frequency Radio Frequency Identifiers (UHF-RFIDs). The second task is for mobile devices to carry relevant subsets of livestock inventory and test result data into occasionally connected environments. While such systems are conceptually feasible, and the DOL desires the capabilities afforded by such a system, the DOL also recognizes that technical, political, and financial challenges would make implementation of such a system difficult. Given the currently available information systems environment, the DOL believes attempts to invest in point of inspection compliance assessment will not produce a favorable cost:benefit ratio in the short to medium term based on the high compliance with testing requirements when utilizing the current system.

2. *Prioritize hiring a compliance inspector to continue reconciling test charts with animal movements.*

Response: The DOL filled the Brucellosis Program Compliance Coordinator vacancy in November 2022. The current Compliance Coordinator has benefited from training and advice of the former Compliance Coordinator.

3. *Update the livestock market lists of DSA producers quarterly to twice yearly to stay current.*

Response: The current Brucellosis Program Compliance Coordinator is updating DSA flags on brand registration records as she completes market compliance reviews. Market inspectors access the brand registration records in the current brand inspection information system as they verify brands and ownership of consigned livestock. When the new brand inspection information system is put into full operation, the Brucellosis Program Compliance Coordinator will continue to maintain the list of operations utilizing land in the DSA in that system.

4. *Evaluate timing of reporting lab results to producers to avoid unnecessary resampling of animals at markets.*

Response: The DOL has investigated causes for delays in delivery of brucellosis test result reports. Only rarely has the regulatory serology laboratory been unable to complete tests and report results on the day that specimens are available to the laboratory if samples are provided by noon, or even later in the day if urgency dictates it. The most common cause of more than two days elapsing between blood collection and reporting of results aside from weekend blood collection is veterinary practices accumulation specimens across multiple days before delivering those specimens to the laboratory. This happens most commonly when practices are extremely busy and run short on staff time to deliver specimens to the laboratory. It also happens when veterinarians are working large herds in remote locations and either stay overnight in those remote locations or have all their staff working in those remote locations and don't have anyone available to deliver specimens to the laboratory.

A major contributor to this problem is distrust by the veterinarians of the shipping services that deliver packages from outlying communities to the laboratory.

5. *Develop a backup plan for veterinary service at the livestock markets should the accredited veterinarians retire or are otherwise unavailable to service the market.*

Response: While the DOL and USDA - Field Operations together approve and regulate market veterinarians, the staffing of markets falls under the business relationship between the livestock markets and the veterinary practices. As such, the regulatory agencies can encourage livestock markets and market veterinarians to develop and maintain back up plans for service, but the agencies themselves do not have authority to require those plans. The DOL intends to work with the VMOs overseeing the livestock markets to encourage the markets and veterinarians to maintain plans to continue service in case of emergencies. .

6. *Continue to collaborate with MFWP to ensure wildlife surveillance is conducted in all areas of concern around the DSA boundary or investigate alternative methods of risk assessment if wildlife surveillance is unable to be performed.*

Response: The department agrees that the interagency cooperation between DOL and MFWP is critical to correctly identify livestock populations at risk of brucellosis. DOL has a memorandum of understanding in place for the 2024 targeted elk testing season. The FWP also continues to monitor elk migration and advises the DOL regarding any areas where elk migration poses increased risk of brucellosis spread.

7. *Continue the current level of cattle surveillance, compliance monitoring, laboratory efficiency, customer service and producer education for the brucellosis program.*

Response: The DOL thanks the USDA review team for this expression of confidence in the brucellosis control program and pledges to maintain program quality.

8. *Continue to collaborate with other GYA states to maintain consistency and transparency.*

Response: The DOL remains committed to collaboration with partner states and looks forward to productive discussions at the upcoming Western States Livestock Health Association Meeting in Cody, Wyoming. Brucellosis is also a recurring topic in committees of that United States animal health association meetings where the DOL expects to further strengthen collaboration with Idaho and Wyoming SAHOs and the USDA.

9. *Develop data entry and sharing standard operating procedures to ensure all program data is available in a timely manner to State and Federal personnel involved in the brucellosis program.*

Response: The DOL believes that the on-line analytical processing system described in response to Recommendation 1 will both ease data entry burdens for and facilitate data sharing among state and federal partners.