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Animal and Plant Health  
Inspection Service

Veterinary Services

Strategy and Policy

Ruminant Health Center

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# **Review of Wyoming's Brucellosis Management Program, 2020**

A Review of Wyoming's Brucellosis Management and  
Mitigation Activities

# **2020 Review of Wyoming's Brucellosis Management Program**

**Dates of the Review:** August 3 - August 7, 2020

## **Review Team Members**

- Mark Camacho, Brucellosis Epidemiologist, APHIS, VS, RHC
- Ryan Clarke, Brucellosis Epidemiologist, APHIS, VS, RHC
- Aimee Hunt, Brucellosis Staff VMO, APHIS, VS, RHC

## **Animal and Plant Health Inspection Service (APHIS) Employees Joining in Person**

- Don Beckett, CO AVIC, Acting RHC Director, APHIS, VS, RHC
- Bob Kerschen, CO/WY Emergency Coordinator, APHIS, VS, Field Ops
- Morgan Hennessy, Assistant AVIC D3, APHIS, VS

## **Wyoming Livestock Board Employees Joining in Person**

- Jim Logan, State Veterinarian (SAHO)
- Hallie Hasel, WY Brucellosis Veterinary Medical Officer (VMO)
- Brad Degroot, Assistant SAHO
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## **Wyoming State Veterinary Laboratory Joining in Person**

- Will Laegreid, Laboratory Director

## **Wyoming Game and Fish Department Employees Joining in Person**

- Hank Edwards, Wyoming Game & Fish Dept. Wildlife Health Laboratory supervisor
- Samantha Allen, State Wildlife Veterinarian

## **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.

## Executive Summary

This is a follow up brucellosis review to USDA's initial comprehensive WY program review in 2017. As such, this review will not cover all the specific sections in as much detail as the initial review. Also due to COVID travel restrictions in 2020, there was no onsite visit by USDA to markets and plants to verify performance of the program; however, the thoroughness of our interviews and questions with the SAHO leave us confident that the program is operating just as it is described to us.

The review team requested brucellosis program data from the Wyoming Livestock Board during the summer of 2020 and then met via MS Teams with Dr. Jim Logan, WY SAHO, and other members of his executive team on August 6<sup>th</sup>, 2020. Due to continued COVID travel restrictions, an in-person review in the spring of 2021 was not possible; so, a second follow up call was held on June 22, 2021, with the Wyoming Livestock Board (WLB), Wyoming Fish and Game Department (G&F), the Wyoming State Veterinary Laboratory, and local VS staff.

The only significant changes to the WY brucellosis program since 2017 have been some staff turnover and the removal of the Bighorn Mountains Area of Concern. There is a new assistant state veterinarian, Brad Degroot, and a new WY Brucellosis VMO, Hallie Hasel, who were not present in 2017. There were no significant changes to their Chapter 2 State Brucellosis Program rules since the 2017 review and the Wyoming Livestock Board recently removed the Bighorn Mountains as an Area of Concern due to no new elk serologic cases since 2017 and no infected cattle herds detected in this area.

Producers and the cattle industry seem to be fully engaged and cooperative with the WY brucellosis program and recognize that their cooperation is necessary for them to do business in an area of endemic wildlife disease.

Wyoming is still working to correlate Brand Inspection records with brucellosis test charts to validate that premovement testing out of the DSA is working properly, but this will need to be confirmed during the coming months with local VS-WY.

Robust testing of about 50% of the approximately 80,000 total head of cattle in the DSA is being performed annually, but it is still unclear what percent of the total of approximately 450 cattle herds in the DSA that amounts to.

Wildlife surveillance of hunter-harvested elk samples on the edges of the DSA continues to amount to about 1,500 samples per year, while Wyoming Game and Fish Department (G&F) continues to radio-collar elk each year for migration pattern information. They are also working to obtain better surveillance samples from the Reservation and the nearby DSA by conducting a rifle raffle to get more hunter samples. In the Big Horn Area of Concern, the elk radio collars are winding down as battery life wains so G&F is investigating the use of drones as a possible surveillance tool and even as a hazing method.

The loss of the rapid automated presumptive (RAP) test in 2019 and the subsequent change in the brucellosis testing protocol in the Greater Yellowstone Area (GYA) has been addressed and the WLB, the Wyoming State Veterinary lab, and the cattle industry seem to be comfortable with the performance of the new protocol.

Herd plans (after risk assessments) in the DSA are voluntary but may provide producers some relief from Chapter 2 rules, if completed and signed by producer. Herds without risk assessments still must follow Chapter 2 rules. All risk assessments are reviewed by Riverton office and given one of three risk categories.

WY requested additional funds (\$10k-\$15k) to support DSA producer education and training. They would like to train a “tier” of DSA practitioners to craft brucellosis risk assessments for producers in their areas. These practitioners will also be trained to utilize a “brucellosis risk app” developed by the U.S. Geological Survey (USGS) (Paul Cross) that assesses risk by looking at elk movement. They are also encouraging G&F disease biologists to work closely with these trained tier veterinarians.

Three seropositive elk were found on the Wind River Reservation in 2018. WY and USDA have no authority on the reservation to increase surveillance. WY has attempted to work with a resistant Tribal Council to request additional surveillance but with no success to date. USDA recommends continuing these efforts to work with the Tribal Council to conduct additional surveillance going forward.

Because of widespread fall testing, when an affected herd is found the majority of adjacent cattle herds have already been tested or are scheduled to be tested. This greatly reduces the time spent locating at-risk herds. USDA recommends that affected/trace herd data be placed in a central repository that the APHIS epidemiologist can access. This could be USDA’s Emergency Management Response System (EMRS) or a repository administered by the State.

Finally, the item of most concern that the review team identified was a > 20% drop in state funding of the WY brucellosis program due to the economic downturn related to the Coronavirus. This is a significant loss of state support. USDA will need to work closely with WY on how to best address this shortfall and when WY can be expected to increase their financial support back to pre-Covid 19 levels.

## **Conclusion**

Wyoming has demonstrated with their regulatory efforts, case management and cooperation with the USDA review team that they are properly administering the brucellosis program in their state in order to control their DSA and prevent infection from escaping the endemic zone. This fulfills the USAHA request to regularly monitor GYA states and their brucellosis programs. USDA plans to review Wyoming again in 2023.