## DAIRY AND LIVESTOCK

2023 IMPACTS · UNIVERSITY OF WISCONSIN-MADISON EXTENSION







**100** LIVE AUDIENCE MEMBERS Through Extension's Livestock programming, livestock producers increase their understanding of vaccinations and biosecurity best practices. Not only do livestock producers maintain economic viability when they properly protect the health of their animals, communities have a reliable source of wholesome and nutritious consumable products. These efforts will support Wisconsin by improving disease security and prevent disease spread at public events such as county livestock fairs.

## Livestock Biosecurity to Prevent Disease

Biosecurity affects the economic sustainability and viability of livestock producers as disease outbreaks can be exceedingly expensive for producers. Disease outbreaks can cause catastrophic livestock losses including the depopulation of whole herds or loss of newborn animals. For example, a recent US disease outbreak, the 2013 porcine epidemic diarrhea virus (PEDv), spread across 13 states in less than two months and resulted in the death of over 7 million piglets in one year.

While the threat of disease outbreaks varies, proper daily on-farm biosecurity can prevent disease spread and prevent livestock from becoming sick. While producers are aware diseases pose a threat to the livestock they manage, not all implement biosecurity measures. Some producers may think their animals are immune to a disease or might not realize what diseases pose a threat to their operation, while others potentially forget the impacts of disease outbreaks if one has not occurred for several years.

The steps in implementing a biosecurity plan to protect livestock from diseases include:

- Understanding vaccination protocols and handling vaccine products
- 2. Isolating animals when they arrive on a new farm
- 3. Isolating farm visitors from susceptible livestock
- 4. Washing and disinfecting equipment.

Recommendations for proper vaccination handling/sanitation, isolation, and sanitizing equipment are not always followed, even though they significantly contribute to the health of an animal. Livestock producers benefit from healthy animals because they grow faster and are more feed-efficient compared to sick animals, which leads to lower input costs. In addition, communities benefit from the availability of nutritious protein.



## **Biosecurity Best Management Strategies**

Extension Livestock program developed a variety of written materials, including five online educational articles; one brochure; and numerous agricultural popular press articles for Wisconsin Cattlemen's Association, Wisconsin Agriculturist, and Farm Progress. Industry stakeholder groups, such as Wisconsin Cattlemen's Association and Wisconsin Pork Association, helped promote written materials through electronic newsletters and in-person meetings and articles were shared by nearby state agricultural publications such as Dakota Farmer, Missouri Ruralist, The Farmer, and more. Written materials covered topics ranging from proper syringe and needle use; disinfecting boots and equipment; and biosecurity measures in beef feedlots.

The Livestock program also hosted eight in-person workshops that focused on biosecurity best management strategies including vaccination protocols, boot wash stations, isolation recommendations, and more for swine, beef, and small ruminant producers. In addition, Livestock program collaborated with Department of Agriculture, Trade and Consumer Protection to develop three educational videos that will be released for public audiences in 2024. Educational resources spanned beef, swine, and small ruminants with the main audience members being livestock producers.

Online educational articles were viewed over 3,200 times by 2,600 individuals; recommended needle and syringe guidelines factsheet reached 100 individuals at in-person events; and in-person demonstrations reached 100 producers. Agricultural popular press articles reached a subscriber audience of over 24,000 within Wisconsin and countless audiences in local states.

Extension Livestock program plans to continue developing educational resources aiming to increase producer awareness of biosecurity practices leading to development and implementation of in-farm biosecurity plans. This will be accomplished through YouTube video development; online educational articles; popular press articles; in-person demonstrations; in-person writing workshops; and more.

## **Creating a Biosecurity Plan**

To evaluate Livestock Program's 2023 biosecurity educational articles, current livestock producers were recruited to first read online educational articles and provide feedback through a survey; 87% of livestock producers indicated they do not have a written biosecurity plan for their farm. Due to reading articles, 94% of respondents increased their understanding of biosecurity practices, specifically cleaning and disinfection techniques and lines of separation for both livestock and visitors.

To evaluate Livestock Program's 2023 in-person workshops, the Livestock Program staff gathered feedback from participating swine, beef, and small ruminant producers that focused on various biosecurity topics. Immediately following workshops, producers reported an increased understanding of biosecurity best management practices. In follow-up conversations, producers self-reported implementing the knowledge they learned by making daily on-farm biosecurity changes that included isolating human visitors from susceptible livestock using signs, creating visitor logs for contact tracking if a disease outbreak occurred, installing boot washing stations, and developing on-farm biosecurity plans.

Long term, having biosecurity plans and implementing them daily will allow livestock producers to remain economically viable as the chance of a disease outbreak will be mitigated and if a disease outbreak occurred, the outbreak would be identified quickly. This ensures the health of livestock and allows them to grow efficiently while producing a reliable source of wholesome and nutritious consumable products for Wisconsin communities.



PROGRAM CONTACT: MEGAN NELSON EMAIL: MEGAN.NELSON@WISC.EDU

EXTENSION.WISC.EDU

An EEO/AA employer, University of Wisconsin-Madison Division of Extension provides equal opportunities in employment and programming, including Title VI, Title IX, the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act requirements.