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Why Do Cows Die in US Dairy Herds, What Can Be Done About It?

Some have explored what is behind the increase in dairy cow mortality, but researchers recently delved into new dimensions of why cows die in a new review in *Applied Animal Science*.

Philadelphia, PA, December 2, 2019 Cow mortality has been increasing steadily in modern dairy farm systems. Concerned investigators have done studies on possible causes such as cow characteristics and handling or the environment. Others have discussed the pathophysiology and documentation of death. Scientists from Washington State University and Colorado State University have been studying dairy cow mortality for over 15 years and recently wrote a review of their findings. “The purpose of this review was to integrate epidemiological, pathophysiological, and historical perspectives to improve our understanding of why dairy cows die and what can be done about it,” said lead author Dr. Craig McConnel.

When considering mortality, it is often difficult to put a meaningful name on the specific cause of death. The authors encourage the use of the “NAMES” (Nomenclature Arranged, Modified, and Evaluated for Solutions) approach when discussing solutions to this problem. To establish a standardized nomenclature for reasons for cow death, they recommend recording specific details that surround each death to capture the complex data on this topic. There are tools such as databases and death certificates that aid in the collection and organization of data for eventual analysis. On-farm modifications (e.g., to procedures and facilities) based on the data should be made cautiously and with much input from all stakeholders. Over time, these modifications should be evaluated for their effectiveness in solving underlying problems, and much consideration should go into further refining on-farm actions and protocols to address herd issues affecting cow health. All of this makes up the NAMES approach when searching for solutions to dairy cow deaths.

“The crux of the matter is that managing such systems requires flexible interventions based on simple actions that can themselves evolve into complex and desirable behaviors,” McConnel said. In response to the question of why cows die, he said, “The more relevant questions are what are you going to do about mortality in your herd, and how do we as an industry manage associated troublesome animal welfare implications?”

Applied Animal Science Editor-in-Chief David K. Beede said this is “a seminal invited review about why cows die in US dairy herds.” He added, “More consideration of the dairy ecosystem (including the cows’

environment, operational practices, economic concerns, and animal interactions on overall performance) is needed to analyze and find solutions to why cows die.”

With the goal of reducing mortality, the review offers seven practical suggestions for implementation in dairy herds on a day-to-day basis. It also offers two ways to address the broader concern about animal welfare.

The article appears in the December issue of *Applied Animal Science*.

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NOTES FOR EDITORS

“Invited Review: Why cows die in US dairy herds,” by C. S. McConnel and F. B. Garry (DOI: <https://doi.org/10.15232/aas.2019-01926>), *Applied Animal Science*, Volume 35, Issue 6 (December 2019), published by FASS Inc. and Elsevier Inc.

Full text of the article is available to credentialed journalists upon request; contact Brittany Morstatter at +1-217-356-3182 ext. 143 or arpas@assoqhq.org to obtain copies. To schedule an interview with the authors, please contact Dr. Craig McConnel at +1-509-335-0766 or cmcconnel@wsu.edu.

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