UNIVERSITY OF CALGARY RESEARCH

Initiating a Western Canadian Cattle Health Surveillance System (CHeSS)

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What is CHeSS?

CHeSS (Cattle Health Surveillance System) is a project initiated through collaborative efforts led by Dr. Herman Barkema and Karin Orsel of the University of Calgary, and PhD students Kayley McCubbin, Ellen de Jong and Marit Biesheuvel seeking partnerships with collaborators in British Columbia, Alberta, Saskatchewan and Manitoba. Provincial governments and industry partners like provincial milk boards and Lactanet have been integral to the program's design and support throughout Western Canada.

CHeSS has been designed to determine the prevalence of specific mastitis pathogens (*Staph. aureus*, *Strep. agalactiae*, and *Mycoplasma bovis*), and other infectious diseases (leukosis, leptospirosis, neosporosis, Johne's disease and *Salmonella* Dublin) on dairy farms, based on bulk milk, individual and environmental samples. Subsequently, the control each of these infectious diseases will be investigated on a subset of infected farms, which will increase the understanding of farm-specific risk factors and control strategies for infectious diseases. By including a targeted control program, CHeSS not only monitors, but aims to actively reduce the prevalence of described infectious diseases. Producers play an integral role in designing a feasible control strategy based on identified risks. Drivers and barriers towards adopting disease control measures will also be investigated, as well as the economics of the control of each of these infectious diseases. In summer 2021, the first phase (prevalence estimation) will start in Alberta.

CHeSS aims to ensure the longevity by establishing a steering committee, advisory committee, and a sustainable data collection and reporting framework. Existing surveillance systems such as the Western Canadian Animal Health Network (WeCAHN) and the Canadian Animal Health Surveillance System (CAHSS) will be used as guides and we will integrate with them as much as possible.

PROJECT CONTACT INFORMATION

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