

# Evaluation of iVET<sup>®</sup> Electronic Birth Alert Device as a Calving Management Tool for Dairy Cows

P.A. Dutra<sup>1,2</sup>, M. Gobikrushanth<sup>2</sup>, C.J. Felton<sup>3</sup> and D.J. Ambrose<sup>2,3</sup>,

<sup>1</sup>Departamento de Zootecnia, Universidade Federal da Bahia, Salvador, Bahia, Brazil; <sup>2</sup>Department of Agricultural, Food and Nutritional Science, University of Alberta; <sup>3</sup>Livestock Research Branch, Alberta Agriculture and Rural Development, Edmonton, Alberta, Canada.  
E-mail: [p Dutra@ualberta.ca](mailto:p Dutra@ualberta.ca); [divakar.ambrose@gov.ab.ca](mailto:divakar.ambrose@gov.ab.ca)

Knowing precisely when a cow enters labor will greatly enhance the ability to provide timely assistance in the event of difficult calving and prompt neonatal care, leading to improved animal welfare and calf survival. While remote live video monitoring of calving pens is possible, and gaining popularity, it still has a major limitation in that no alert signal is received when the calving process begins, necessitating frequent viewing of the monitor screen. The objective of this study was to evaluate the iVET<sup>®</sup> electronic birth alert device as a reliable and efficient calving management tool in combination with remote live video monitoring. The iVET<sup>®</sup> system, designed in Germany, and yet to enter the Canadian market, has two components, a transmitter and a receiver. The transmitter containing an electronic sensor is placed in the vagina of a pregnant cow several days prior to the expected calving date. Up to two mobile phone numbers can be programmed into the system to receive birth alerts. When the calf enters the birth canal following the rupture of the first water bag (allantoic sac), the transmitter gets pushed out, activating the sensor due to changes in the intensity of light and temperature. Upon receiving the activation signal, the receiver sends out a text/voice alert to the phone numbers that were programmed into the iVET<sup>®</sup> system. One receiver can be linked with up to 10 transmitters simultaneously and each transmitter has a maximum life of 20 uses. In preliminary testing with only a small number of cows, the iVET<sup>®</sup> device accurately sent alerts upon initiation of calving, with no false alarms. Further validation of this device as a calving management tool is currently underway.

**Take Home Message:** Based on early results, we believe that the iVET<sup>®</sup> device in combination with remote live video monitoring has the potential to improve calving management and calf survival.