

# U.S. cow-calf producer interest in and access to technology for cattle health and production record-keeping purposes

W. Jumper<sup>1</sup>, DVM; C. Huston<sup>1</sup>, DVM, PhD, DACVPM; R. Wills<sup>2</sup>, DVM, PhD, DACVPM, Dipl. Epidemiology;  
D. Smith<sup>1</sup>, DVM, PhD, DACVPM, Dipl. Epidemiology

<sup>1</sup>Department of Pathobiology and Population Medicine, College of Veterinary Medicine,  
Mississippi State University, Mississippi State, MS 39762;

<sup>2</sup>Department of Comparative Biomedical Sciences, College of Veterinary Medicine,  
Mississippi State University, Mississippi State, MS 39762

## Introduction

The objective of this study was to describe U.S. cow-calf producer interest in and access to technology for collection and utilization of cattle health and production records (CHPR).

## Materials and methods

We anonymously surveyed 14,294 cow-calf producers across the U.S. Multivariable logistic regression by manual forward selection was used to test demographic factors for association with producer opinions toward using technology to keep CHPR.

## Results

The survey response rate was 26%, with 97% of respondents actively involved in cow-calf production. Of these, 92% had access to a computer for record-keeping purposes, 88% said internet access was available at their operation's headquarters, and 85% said they had a smartphone. A cellphone-signal was available where cattle are worked for 67% of respondents, and 55% were interested in using a smartphone to record CHPR. Factors associated with interest in using a smartphone to record CHPR were age  $\leq 64$  years (OR = 3.4, 95% C.I. = 2.9, 3.9; compared to  $\geq 65$  years), currently using any type of CHPR (OR = 2.1, 95% C.I. = 1.7, 2.6; compared to not currently keeping any type of CHPR),

level of education (Bachelor's degree or less: OR = 1.8, 95% C.I. = 1.4, 2.2; professional/post-graduate degree: OR = 2.0, 95% C.I. = 1.6, 2.5; compared to High-school diploma or less), cow-calf operation as primary income source (OR = 1.5, 95% C.I. = 1.3, 1.8; compared to not being primary income source), and herd size (50-99 head: OR = 1.1, 95% C.I. = 0.9, 1.3; 100-199 head: OR = 1.3, 95% C.I. = 1.0, 1.6; 200 head or greater: OR = 1.5, 95% C.I. = 1.2, 1.9; compared to  $< 50$  head).

## Significance

Cow-calf producers in the U.S. commonly have access to technology needed to maintain electronic CHPR.

