Survey of cattle health record-keeping methods by Mississippi cow-calf producers

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Introduction

The objective of this study was to determine demographic characteristics associated with the use of cattle health record systems by Mississippi cow-calf producers.

Materials and Methods

We anonymously surveyed 1,275 randomly-selected cow-calf producers in Mississippi. Multivariable logistic regression was used to test demographic factors for association with methods of recording cattle health data. Significance was defined at alpha = 0.05.

Results

Of 1,275 mailed surveys, 308 (24%) producers responded. Of 292 (95%) actively involved in cow-calf production, 221 (75.7%), 29 (9.9%), and 42 (14.4%) were commercial, seedstock, or both, respectively. Most respondents (71%) were 56 years or older. Producers <65 years old were more likely to keep any form of health records (OR=3.3, 95%CI=1.4,6.5). Factors associated with keeping electronic health records were seedstock production (OR=2.0; 95%CI=1.1,3.7); age <56 years (OR=2.1, 95%CI=1.2,3.9); having ≥100 head (OR=2.2, 95%CI=1.2,4.0), and bachelor's degree or higher education (OR=2.3, 95%CI=1.3,4.1). Factors associated with using individual animal identification were seedstock production (OR=8.9, 95%CI=2.1,38.1); and size of operation, compared to <50 head (50-99 head OR=3.5, 95%CI=1.4,8.8; 100-149 head OR=5.2, 95%CI=1.2,22.9; ≥150 head OR=5.0, 95%CI= 1.1,22.3). Seedstock producers were more likely (OR=6.04, 95%CI= 3.16,11.56) to utilize a confidential, centralized data storage system. Age, compared to ≥75 years, was associated with interest in using a smartphone to keep records (≤35 years OR=12.9, 95%CI=3.2,51.5; 36-45 years OR=12.0, 95%CI=3.0,48.4; 46-55 years OR=11.3, 95%CI=3.8,33.9; 56-65 years OR=5.3, 95%CI=2.0,13.9; 66-74 years OR=3.2, 95%CI=1.2,8.6).

Significance

Age of producer, herd size, and seedstock production were important factors associated with use of cattle health record systems by Mississippi cow-calf producers