

# A survey of commercial slaughterhouses: preliminary data on the prevalence of pre-slaughter defects in market cows

**T. L. Lee, DVM, MS<sup>1</sup>; K. D. Vogel, PhD<sup>2</sup>; B. Feinberg, BS<sup>3</sup>; G. H. Loneragan, BVSC, PhD<sup>4</sup>; J. Walker, DVM, PhD, ACVPM<sup>5</sup>; L. N. Edwards-Callaway, PhD<sup>6</sup>; D. U. Thomson, DVM, PhD<sup>1</sup>**

<sup>1</sup>Beef Cattle Institute, Kansas State University, Manhattan, KS 66502

<sup>2</sup>Department of Animal and Food Science, University of Wisconsin-River Falls, River Falls, WI 54022

<sup>3</sup>Global Animal Health and Welfare Officer, McDonald's Corporation, Oak Brook, IL 60523

<sup>4</sup>Department of Animal and Food Sciences, Texas Tech University, Lubbock, TX 79409

<sup>5</sup>Dairy Stewardship, Dean Foods, Dallas, TX 75204

<sup>6</sup>Technical Service, Animal Welfare, JBS USA, LLC, Greeley, CO 80634

## Introduction

Beef and dairy cull cow health and welfare are important to ensuring safe, quality food. This survey serves as a global benchmark for assessing cull cow health and welfare at the time of slaughter. The objectives of the survey were to: 1) describe the distribution of 10 pre-determined health and/or welfare conditions, and 2) describe the distribution of the conditions within and among different areas of the world.

## Materials and Methods

A total of 4,211 lots of market cows (n=76,886 hd) from 8 states, 13 countries, and 3 areas of the world (Europe, Brazil, and the United States) were included in the study. The survey was conducted in the months of July, August, and September of 2014. Individual animals were assessed in lairage pens at commercial beef slaughter facilities for the 10 pre-determined health and/or welfare conditions by trained evaluators located at each slaughter facility.

## Results

Of all animals evaluated, at least 1 condition was observed in 2.98% of animals. The 3 most commonly observed conditions were low body condition score (45.6% of conditions observed), poor udder condition (20.3% of conditions observed), and severely lame animals (16.3% of conditions observed). Most conditions were more prevalent in facilities in the United States. The classes of cattle in which the most conditions were reported were "Dairy" and "Mixed Beef and Dairy", accounting for 69.6% of all conditions observed.

## Significance

Beef and dairy cull-cow health and well-being are important issues when considering animal welfare and food safety. This survey provides a point of reference for assessing cull cow health and welfare at commercial slaughter facilities, and provides a foundation which future surveys can be based upon.

# Calving distributions of individual bulls in multiple-sire pastures

**K. M. Abell, DVM<sup>1</sup>; B. J. White, DVM, MS<sup>2</sup>; R. L. Larson, DVM, PhD<sup>2</sup>; D. K. Hardin, DVM<sup>3</sup>; R. F. Randle, DVM, MS<sup>3</sup>; M. E. Theurer, DVM, PhD<sup>1</sup>; R. A. Cushman, PhD<sup>4</sup>**

<sup>1</sup>Department of Diagnostic Medicine and Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, KS 66506

<sup>2</sup>Clinical Sciences, College of Veterinary Medicine, Kansas State University, Manhattan, KS 66506

<sup>3</sup>School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, NE 68588

<sup>4</sup>USDA, ARS, US Meat Animal Research Center, Clay Center, NE 68933

## Introduction

Reproductive performance and the number of calves produced by individual bulls within multiple-sire pastures has been shown to be highly variable. The objective of this project was to quantify patterns in the number of calves sired in multiple-sire pastures.

## Materials and Methods

Five multiple-sire pastures were analyzed from the US Meat Animal Research Center database from the spring 2010 calf crop. Parentage was tested for all calves via genotyping. Calving intervals were analyzed in 21-day periods and bulls were ranked based on number of calves born in the entire