PCR results on environmental samples. While cohabitation did not result in BVDV transmission to pregnant goats, 1 calf per group became infected. The second calf in each group did not become infected.

## Significance

Results suggested that PI goats can shed and transmit BVDV, but the transmission potential may be lower than from PI cattle.

# A survey of caprine arthritis encephalitis in midwestern goats

B.T. Jones, DVM; J.E. Keen, DVM, PhD

Great Plains Veterinary Educational Center, School of Veterinary Medicine and Biological Science, University of Nebraska, Clay Center, NE 68933

#### Introduction

CAEV is an incurable disease of goats that has social and economic impacts. Clinical disease includes encephalitis, arthritis, mastitis, and progressive respiratory disease. In the last 25 years there have been significant changes in the US goat industry. Recent prevalence studies are lacking and historic studies may not reflect changes in the industry. The purpose of the study was to establish the prevalence of CAEV in midwestern herds that are not actively controlling for CAEV.

### **Materials and Methods**

Herds were recruited through local contacts and invitation through the Nebraska Dairy Goat Association. Herd survey provided contact information, goat inventory by age, type and breed, knowledge of CAEV, and management practices. All goats 10 months or greater were sampled and tested by CAEV cELISA at WADDL Pullman, Washington.

### Results

We sampled 3488 goats from 57 herds in 6 states. Description of data listed prevalence by goats sampled, type, gender, breed, age, farm, management type, and size. Analysis by logistic regression produced 2 final models, individual and herd. The individual model reported increase in odds ratio for age until 5 years, and various dairy breeds compared to meat breeds. Herd model showed increased odds ratio for management types, median age of herd, and herd size.

## Significance

Variation in prevalence was noted at herd and individual level. Breed, age, management type, median age, and herd size were important for prevalence. Knowledge of prevalence of CAEV in sub populations of goats will help veterinarians and producers make choices on the importance of CAEV control in certain populations.