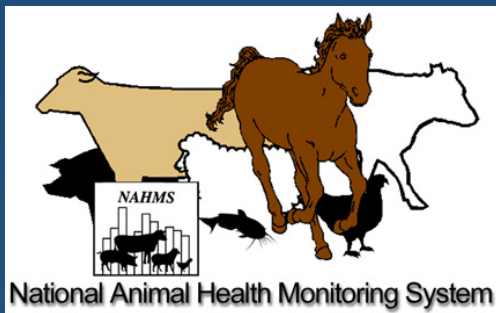


Current Status of the National Johne's Disease Demonstration Herd Project

Chuck Fossler, DVM, PhD; Jason Lombard, DVM, MS
USDA:APHIS:VS, Centers for Epidemiology and Animal Health
Charles.P.Fossler@aphis.usda.gov
970-494-7595



NIAA 2007



Principal Investigators

- John Adaska – CA
- Frank Garry – CO
- D. Owen Rae – FL
- C. Dix Harrell – FL
- Mel Pence – GA
- Ching Ching Wu – IN
- Ed Hall – KY
- John Kaneene – MI
- Scott Wells – MN
- James Watson – MS
- Thomas Moss – ND
- Sue Stehman – NY
- Bill Shulaw – OH
- Don Hansen – OR
- David Wolfgang – PA
- Ellen Jordan – TX
- Todd Johnson – VT
- Elizabeth Patton – WI
- Michael Collins - WI

National Johne's Disease Demonstration Herd Project (NJDDHP)

- Primary Objective
 - Evaluate long-term effectiveness and feasibility of management-related control measures for Johne's disease on dairy and beef operations
- Primary Hypothesis
 - Control of Johne's disease can be achieved through implementation of on-farm management practices to reduce transmission of infection to susceptible cattle

NJDDHP Objectives (cont'd)

- Secondary Objectives
 - Provide materials for education and training
 - Evaluate management, testing, and monitoring strategies
 - Create opportunities for additional research

NJDDHP Outcomes to be Measured

- Incidence of clinical disease
- Prevalence of infection
- Culling as a result of testing
- Risk and management changes

NJDDHP Herd Enrollment Criteria

- Herds must have had a history of Johne's disease and be documented as infected by organism detection methods
- Willing to keep good records
- Plan to be in business at least next 5 years
- Must have time/labor/facility/cash resources necessary to implement a control plan

NJDDHP Data Collected Annually

- Risk assessments
- Animal information (lactation number, milk production, source, etc.)
- Removal information
- Test results

NJDDHP Herd Testing

- Flexible testing strategy
 - Preferably whole herd fecal culture and ELISA annually
 - Statistical subset if very large herd or limited resources
 - Whole-herd ELISA with fecal culture confirmation of positives
 - Tests determined by investigators
 - (e.g., Biocor vs. Idexx)

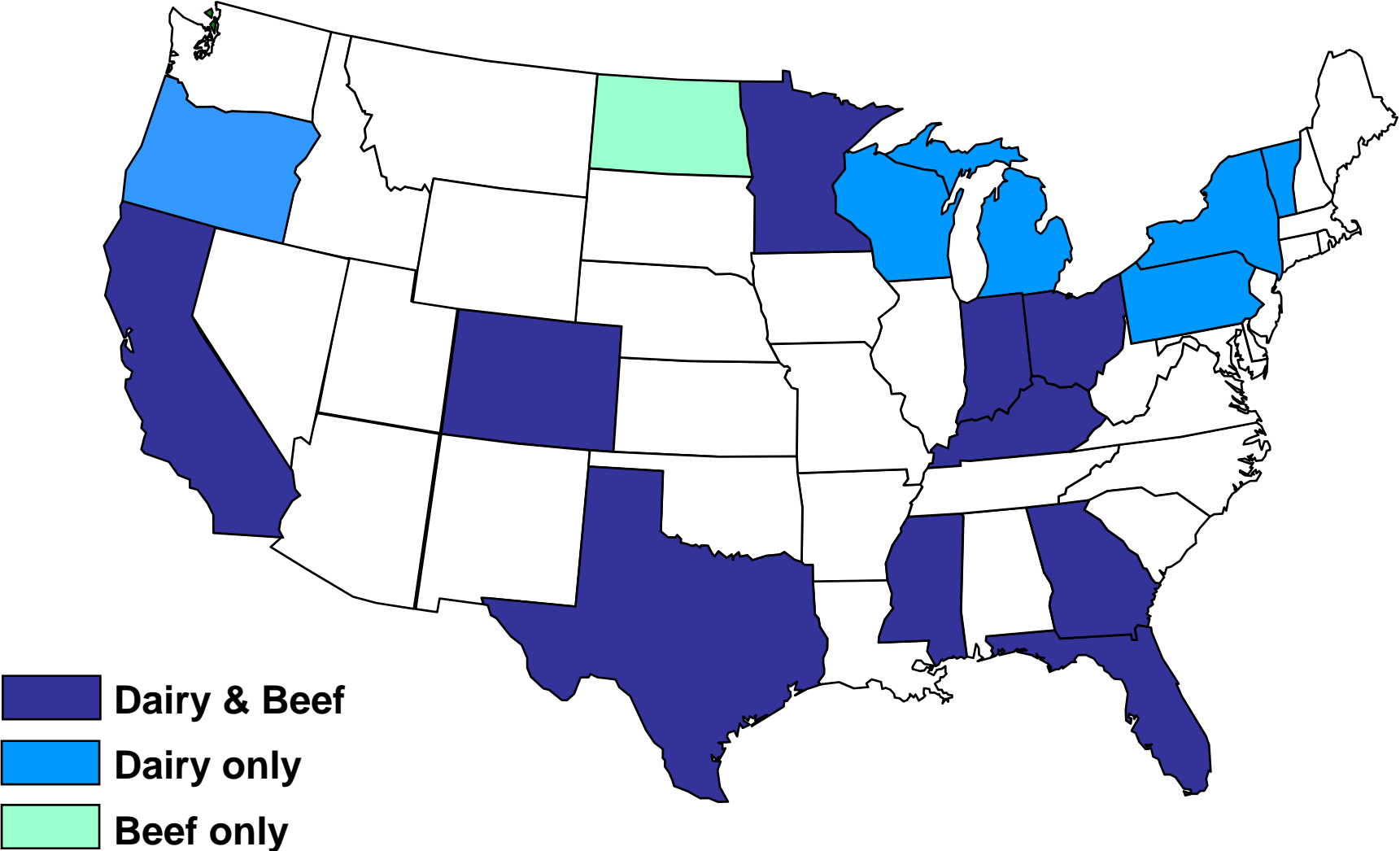
NJDDHP Status

- Project started in late 2003
 - 2004 was first full year of participation
- Status (4/1/07):
 - Fourth year of study
 - 17 States have enrolled herds
 - 67 dairy herds from 16 states
 - 22 beef herds from 11 states

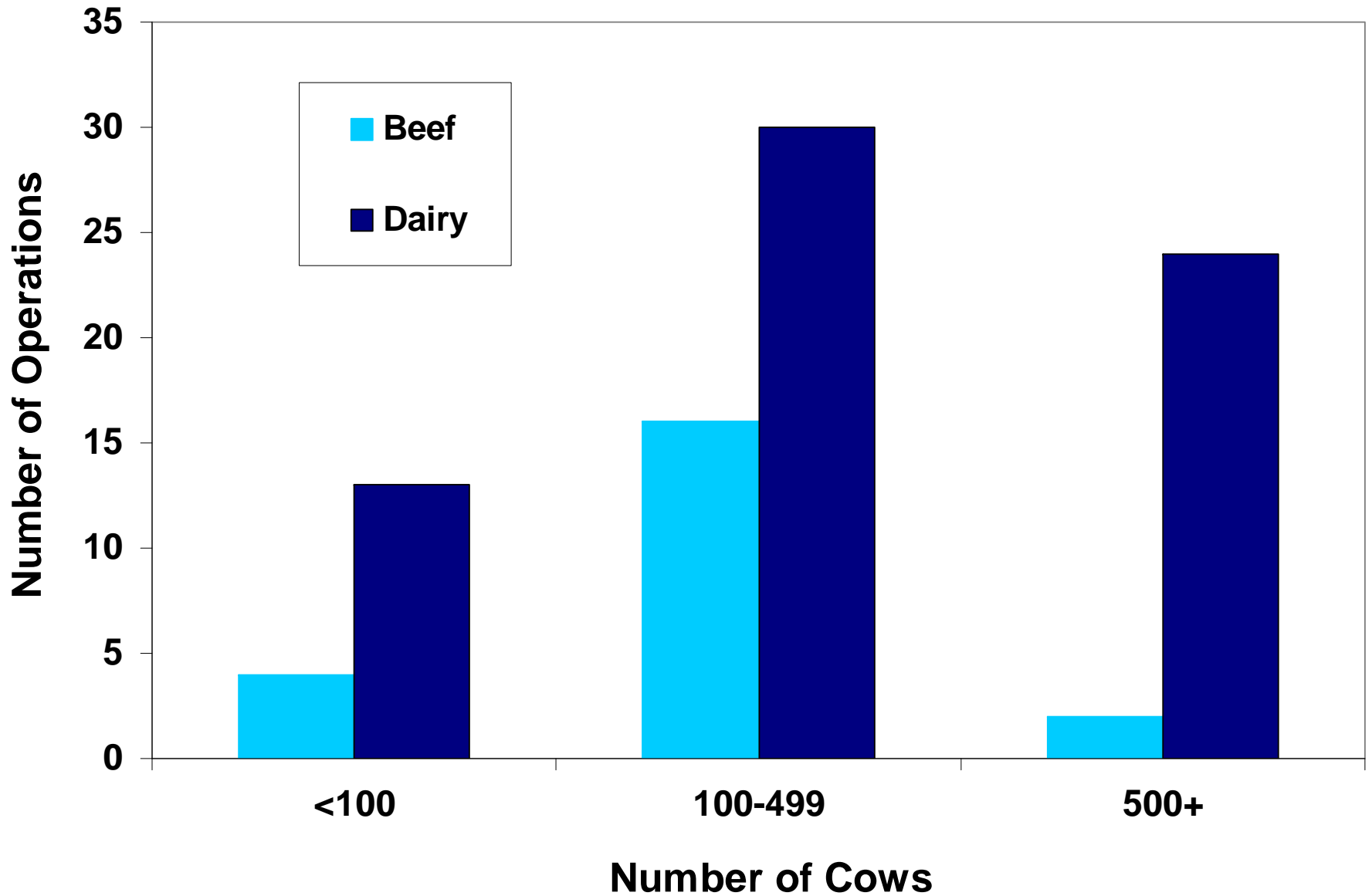
NJDDHP Test Results: Status as of 4/1/07

Type	Years of Test Data	Number of Herds
Dairy	< 3	15
	3	9
	4	28
	5 to 7	15
Beef	< 3	9
	3	8
	5 to 7	5

States Participating in NJDDHP in 2007

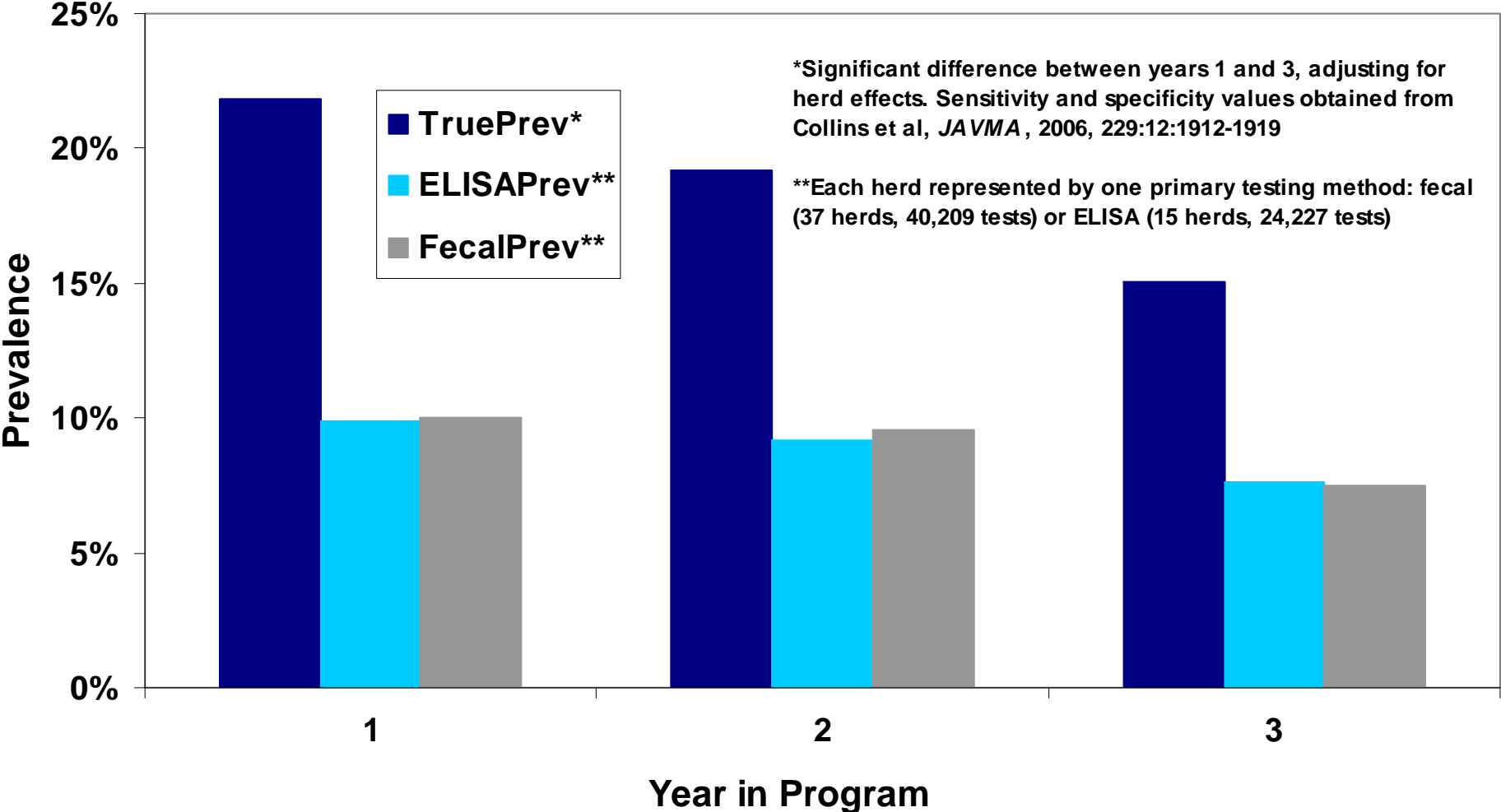


Herds Enrolled in NJDDHP 2007



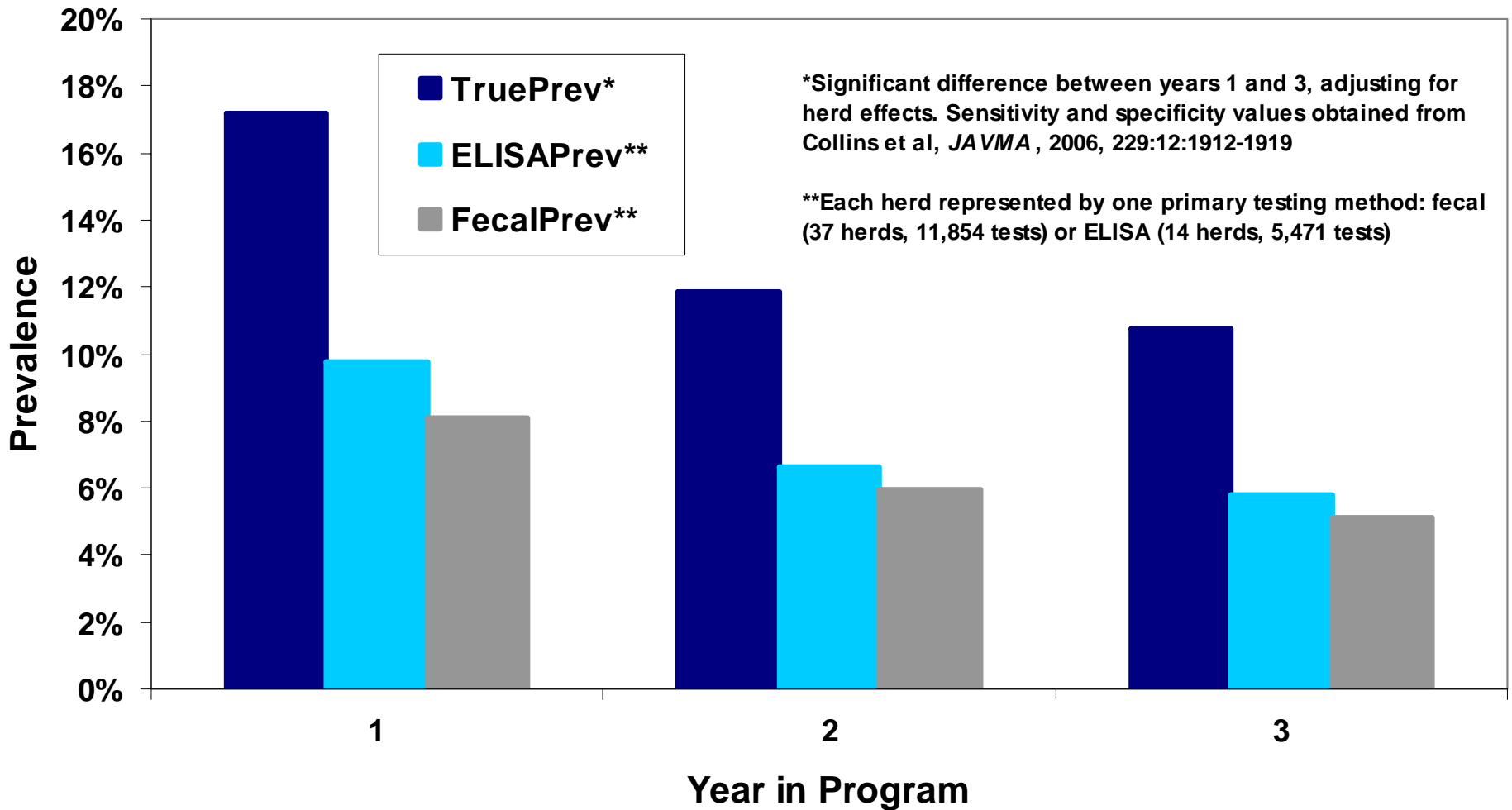
Preliminary Results: Dairy Cattle Prevalence (All Lactations)

52 herds, 64,436 tests



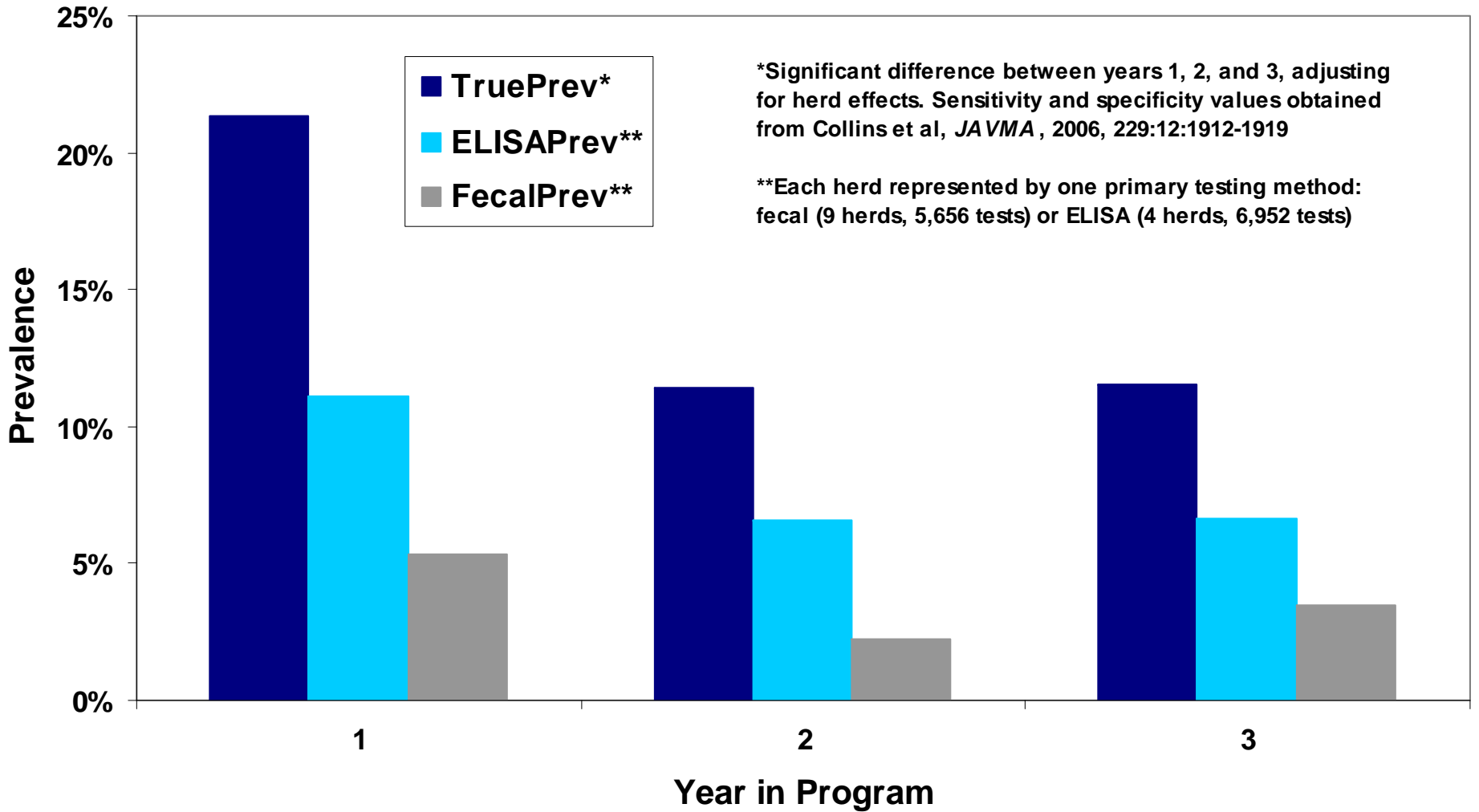
Preliminary Results: Dairy Cattle Prevalence (First Lactation)

51 herds, 17,325 tests



Preliminary Results: Beef Cattle Prevalence (All Lactations)

13 herds, 12,608 tests



Dissemination of Information

- Overview of NJDDHP and of herds at program outset
 - Draft by May 2007
- Change in prevalence of *M. paratuberculosis* infection after 3 years
 - Draft by USAHA
- Economic cost of Johne's Disease and Johne's Disease Control Programs
 - Presentation at NIAA, paper to follow

Upcoming Information (cont'd)

- Association between changes in management and prevalence of infection after 3 years
 - 2007
- Associations between environmental and individual cow test results
 - 2008
- Effects of management practices and changes on clinical cases of Johne's Disease
 - 2008
- Effects of vaccination
 - 2008

THANK YOU!