

National Animal Health Monitoring System (NAHMS) Beef 2017 Cow- Calf Study: BVD Results

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NAHMS Overview

- Beginning in 1990, NAHMS has performed national studies on the health and management of U.S. livestock populations
- Studies are designed to meet information needs of livestock industries
- Beef 2017 study provides estimates that are representative of the entire U.S. beef cow-calf industry

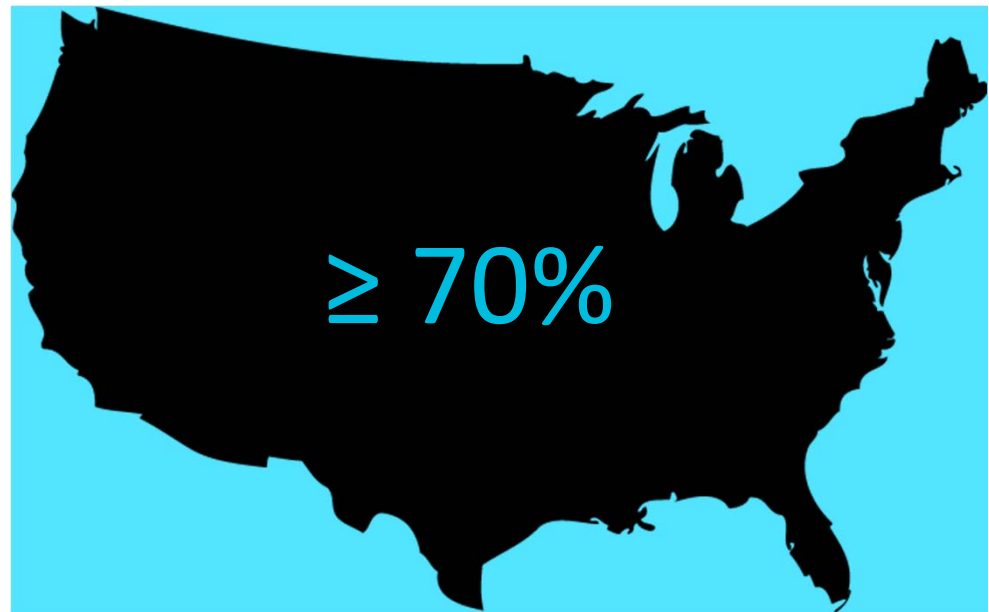
NAHMS Overview

- Commodities are surveyed on a rotating basis
- Study objectives are set in partnership with industry and other stakeholders
- All studies depend on voluntary participation

NAHMS Overview

All studies use a statistically valid nationally representative sample

- Animals
- Operations



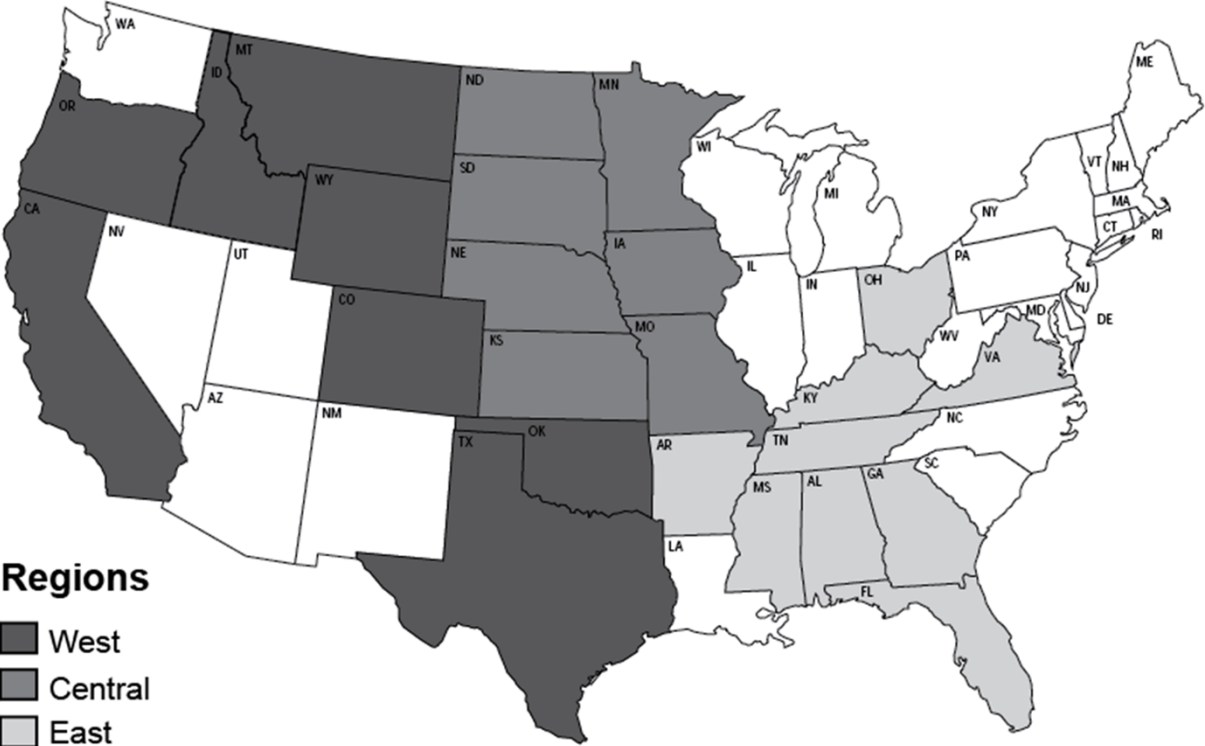
Past NAHMS Beef Cow-calf Studies

- Cow/calf Health and Productivity Audit (CHAPA) 1992/93
- Beef '97
- Beef 2007-08
- Beef 2017 (Preliminary Data)



NAHMS 2017 Beef Cow-Calf Study

States/regions participating in the NAHMS Beef 2017 study



Questionnaires

National Agricultural Statistics Service (NASS) questionnaire:

Administered by NASS employees

October 4 through November 30, 2017

Veterinary Services (VS) questionnaire:

Administered by VS field staff

January 22 through May 15, 2018

Antigen capture enzyme-linked immunosorbent assay (ELISA) by IDEXX:

Performed on ear notches from individual calves

January through August 2018

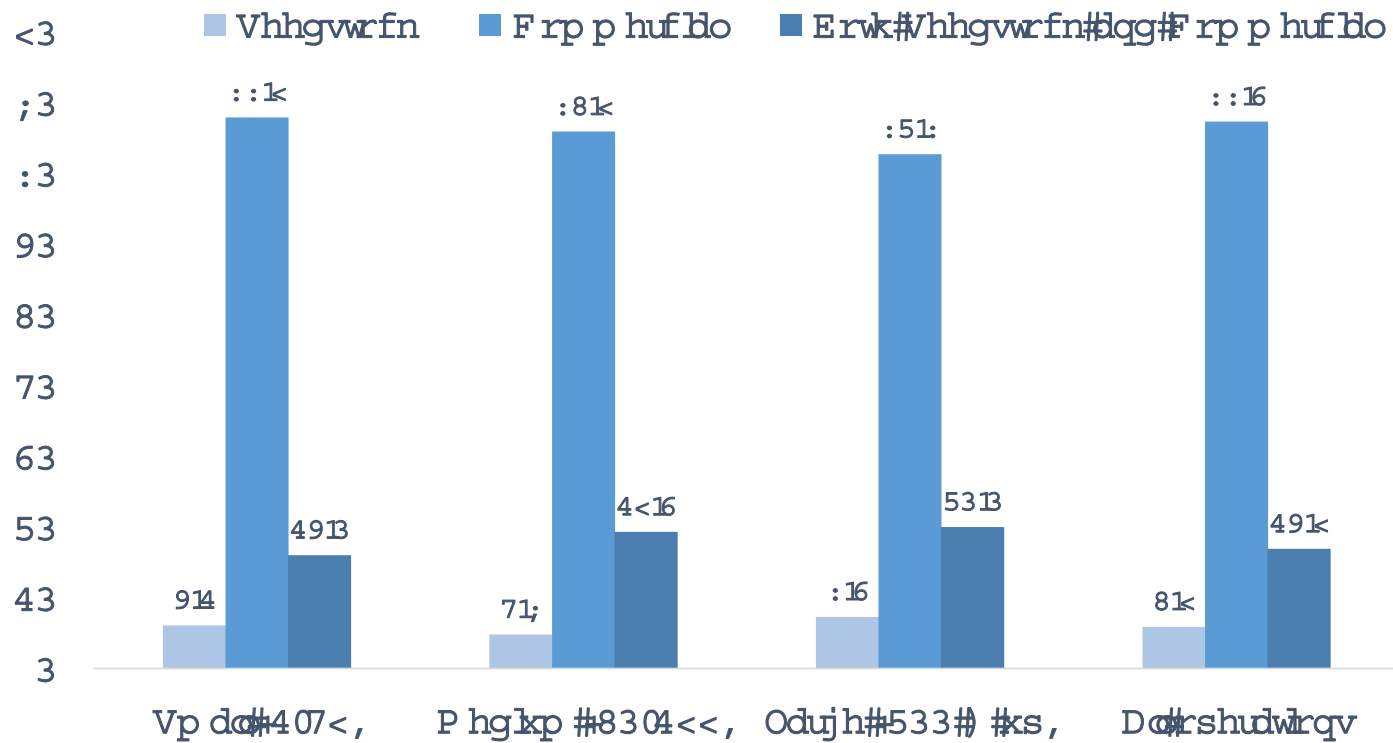
Performed at Kansas State Veterinary Diagnostic Laboratory

BVDV Testing Results from 2007-08 and 2017 Studies

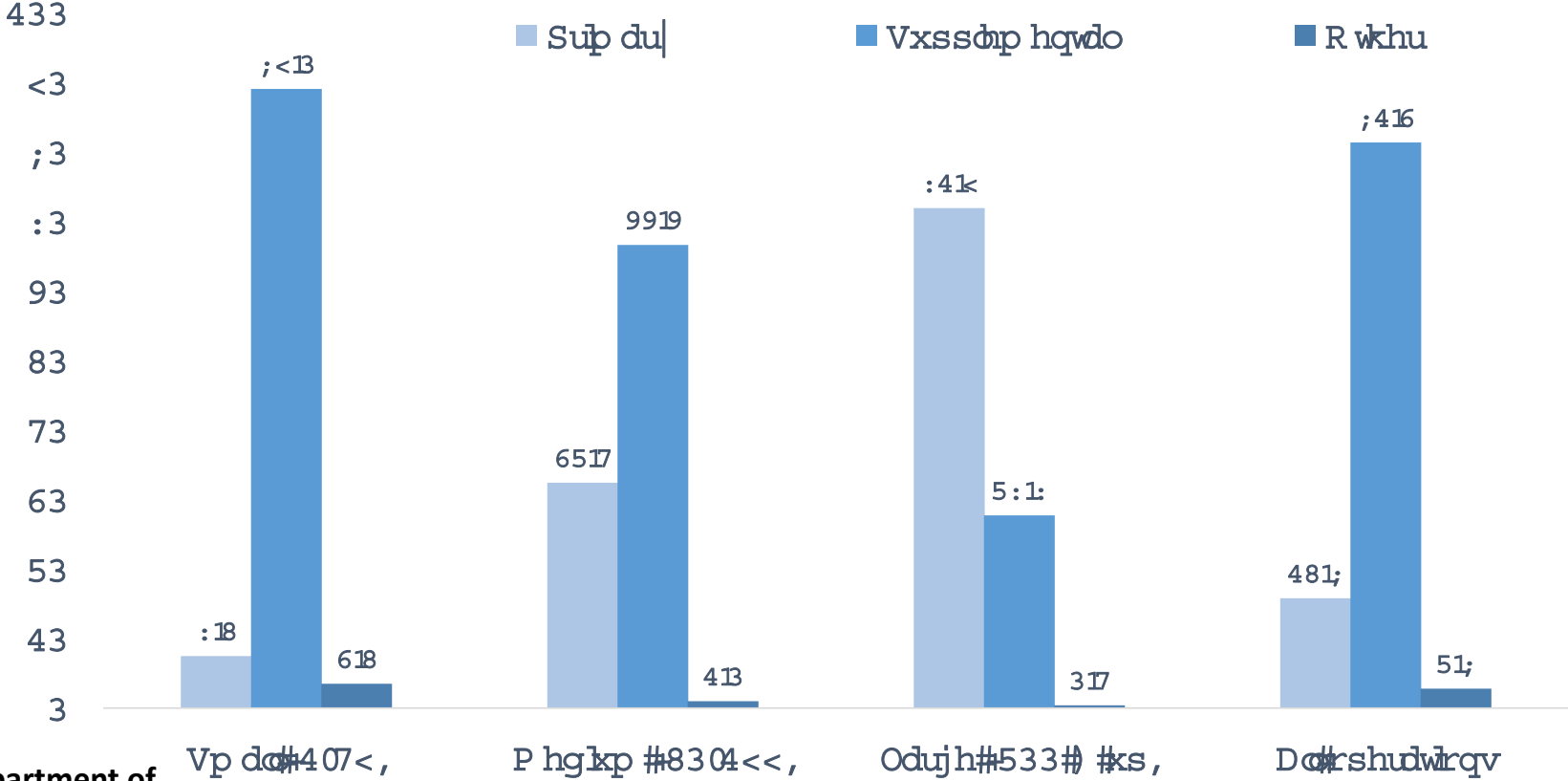
| Ehh#533:03; | Ehh#534: |
|---|---|
| 205 producers from 22 States submitted ear notches for BVDV testing | 75 producers from 22 states submitted ear notches for BVDV testing |
| 44,150 samples were tested | 13,627 samples were tested |
| 53 positive samples from 18 farms; sample-level prevalence = 0.12% ; herd-level prevalence = 8.8% | 17 positive samples from 5 farms; 13 of the positives were from 1 farm; sample-level prevalence = 0.12% ; herd-level prevalence = 6.7% |



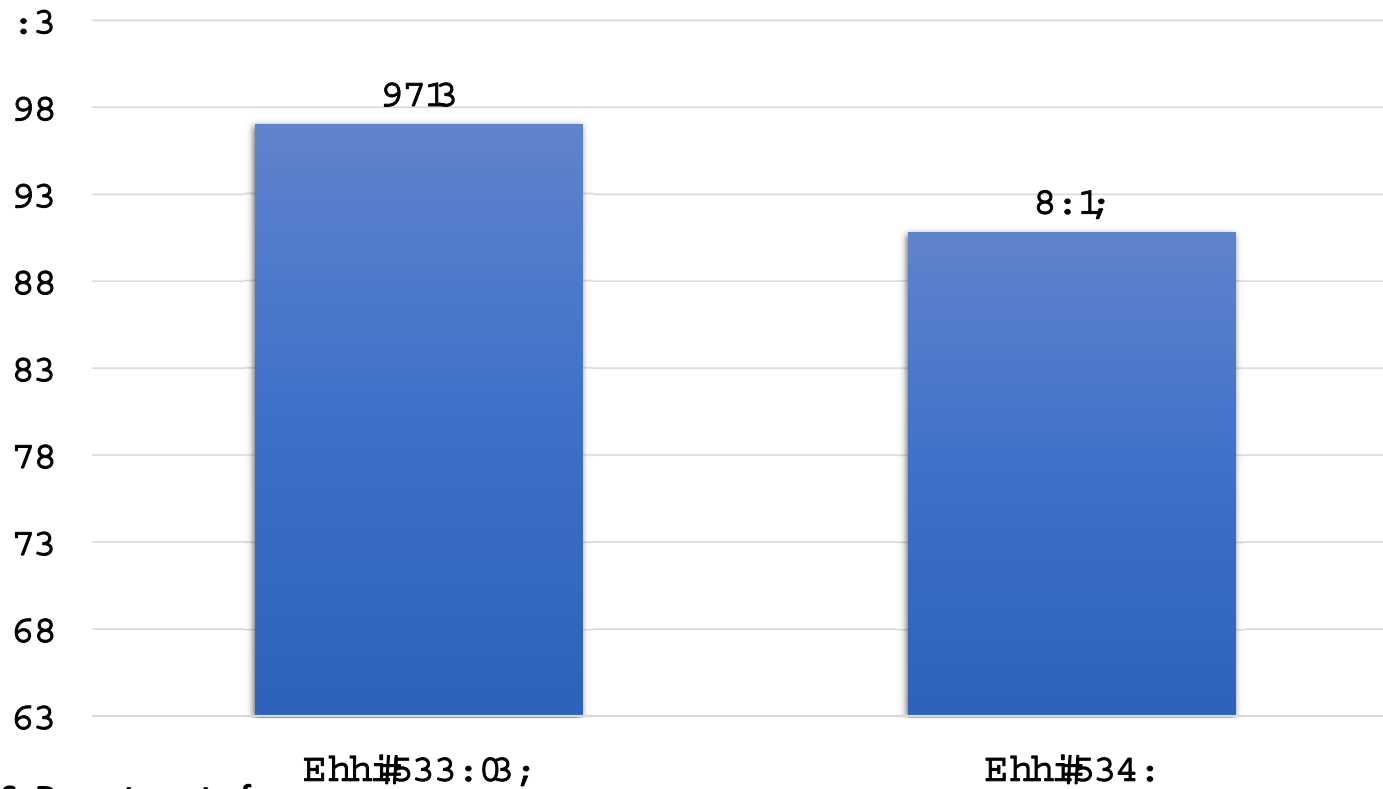
Percentage of operations by type of breeding herd



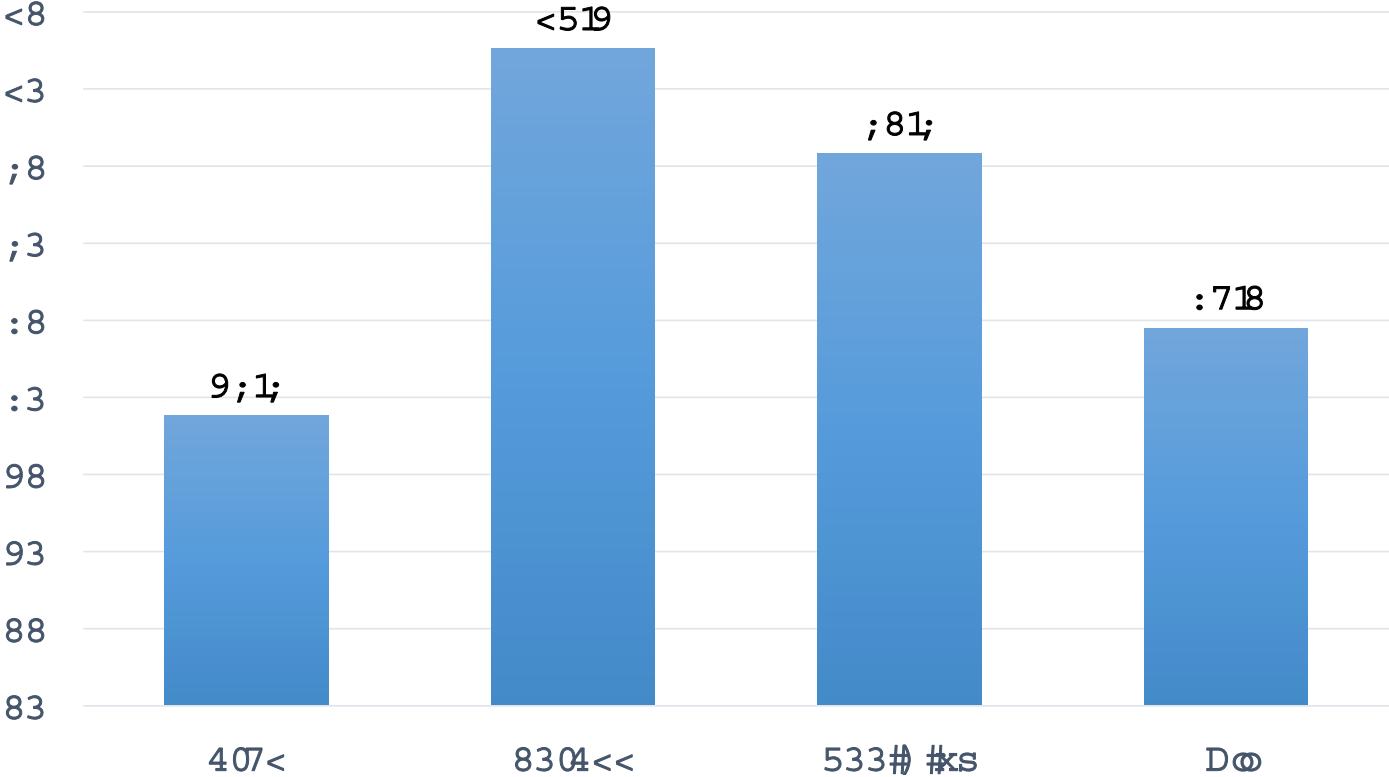
Percentage of operations by level of income provided by the cow-calf operation



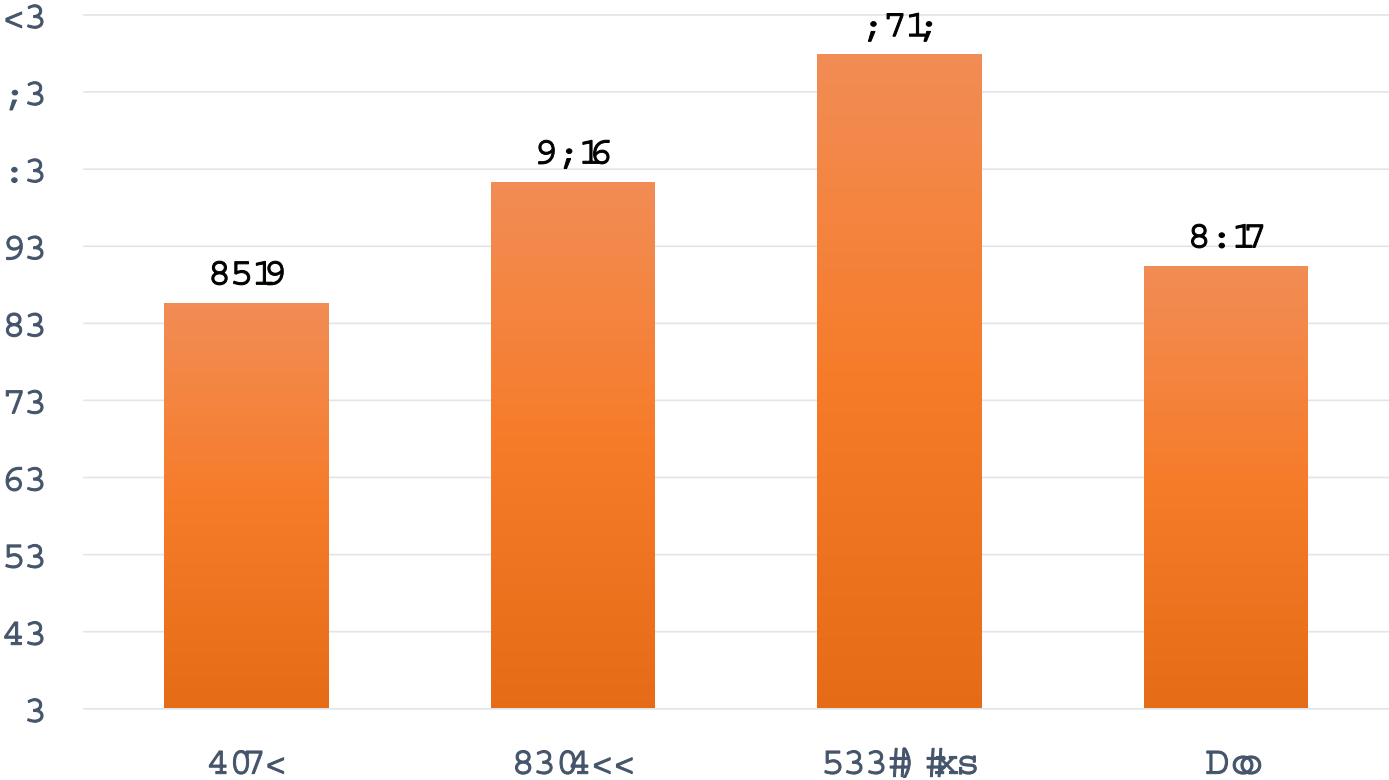
Percentage of operations that were knowledgeable or knew some basics about BVD



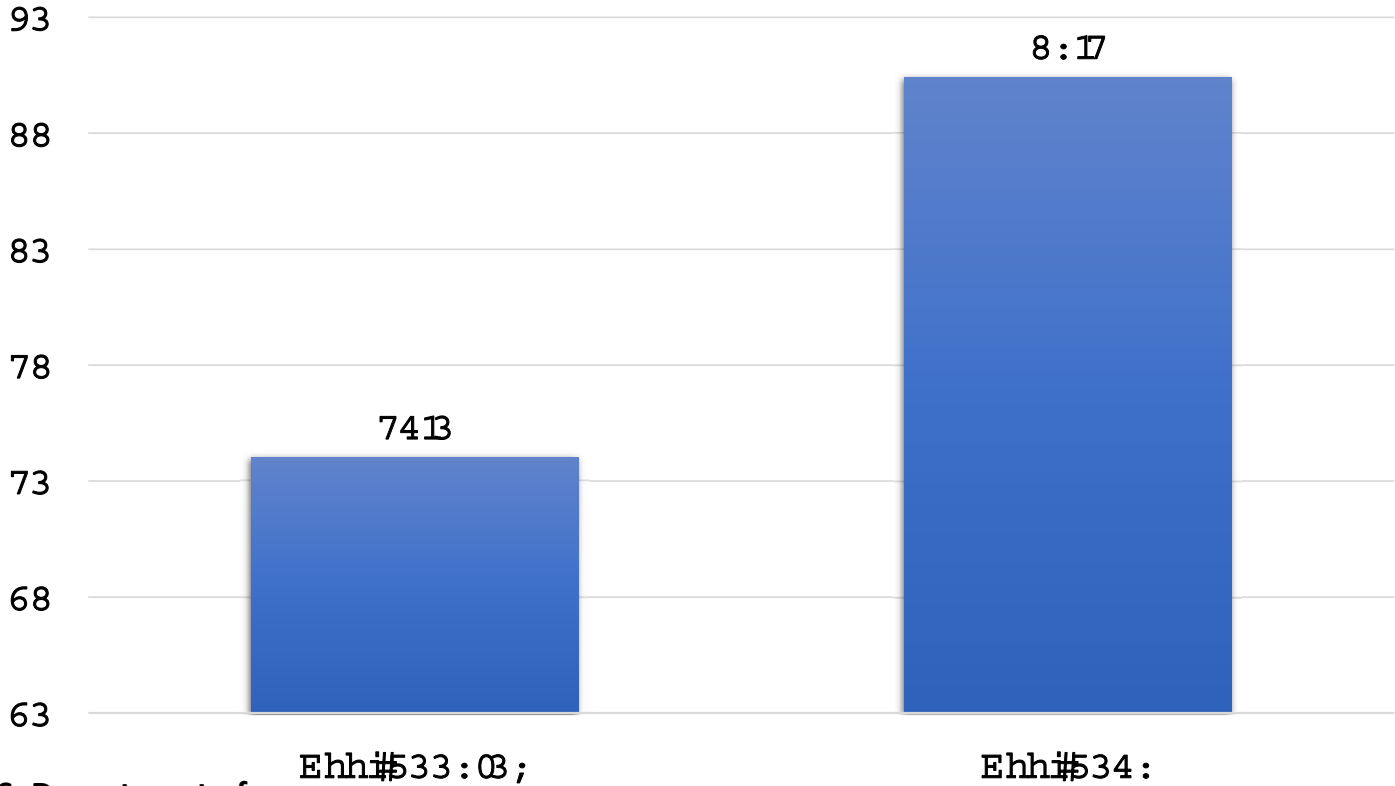
Percentage of operations that vaccinated any beef cattle or calves in 2017



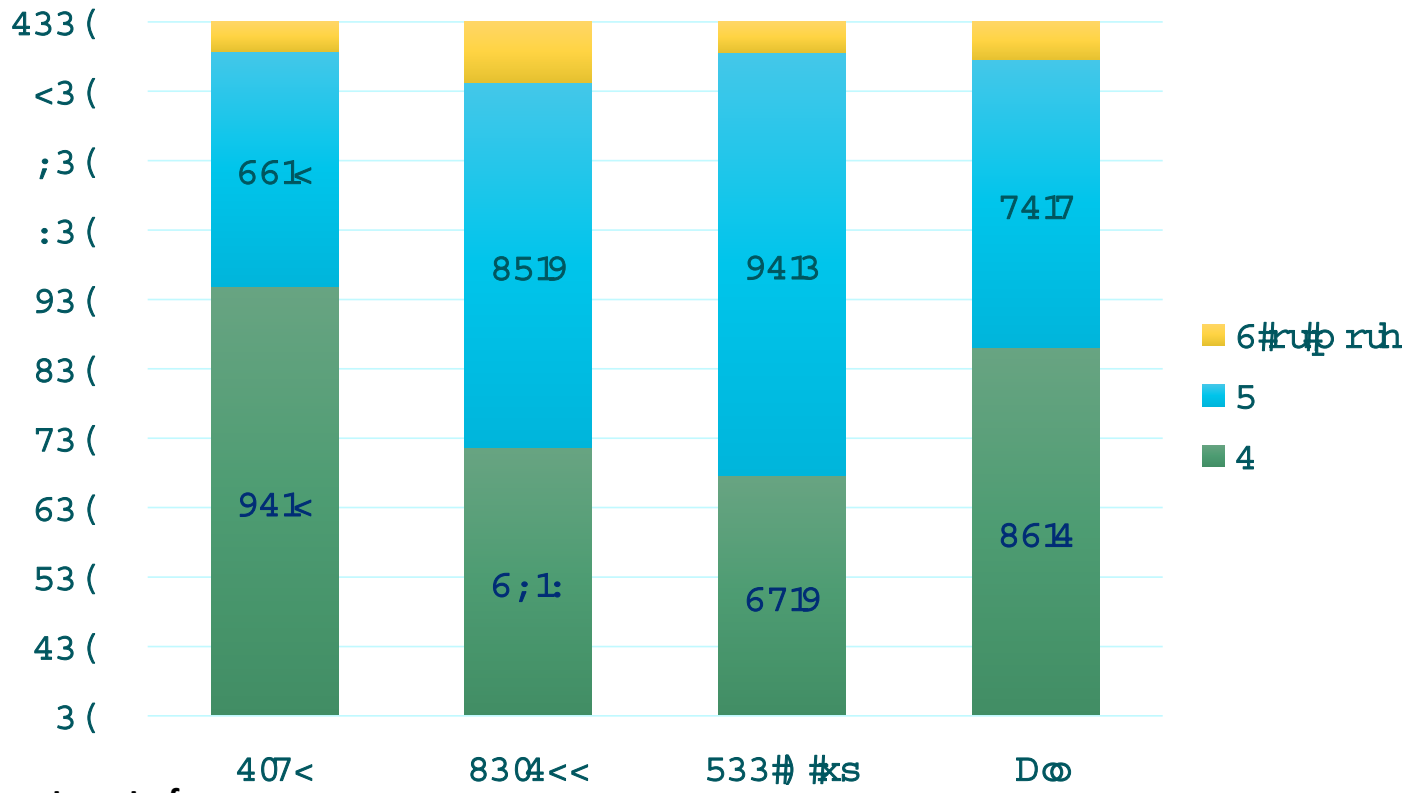
Percentage of operations that vaccinated any beef cattle or calves against BVDV in 2017



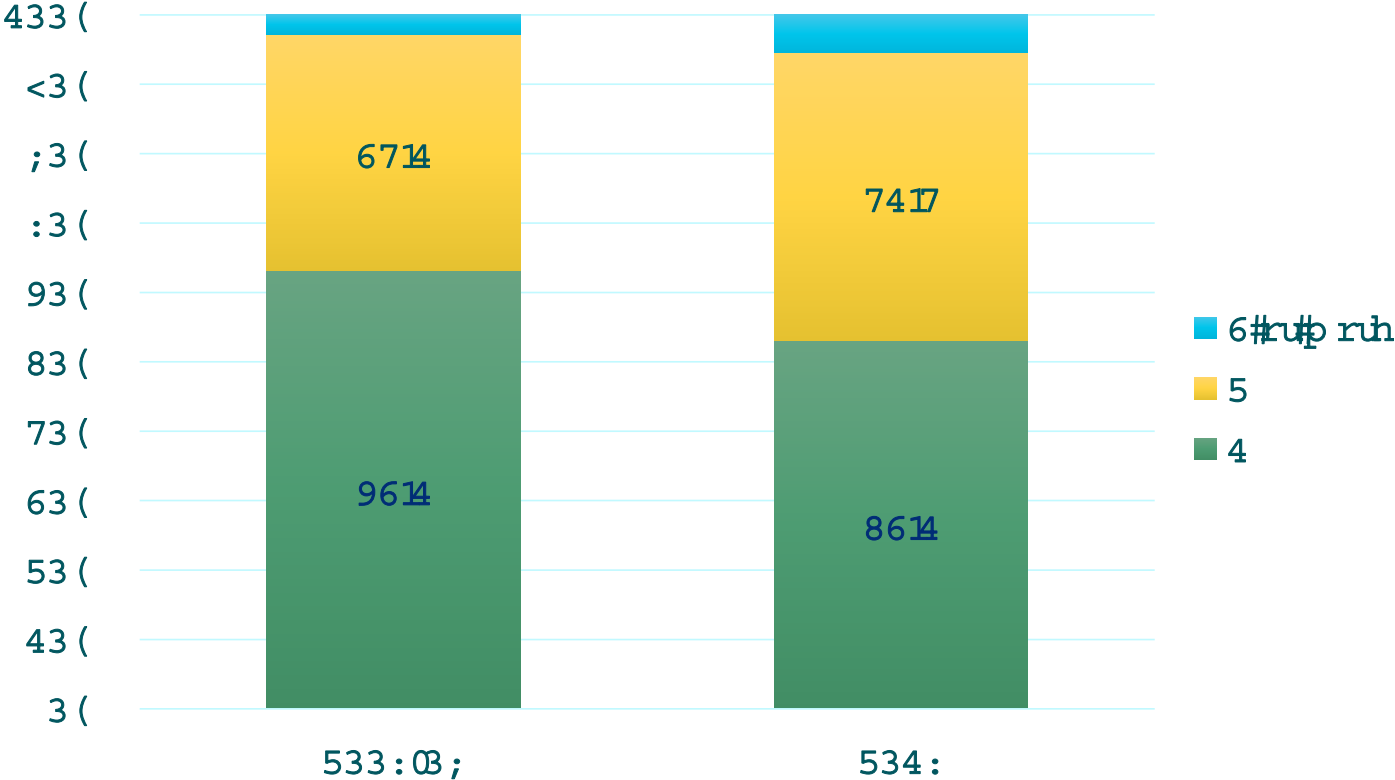
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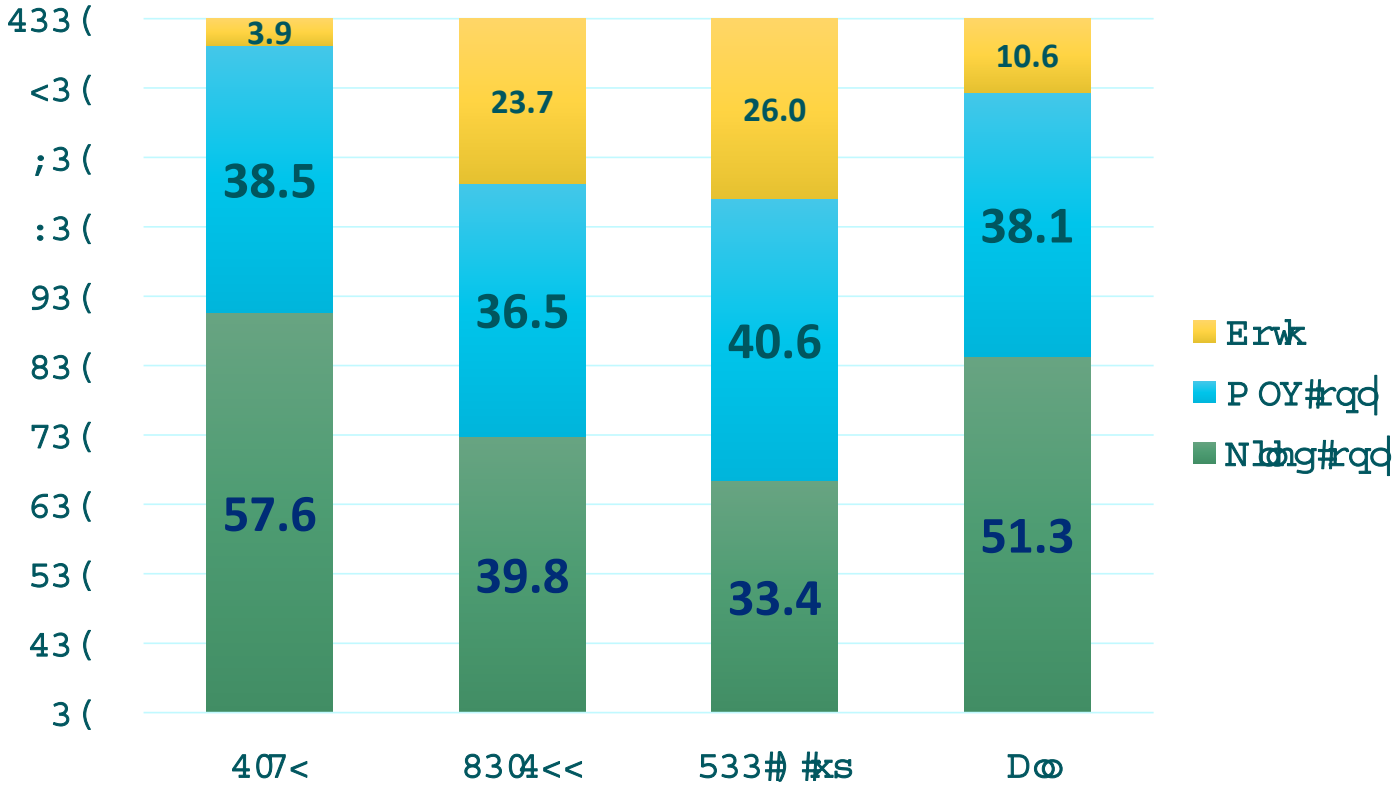
For operations that vaccinated any calves (22 days old through weaning) against BVDV in 2017, percentage of operations by number of times calves were vaccinated



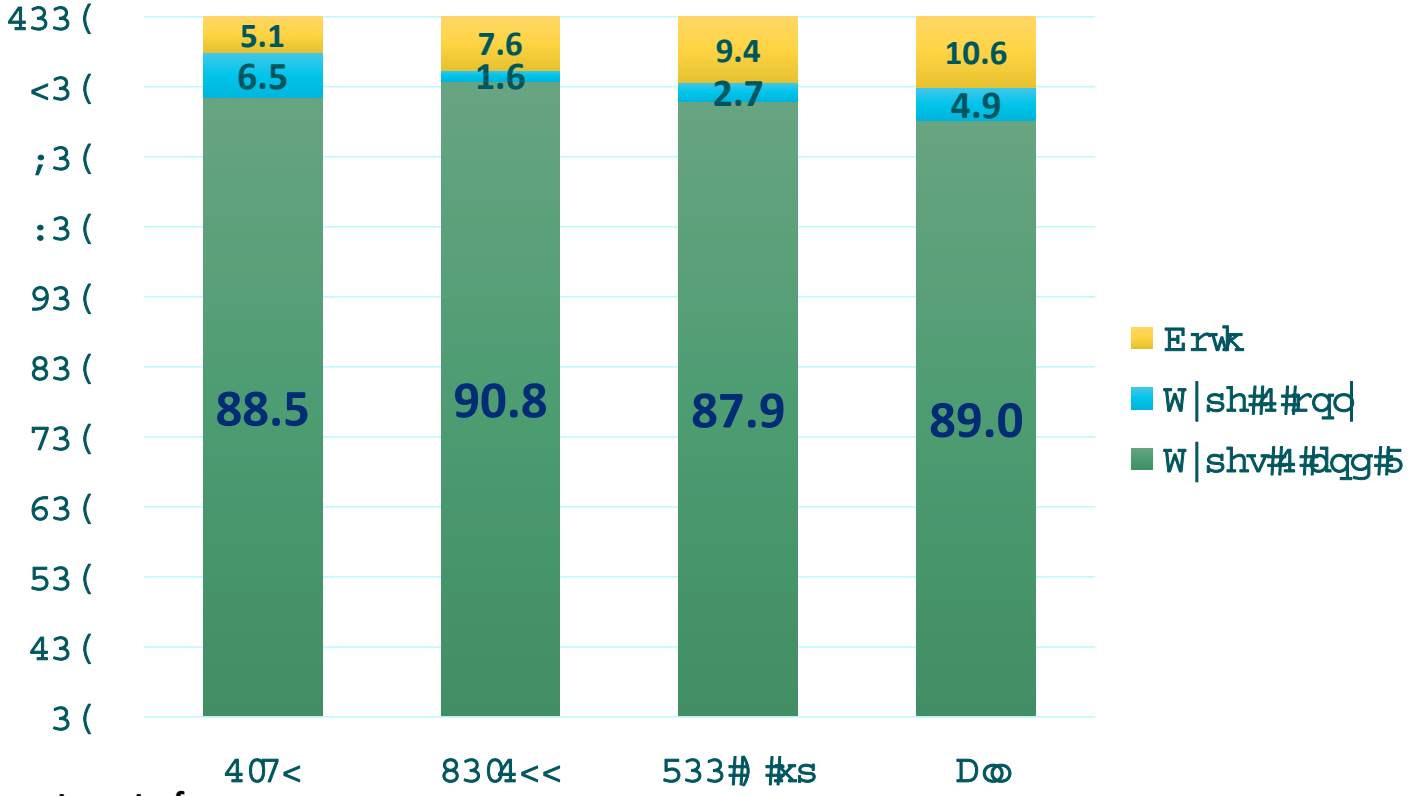
For operations that vaccinated any calves (22 days old through weaning) against BVDV, percentage of operations by number of times calves were vaccinated, by NAHMS study



For operations that vaccinated any cattle against BVDV during 2017, percentage of operations by vaccine type used



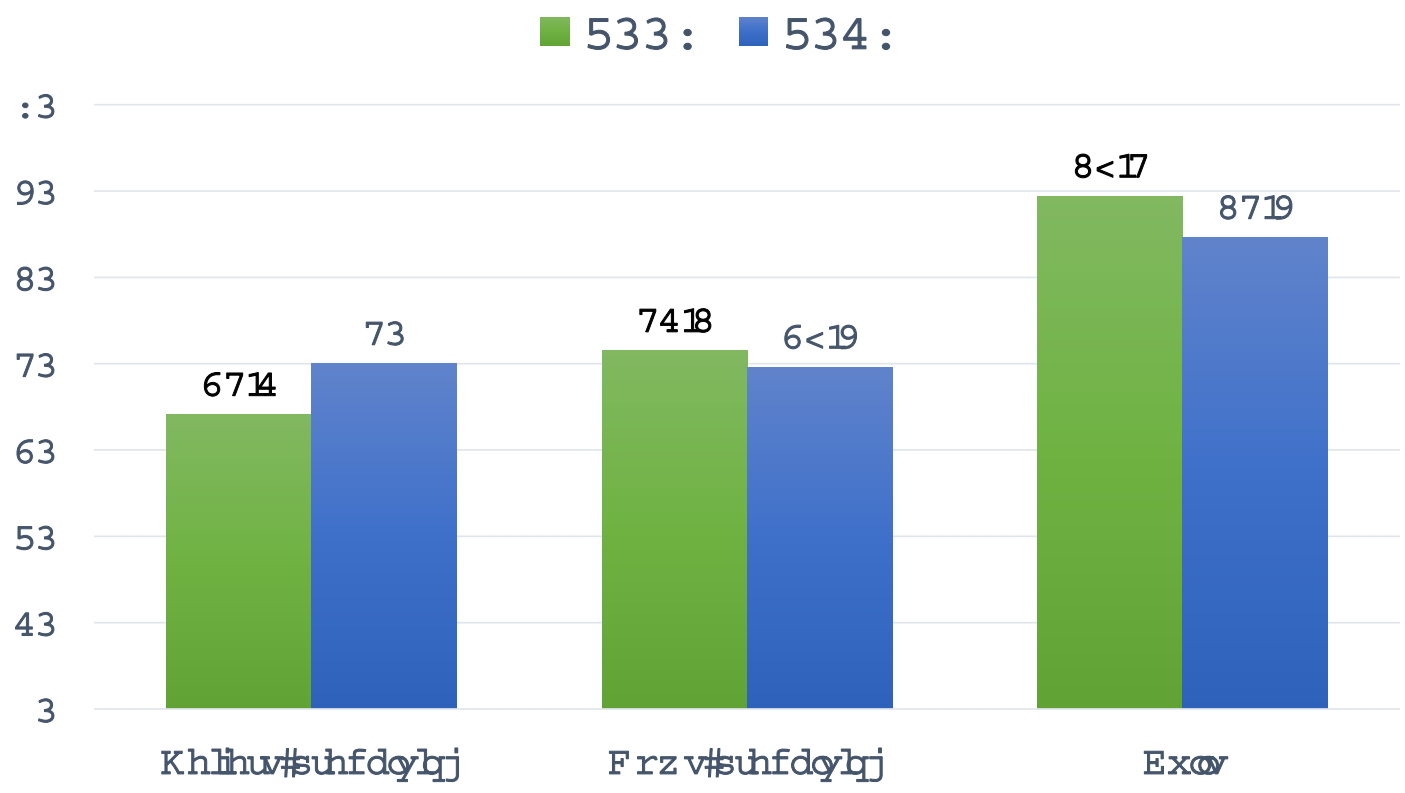
For operations that vaccinated any cattle against BVDV during 2017, percentage of operations by vaccine genotype used



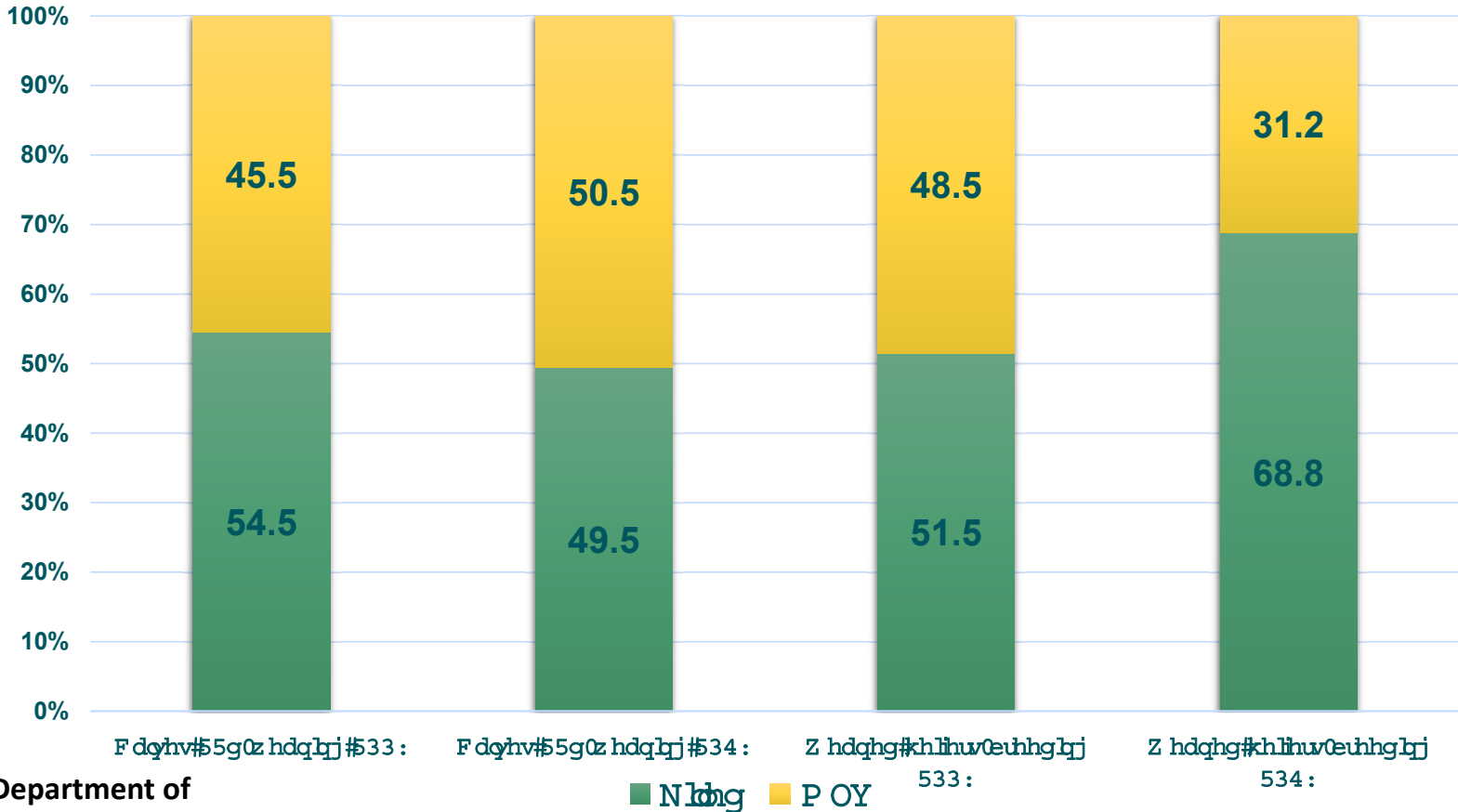
For the the 57.4 percent of operations that vaccinated any beef cattle or calves against BVDV in 2017, percentage of operations by cattle class vaccinated



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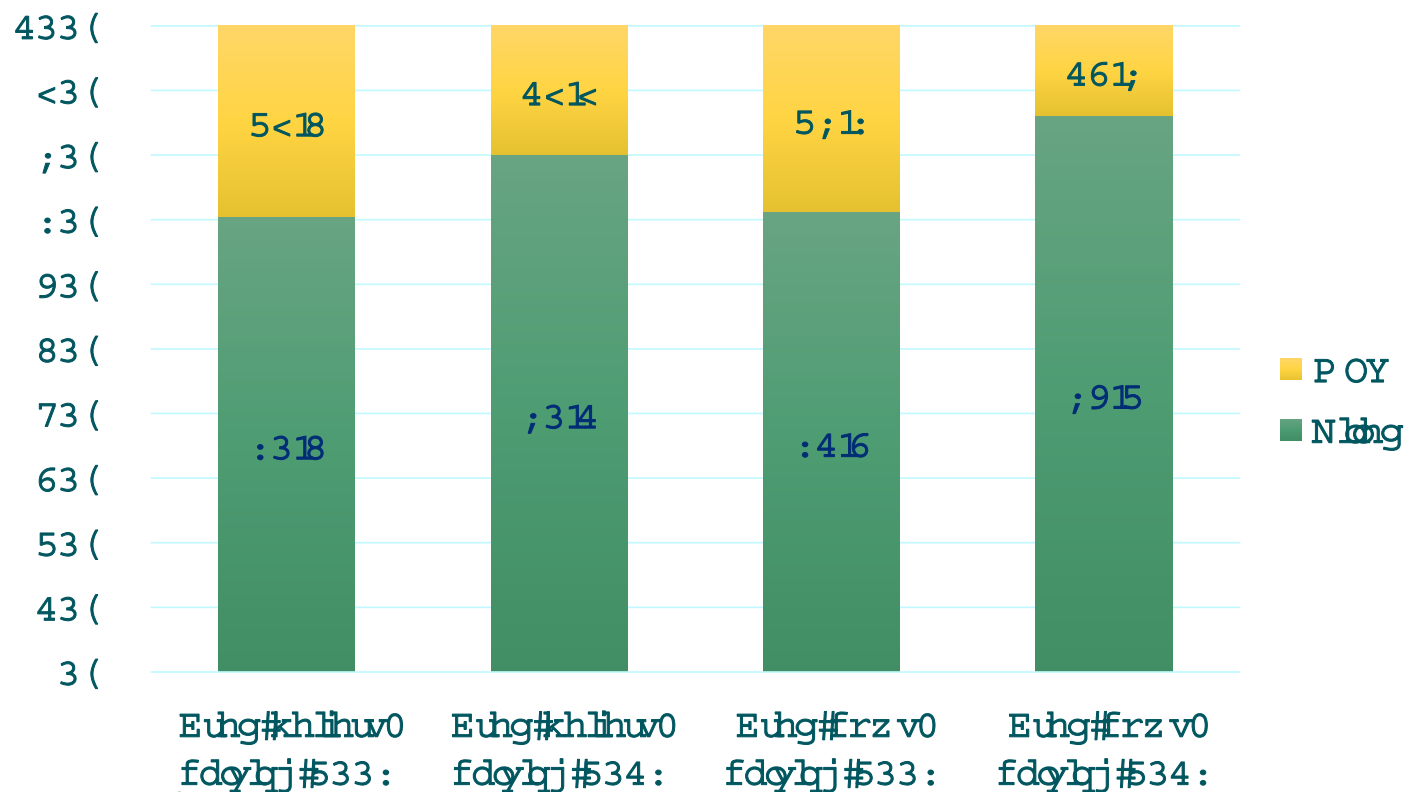


For operations that vaccinated any cattle against BVDV in 2017, percentage of operations by type of vaccine given, by cattle class and by NAHMS study

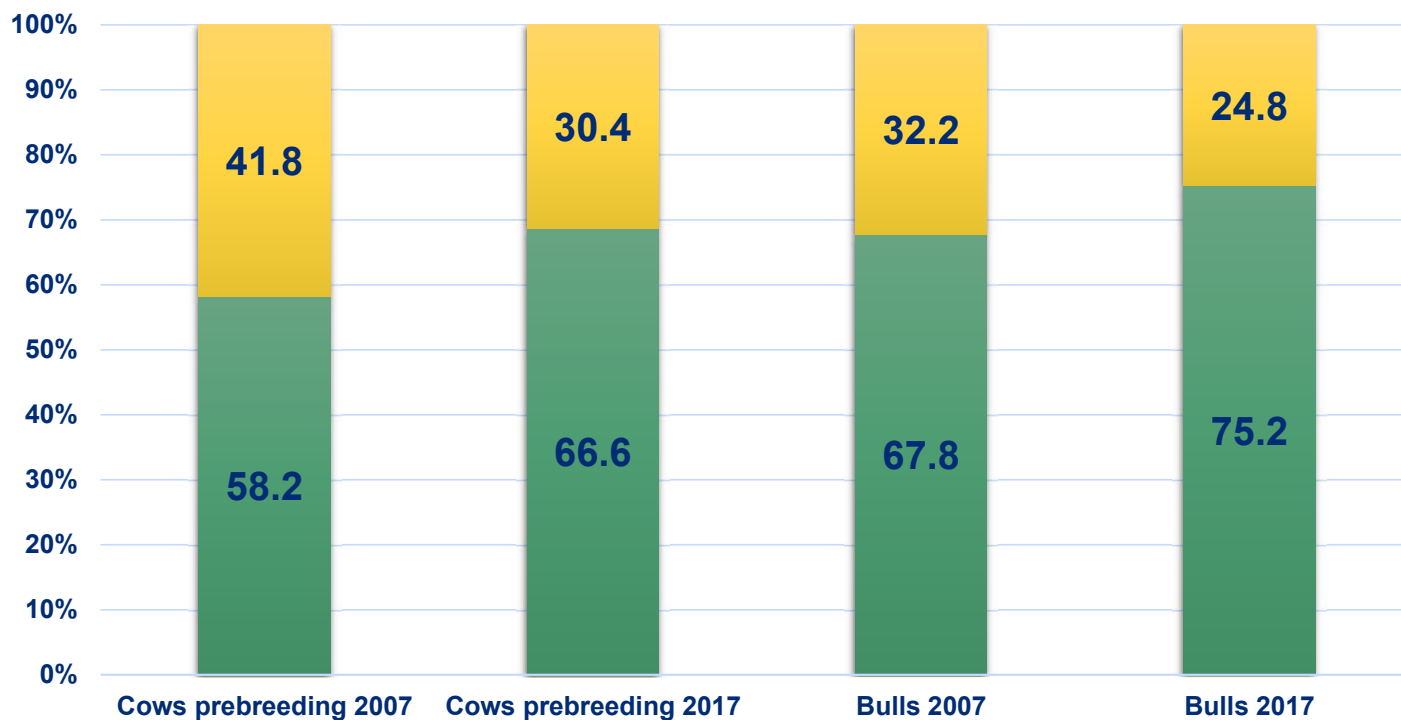


■ Non-POV ■ POV

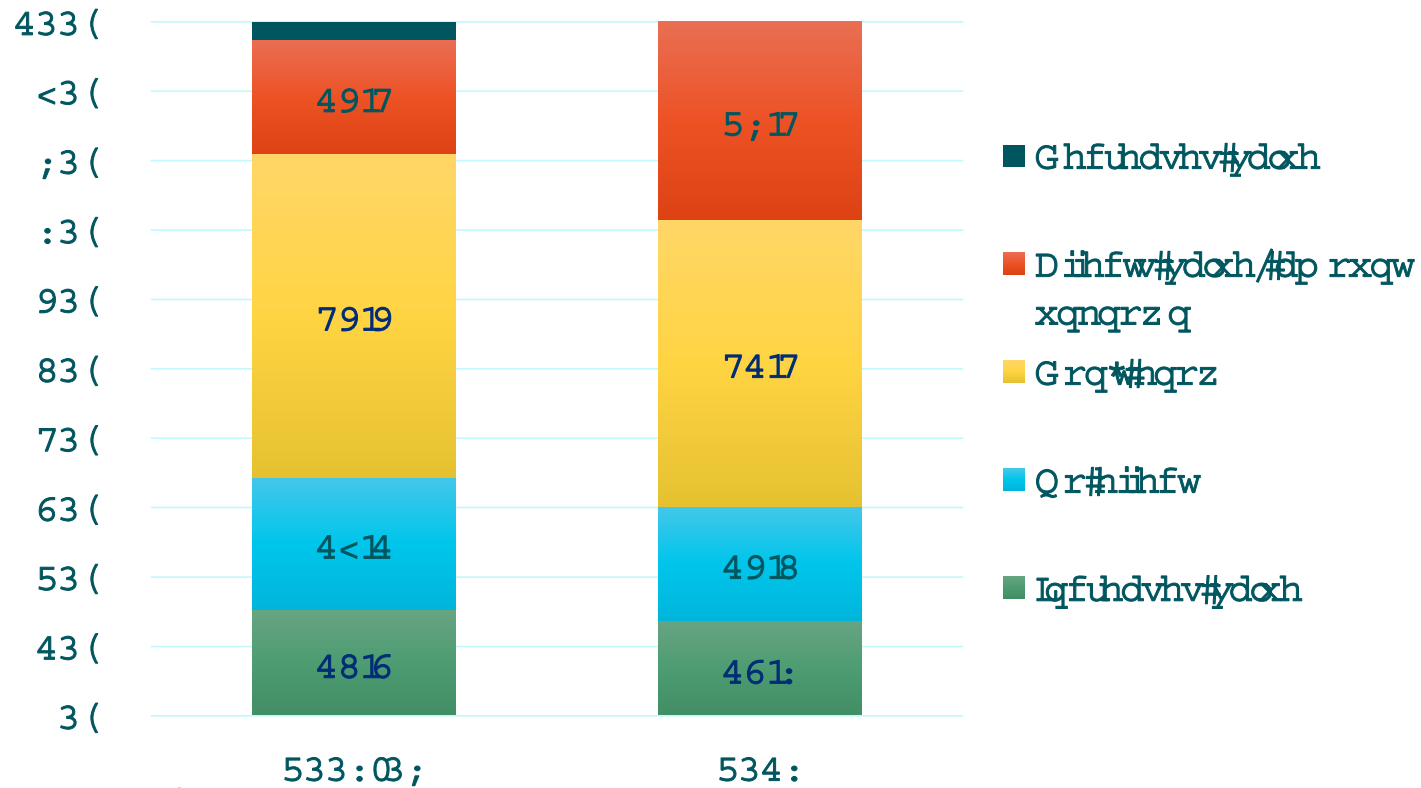
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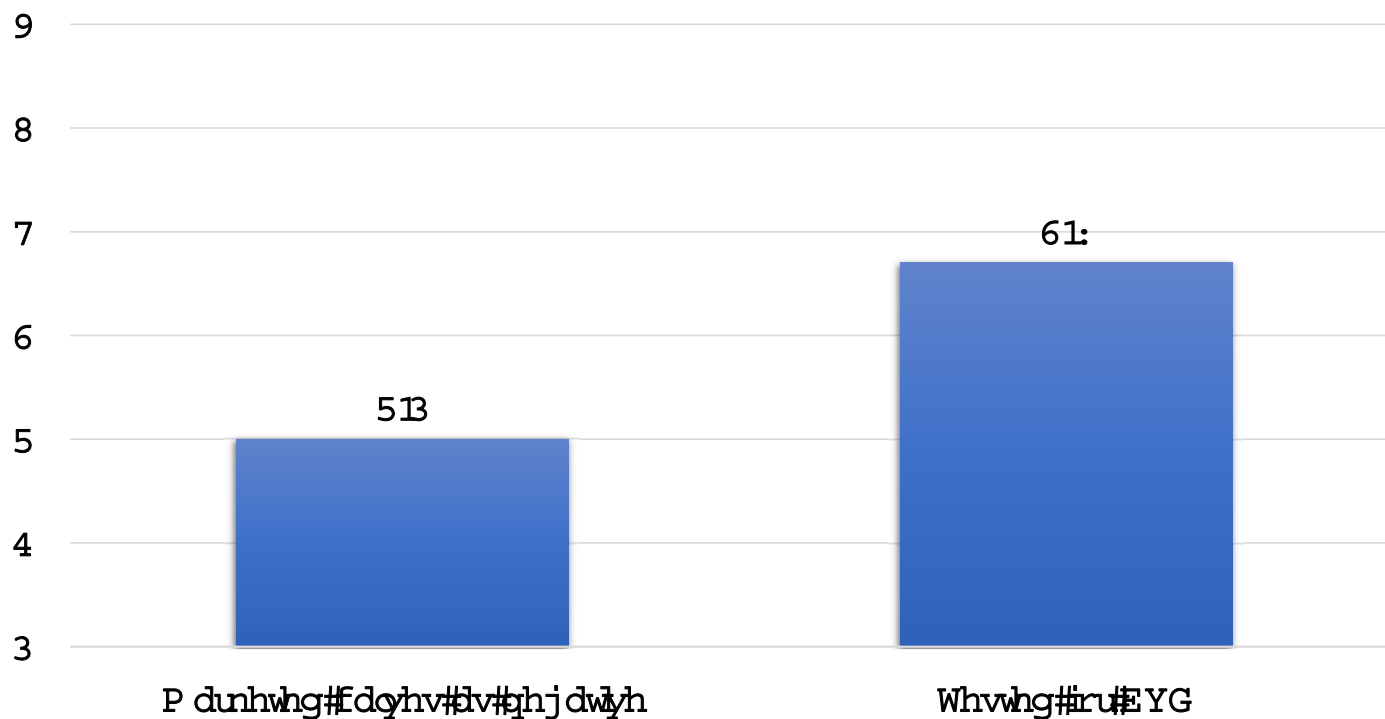
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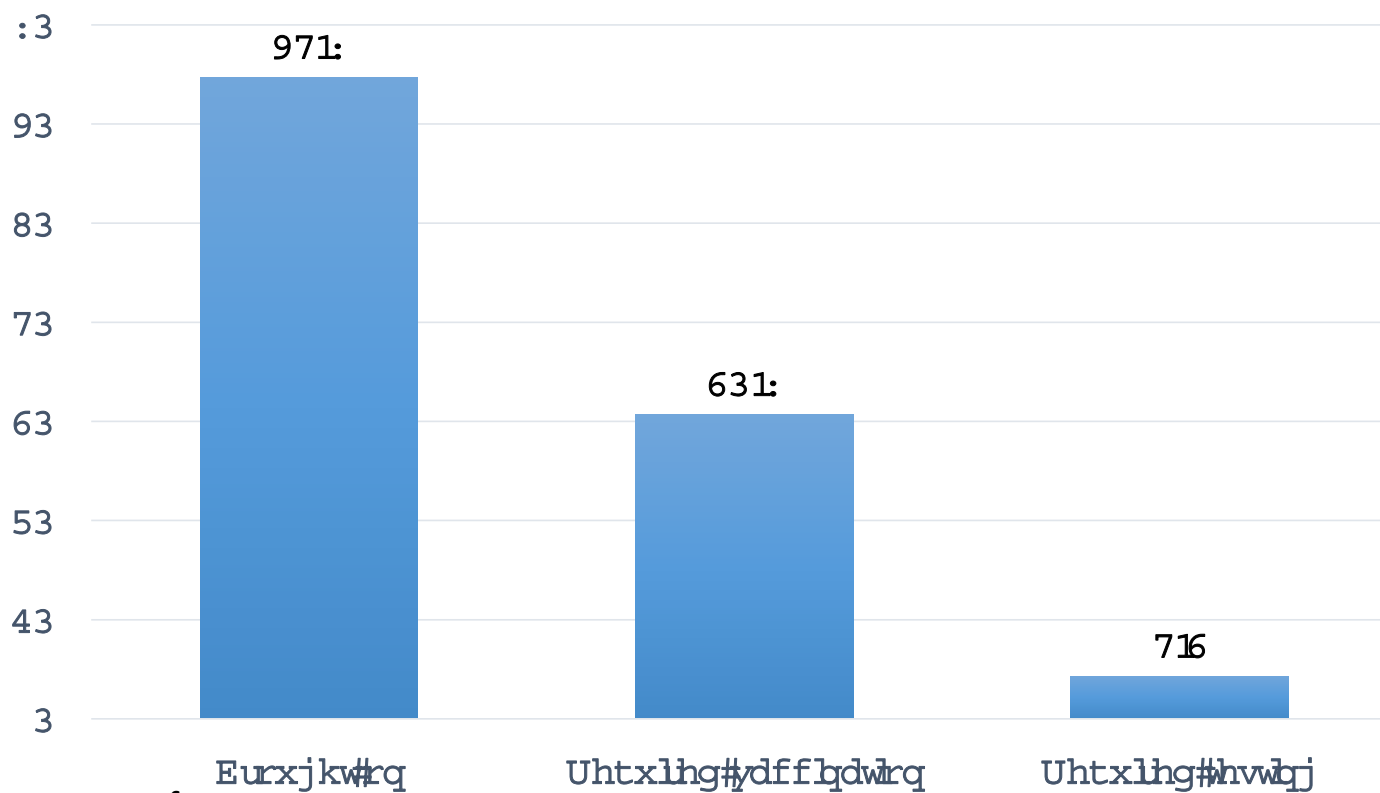
Percentage of operations by how removing calves that tested positive for persistent infection with BVDV affected the value of the remaining calves in the herd, by NAHMS study



Percentage of operations that marketed calves as PI-negative or that tested any cattle for BVD during the previous three years



Percentage of operations that brought on new cattle in the previous three years, required vaccination of new cattle for BVD, and that required testing of new cattle for BVD



Summary

- It appears that a higher percentage of operations vaccinated cattle against BVDV in 2017 compared to 2007
- For operations that vaccinated any cattle against BVDV in 2017, the majority of operations are only using killed vaccines for all cattle on the operation vaccinated against BVDV
- Participation in BVDV testing of calves was much lower in 2017 compared with 2007, but herd- and animal-level prevalence were similar

Thank you

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