

Table S3: Estimated coefficients and odds ratios from a multilevel mixed effects logistic regression model for the association between survey factors and having farm made changes in management to prevent spread of disease.

Variables	Coefficient	SE	Odds Ratio	95% CI		P-value ¹
				Lower	Upper	
Region²						
GSCA	Referent					
NCA + NSJV	-1.20	0.72	0.30	0.07	1.22	0.09
Herd size, milking cows						
<1304	Referent					
≥1304	-0.70	0.74	0.49	0.11	2.14	0.35
Breed³						
Holstein	Referent					
Other (Jersey, crossbred, mix)	0.88	0.70	2.41	0.61	9.55	0.21
Who review/revise the animal health protocols						
Dairy personnel	Referent					
Veterinarian	2.60	1.10	13.49	1.71	106.47	0.01
Farm's animal health						
No Change	Referent					
Better	1.56	0.69	4.79	1.21	18.87	0.02
Worse	0.72	1.43	2.04	0.12	34.23	0.62
Use or increased use of protective alternatives to AMD since 2018						
No	Referent					
Yes	1.50	0.65	4.40	1.23	15.72	0.02

¹Factors are statistically significant at $P \leq 0.05$.

² Northern California (NCA), Northern San Joaquin Valley (NSJV), and Greater Southern California (GSCA)

³ Breed was categorized into two levels: Holstein and others (Jersey, crossbreed, and mixed herds). Dairies with jersey and crossbreed cows were all did not report change in management practices.