

Bovine Pneumonia Summary

These are the bacterial and viral etiologies recovered from 112 cases of bovine pneumonia received by the MU VMDL from January 1, 2019 through September 30, 2019. Results include whole carcasses submitted for necropsy and field specimens collected by practitioners.

Bacterial Culture Results in Bovine Pneumonia Cases 01/01/19 through 09/30/19

Number	Percent	Culture Result
30	26.8%	No significant pathogens isolated
22	19.6%	<i>Mannheimia haemolytica</i>
20	17.9%	<i>Histophilus somni</i>
15	13.4%	Two or more of <i>M. haemolytica</i> , <i>P. multocida</i> , or <i>H. somni</i>
11	9.8%	<i>Pasteurella multocida</i>
7	6.3%	<i>Trueperella pyogenes</i> *
4	3.6%	Salmonella**
3	2.7%	<i>Bibersteinia trehalosi</i>
112	100.0%	Total

*Because *T. pyogenes* is almost always a secondary invader of lung that is already damaged, this number includes only those cases from which it was the only significant organism recovered. If a primary pathogen (*M. haemolytica*, *P. multocida*, *H. somni*) was also recovered, the *T. pyogenes* was considered secondary and the case was assigned to the category of the primary pathogen.

**These isolations are usually a feature of generalized septicemia.

A complete bovine respiratory panel (BVD, BRSV, IBR, PI3) was performed in 95 of 112 cases.

PCR Panel Results in Bovine Pneumonia Cases 01/01/19 through 09/30/19

Number	Percent	PCR Result
71	74.7%	No virus detected
12	12.6%	BRSV only
6	6.3%	BVD only
4	4.2%	Two or more of BVD, BRSV, IBR, or PI3
2	2.1%	IBR only
95	100.0%	Total

Cases in which multiple viruses are detected simultaneously should be interpreted with caution, as this can sometimes reflect recent administration of a multivalent vaccine and does not necessarily indicate the case of disease or death.

Finally, within these 112 cases of bovine pneumonia, *Mycoplasma bovis* was detected in 30 of 45 cases (66.7%) in which PCR was performed.

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