Survey of Large Animal Veterinarians' Biosecurity Practices

DE Anderson, DVM, MS, DACVS¹; F Silviera, MV²

¹Agricultural Practices Section, College of Veterinary Medicine, Kansas State University, Manhattan, KS 66506 ²Department of Preventive Medicine, College of Veterinary Medicine, The Ohio State University, Columbus, OH

Introduction

Recommendations for biosecurity practices are often aimed at idealized scenarios. Although it is well understood that biosecurity protocols must be individualized to account for farm and veterinary specific issues, core principles should be universally applicable. We hypothesized that biosecurity protocols used in field settings by veterinarians in private practice would have similarities that would be useful in bringing these core principle into focus. This study was undertaken in an attempt to gain insight into current "standards of practice" regarding biosecurity protocols used by practicing veterinarians working on farms.

Materials and Methods

An electronic survey was distributed using the elists of the American Association of Bovine Practitioners, American Association of Small Ruminant Practitioners, and a Llama Medicine Discussion Group. Practitioners were asked to provide details of biosecurity protocols they personally used when visiting client farms. Veterinarians were specifically asked not to discuss idealized protocols, were discouraged from projecting what they thought an optimal program would be, or to discuss any practice they were not actually performing. Instead, practitioners were asked to describe specifically what they actually do on a day-to-day basis for biosecurity and to make specific reference to practice type, state, country, coveralls/aprons, boots, head covers, truck maintenance, separation of animals, facilities maintenance, needle use (e.g. for vaccinations), instrument maintenance, any other specific item. These results are presented as descriptive statistics.

Results

Practice type: Of 55 veterinary practices, 26 were bovine only and 27 were mixed large animal (MixedLA).

Personal Habits--use of coveralls and boots: Of bovine practices, 54% changed coveralls between farms and 46 % did "as needed"; 85% disinfected boots between farms and 15% did as needed. Of 27 MixedLA, 48% changed coveralls between farms, 4% did between cattle farms but as needed between small ruminant farms, and 48 % changed as-needed only; 81% cleaned boots between every farm and 19% did as-needed. Head covers: Four (2 bovine; 2 MixedLA) respondents indicated that they wore the same hat to all farms without cleaning unless obviously dirty. Needle use: 31% of bovine practices and 37% of MixedLA used one needle per cow with the remainder using needles on multiple animals on the same facility. Instruments: 42 % of bovine practitioners autoclave instruments and 23 % "sanitize" instruments before use. Of MixedLA veterinarians 15 % indicated that instruments are autoclave sterilized and 30 % "sanitize" instruments before use. Practice Habits: Truck maintenence: 15% of bovine practices washed trucks regularly, 12% did not use vehicles in animal areas, and 73% had no specific vehicle maintenance. 19% of MixedLA did not allow vehicles onto farms, 7% cleaned weekly, and 74 % had no specific truck maintenance plan. Separation of animals: 15 % of bovine practitioners indicated isolation and testing of new arrivals; 7% of MixedLA veterinarians indicated isolation and testing of new arrivals. Facilities: 12 % of bovine practitioners recommended use of boots and buckets by farm personnel; MixLA had no comments.

Significance

Although idealized procedures allow targeting goals, realities of practice must be addressed. This study uncovered an interesting dual-standard among practitioners when comparing biosecurity practices for bovine versus small ruminant farms.