

Owner-reported Incidence of Clinical Salmonellosis in Northeastern Dairy Herds

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Introduction

Bovine salmonellosis is important because of clinical effects and zoonotic potential. Our objectives were to determine the frequency of owner-reported salmonellosis in northeastern US dairy herds and to examine the relationship of salmonellosis with herd size and housing type.

Materials and Methods

The information analyzed was collected during enrollment for a prospective salmonellosis incidence study. Veterinary clinics in New York, Pennsylvania, Vermont and Connecticut were invited to enroll all the dairy herds for which they provided regular service. At the time of enrollment the herd veterinarian collected information on herd size, housing, vaccination status, organic and inorganic farming practices, record-keeping and previous salmonellosis. Enrolled herds were eligible for free salmonella testing.

Results

A total of 801 herds with milk cows were enrolled. Of these, 210 (25.9%) reported at least one previous case of clinical salmonellosis. One hundred thirty-three (16.6%) herds reported salmonellosis within the five years prior to enrollment, and 55 (6.9%) within the year preceding enrollment. Salmonellosis within the last five years was strongly related to larger herd size (for each additional 100 cows odds ratio=1.2; 95% CI 1.1, 1.3). Even when controlling for herd size, herds with freestall housing were more likely to have reported salmonellosis within five years (OR = 4.9; 95% CI 2.6, 9.0).

Significance

About one-fourth of participating herds reported prior diagnosis of clinical salmonellosis, and 6.9% within the previous year. Larger herd size and freestall housing were both associated with increased owner-reported salmonellosis.

The Effect of Metaphylactic Intramammary Infusion of 200 mg Cephapirin Sodium per Quarter in Dairy Cattle at 2-3 Weeks Prepartum on Selected Postpartum Production Parameters

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Introduction

The objective of this study was to determine the effect of a metaphylactic prepartum intramammary infusion of 200 mg cephapirin sodium (Cefa-Lak[®]) per quarter in heifers and mature dairy cows. Treated and control animals from a large, well-managed herd were evaluated for selected production parameters during the immediate post calving period.

Materials and Methods

The study was conducted from May 2004 through April 2005. At the time of enrollment (2-3 weeks prepartum) each eligible animal was randomly assigned to a treatment or a control group by coin flip. Of 422 heifers, 209 were treated with cephapirin sodium (administered by partial insertion [OptiSert[®]] following full teat and teat end preparation) and 213 heifers served as a con-