Treating Heifers Prepartum For Mastitis
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For many years dairy producers have been advised to dry treat all quarters of all cows to help prevent new cases of mastitis, as well as to reduce the level of existing infections. The practice has generally been shown to be a fiscally sound one.

Producers have also been advised by some consultants, based upon research conducted in the 1990’s, to infuse a lactating cow antibiotic into the udders of all heifers about two weeks prepartum to cure infections that exist or may occur during late pregnancy. However, a recently published report in the Journal of Dairy Science questions the economic value of this practice.

Researchers from 6 states and Canada studied the effectiveness of this practice in 561 heifers in nine herds. They found that overall, 34% of the heifer mammary quarters were infected before parturition, and 63% of the heifers had at least one quarter infected. Coagulase negative staph caused 75% of the infections, while coagulase positive staph, environmental strep, and coliforms were responsible for 25% of the infections. Infected quarters that were treated prepartum with 200 mg of cephapirin sodium resulted in a 60% cure rate, while untreated infected control quarters had only a 32% spontaneous cure rate. The efficacy of the prepartum antibiotic treatment varied between herds, as would be expected, ranging from 32% to 87%.

While the cure rate of the quarters treated prepartum was significantly better than that of the control quarters, a most interesting finding is that the treated heifers did not produce significantly more milk or have a better log SCC score during the first 200 days of lactation. Furthermore, no significant effect on services per conception or days open was shown, as would be expected, between the treated and control groups.

The researchers who conducted the study cautioned that universal antibiotic infusion of heifer quarters prepartum is not a practice that all producers should use. While the practice may cure many mammary infections prepartum, it does not appear to be one that can guarantee more profit. In most cases, producers may well make better use of their resources by waiting to check their heifers for udder infections at parturition, and then treat only those that are infected. Since conditions vary between herds, producers are advised to discuss their herd’s situation with their veterinarian or qualified consultant. Herds with a significant proportion of heifers freshening with mammary infections may find the practice of prepartum udder infusion worthwhile.