

# MANAGING THE COSTS AND IMPACT OF METRITIS IN DAIRY COWS

**ERIC MOORE, DVM**

DIRECTOR, TECHNICAL SERVICES - NORTH AMERICA | NORBROOK LABORATORIES

*Metritis, one of the most common fresh cow diseases, can be costly to the health of individual cows and the overall productivity of dairy operations, especially in today's environment. Fortunately with diligent monitoring of fresh cows, combined with early diagnosis, timely and effective intervention, the health, productivity and economic impacts of metritis can be reduced.*

## MEASURING THE SCOPE AND ECONOMICS OF METRITIS

Metritis is a uterine infection that affects about 20% of lactating dairy cows, although the incidence can range from 5% to more than 40% of cows in some herds. Typically seen within the first 10 days in milk (DIM), metritis is characterized by a foul-smelling, reddish-brown, watery vaginal discharge and systemic signs of illness such as decreased feed intake and milk production, with or without fever. It can range from a mild infection that a healthy cow can clear without intervention to a severe, life-threatening disease.

The costs associated with metritis can be substantial. Metritis can lower a cow's milk production, decrease fertility and future pregnancy rates, put her at greater risk of culling, and increase labor and treatment

costs. One key reproductive parameter contributing to increased costs is prolonged time from calving to breed-back. This can be affected by postpartum conditions such as metritis during the first 30 DIM and subclinical or clinical endometritis, an inflammation of the endometrium (innermost uterine lining) that occurs during 31 to 60 DIM. As a result, metritis is estimated to cost producers between \$329 and \$386 per cow.<sup>1</sup> Although metritis cannot be completely prevented, its costly consequences can be minimized. Cows with metritis should be identified early and appropriately treated to reduce the disease's effects and return cows to reproductive health and production as effectively and quickly as possible.



## MONITORING STRATEGIES HELP DETECT ISSUES EARLY

Early detection followed by appropriate intervention is key to successfully treating any disease. For dairies, that means closely monitoring fresh cows for clinical signs and symptoms of metritis. Since metritis often follows calving complications such as retained placenta, dystocia, twins or stillbirths, these cows in particular should be monitored closely for metritis signs.

Fresh cows should be observed at least twice daily for a minimum of 10 days, and preferably for 14 days, after calving. When checking fresh cows, you or your employees should check both the front and back of each fresh cow. The following steps can help identify cows with metritis or another fresh-cow health problem:

- » **Evaluate uterine/vaginal discharge.** Cows normally can have an odorless, red to brownish-red (mostly bloody) vaginal discharge for up to 14 days after calving. But a fetid-smelling, reddish-brown to gray discharge is a sign of an infection or retained placenta.
- » **Check rectal temperature for fever.** While a fever greater than 103 degrees Fahrenheit can be a telltale sign of a health problem, be aware that as many as 60% of cows with metritis don't have an elevated temperature. (Normal rectal temperature for dairy cows ranges from 100.4 to 102.8 degrees Fahrenheit.)
- » **Assess manure consistency.** Manure should be firm enough to form a patty. However, foul-smelling manure with a fluid consistency or that contains blood may indicate disease or a poorly functioning rumen.
- » **Look for cows with a decreased appetite.** Check for the absence of feed "holes" in front of cows after they've been at the feed bunk to identify those that are standing at the bunk but not eating.
- » **Check udder fill before milking and milk weights daily or at every milking.** Milk yield and udder fill can provide clues about a cow's overall health and how it has been eating. An udder that isn't full can be a sign that the cow may be experiencing metritis, ketosis, hypocalcemia (milk fever), displaced abomasum or pneumonia.
- » **Assess the cow's appearance and demeanor.** Watch for signs of general depression such as standing alone, lack of appetite and low hanging head. Sunken eyes can suggest dehydration, while crusty eyes and nasal discharge can indicate a potential respiratory problem. Cold, droopy ears also may indicate a sick cow, possibly one with low blood calcium (hypocalcemia). And don't forget to check tail position since a raised tailhead can be a sign of uterine inflammation.

If you suspect a cow has metritis, have your veterinarian evaluate the cow to confirm your suspicions with a diagnosis. Cows with metritis typically can stay in the fresh pen and don't need to be moved to a hospital pen unless the case is complicated.



## TREAT EARLY TO REDUCE DISEASE IMPACTS AND RETURN FRESH COWS TO PRODUCTION

Once a diagnosis of metritis is confirmed, prompt treatment with a systemic antibiotic is appropriate to return the cow to health and peak productivity. Cefenil® RTU (ceftiofur hydrochloride) sterile suspension from Norbrook Laboratories is now approved by the Food and Drug Administration for use in lactating dairy cows to treat acute metritis associated with ceftiofur-susceptible bacteria. It's also approved for treatment of foot rot and bovine respiratory disease.

The first ready-to-use, veterinary-prescription, generic ceftiofur hydrochloride injectable, Cefenil RTU is easy to incorporate into your existing fresh cow monitoring and disease treatment protocols. To treat metritis, administer Cefenil RTU subcutaneously or intramuscularly at a dosage of 2 mL sterile suspension per 100 pounds of body weight once every 24 hours for five consecutive days. When treatment timing coincides with one of the fresh cow evaluations, you or your employees have an opportunity to assess treated cows and confirm whether they're improving or if they need additional supportive care.

With Cefenil RTU, there's zero milk discard, so milking routines aren't disrupted. There's also no need to move cows to hospital pens which can add stress to an already-stressed cow. The injectable suspension's three-day preslaughter withdrawal is one of the shortest withdrawal times for treatments on the market today.

The bottom line is that Cefenil RTU provides you and your herd with the same effective treatment as Excenel® RTU EZ but as a more cost-effective formula.

Cefenil RTU is made by Norbrook Laboratories, a company committed to producing generic veterinary pharmaceutical products. Norbrook is known for providing quality medicines, economical pricing of its products and its commitment to enhancing the health of food and companion animals. To learn more about Cefenil RTU, contact your Norbrook representative, call (866) 591-5777 or visit us online at [Norbrook.com](http://Norbrook.com).

#### REFERENCE

1. Overton M, Fetrow J. Economics of postpartum uterine health. In: *Proceedings of the 2008 Dairy Cattle Reproduction Council Convention*. 2008:39-44.

## A VETERINARIAN'S PERSPECTIVE: MANAGING METRITIS IN THE DAIRY

For Dr. David Chapman, a veterinarian with Stateline Veterinary Services in Darien, Wi., managing metritis is a serious condition that can impact 5 to 10% of the producing dairy cows in their service area. "It's a high-impact disease that we need to pay attention to that pops up from time to time. And it's one that cost producers not only in lost milk production and fewer days in milk, but also lost reproductive capacity and production over the life of the cow."

Stateline Veterinary Services was one of the first practices to use Cefenil when it was introduced and Dr. Chapman says it's been a highly effective in helping them and their producers treat metritis. "The active ingredient in Cefenil has a great track record in treating metritis-causing bacteria that are sensitive to ceftiofur hydrochloride," he says. "It's the only ready-to-use antibiotic that doesn't require cows to be separated and milk to be discarded. It also has a short 3-day slaughter withdrawal, which helps producers keep their management options open."

More importantly, Dr. Chapman says clients who have used Cefenil have been very happy with the results and the cost of the product. "It's very easy to administer—one subcutaneous or IM injection every day for five days—it's fast-acting, and very economical compared to other options. It is the right product at the right time for helping dairy producers under these current economic conditions."

For Dr. Chapman, managing metritis in dairy cows is about monitoring and expeditious treating with the right cost-effective tool. "A cow's attitude and appetite are key indicators to most health problems in the dairy, and three to 10 days in milk is the most important time to be monitoring," he says. "If metritis is diagnosed, treating it early with veterinarian prescribed Cefenil has shown to be a highly effective and economical way to get cows healthy and keep them producing."



Observe label directions and withdrawal times. Not for use in calves to be processed for veal. As with all drugs, the use of Cefenil® RTU (ceftiofur hydrochloride sterile suspension) is contraindicated in animals previously found to be hypersensitive to the drug. See product labeling for full product information.

© 2020 Norbrook Laboratories Limited. All rights reserved. The Norbrook logos and Cefenil are registered trademarks of Norbrook Laboratories Limited. Excenel is a registered trademark of Zoetis Inc.