



HELP PROTECT YOUR HERD  
WITH THE TOTAL PACKAGE.  
DEMONSTRATED SAFETY  
AND EFFICACY.



enviracor™ J-5

## Coliform mastitis. Frightening in its severity and frequent fatality.

Well-managed herds that have effectively controlled contagious mastitis are especially at risk for coliform mastitis. It carries the greatest potential for losing a quarter or even the cow, in part because of bacterial endotoxins.

*Escherichia coli* can be found throughout a cow's environment.

- Up to 53 percent of all coliform mastitis cases are caused by environmental bacteria.<sup>4</sup>
- *E. coli* is the primary bacterium responsible.<sup>5</sup>
- Milk should be cultured to learn which bacteria are involved so a vaccination program can be targeted.

Vaccination should be part of every *E. coli* mastitis management program.

While complete prevention of *E. coli* mastitis is impossible, vaccination with an *E. coli* vaccine will help **lessen the severity** of cases and help provide an **opportunity for successful treatment**.



# 60 to 70 percent

Coliform mastitis infections that become clinical<sup>1</sup>

# 50 percent

*E. coli* mastitis infections established during the dry period that remain dormant until shortly after freshening<sup>2</sup>

# \$378.13

Average cost of each case of clinical *E. coli* mastitis<sup>3</sup>

When coliform mastitis occurs, it can cause:

- Fever
- Abnormal milk
- Lack of appetite
- Excessive udder edema
- Diarrhea
- Dehydration
- Dramatic drop in milk production
- Death

# A total package of safety and demonstrated efficacy.



ENVIRACOR™ J-5 is the safe and effective way to help control clinical signs associated with *E. coli* mastitis.

**Efficacy = 2½ days shorter duration of *E. coli* mastitis.<sup>6</sup>**

The three-dose regimen helps stimulate the immune system for optimum response to help fight clinical *E. coli* mastitis.

**Less risk = Greater potential for profit.**

Each case of clinical *E. coli* mastitis costs an average of \$378.13.<sup>3</sup> Producers may expect an **additional \$57 income per cow per lactation** using ENVIRACOR J-5 in a whole-herd vaccination program.<sup>3</sup>

**Help protect your herd with the original *E. coli* vaccine.**

ENVIRACOR J-5 is the pioneer brand in the mastitis vaccination category, and is the No. 1 selling *E. coli* vaccine.<sup>9</sup>



## Safety = Lower endotoxin levels.

High endotoxin levels may cause:<sup>7</sup>

- Shock
- Fever
- Leukopenia (low white blood cell count)
- Abortion

When making vaccine decisions, it is important to consider the amount of endotoxins present in the vaccine.

**Choose the lower endotoxin concentration<sup>8</sup>**

Vaccine	Endotoxin Units/Dose
<b>ENVIRACOR J-5</b>	<b>14,583</b>
J-VAC®	800,000

## Part of a dairy's mastitis management program.

A comprehensive dry cow mastitis management program can help reduce the number of new infections, as well as successfully treat existing infections. Management includes vaccination, hygiene and treatment.

- Work with your veterinarian to help identify problem areas.
- Maintain clean, dry freestalls and corrals with inorganic bedding.
- Keep the ratio of cows to freestalls near 1-to-1.
- Use properly functioning milking equipment.
- Minimize use of water to wash teats before milking.
- Before milking, use commercial pre-dip and forestrip.
- Dry teats completely, including teat ends, with one cloth towel per cow prior to milking.
- Attach units no less than 90 seconds after stimulation.
- Prevent inflation squawks; correct squawks promptly.
- After milking, shut off vacuum and remove all four teat cups at once.
- Make fresh feed available after milking so cows remain standing at least 30 minutes to an hour, allowing teat ends to close more completely before cows lie down.
- Ensure that selenium and vitamin E are at optimum levels in the lactating and dry cow ration for optimal function of the immune system.
- Use ENVIRACOR™ J-5 to help control clinical signs associated with *E. coli* mastitis.

Visit [www.milkqualityfocus.com](http://www.milkqualityfocus.com) for more information on how to incorporate vaccination into an overall mastitis management program for better milk quality.



**For more information, contact your veterinarian or Zoetis representative, call ZOETIS1 (888-963-8471) or visit [zoetisUS.com](http://zoetisUS.com).**

<sup>1</sup>Hogan J, Smith KL. Coliform mastitis. *Vet Res* 2003;34:507-519. Available at: [www.vetres-archive.org/file/Vet.Res.\\_0928-4249\\_2003\\_34\\_5/Vet.Res.\\_0928-4249\\_2003\\_34\\_5\\_ART0003.pdf](http://www.vetres-archive.org/file/Vet.Res._0928-4249_2003_34_5/Vet.Res._0928-4249_2003_34_5_ART0003.pdf). Accessed Jan. 7, 2011.

<sup>2</sup>Godden, S. et al. Effectiveness of an internal teat seal in the prevention of new intramammary infections during the dry and early-lactation periods in dairy cows when used with a dry cow intramammary antibiotic. *J Dairy Sci* 2003;86:3899.

<sup>3</sup>DeGraves FJ, Fetrow J. Partial budget analysis of vaccinating dairy cattle against coliform mastitis with an Escherichia coli J5 vaccine. *JAVMA* 1991;199:451-455.

<sup>4</sup>Erskine, P.C. et al. Efficacy of systematic cefiofur as a therapy for severe clinical mastitis in dairy cattle. *J Dairy Sci* 2002;85:2571-2575.

<sup>5</sup>Todhunter, D.A., Smith, K.L., Hogan, J.S. & Schoenberger, P.S. Gram-negative bacterial infections of the mammary gland in cows. *Am. J. Vet.* 1991;52:184-188.

<sup>6</sup>Data on file, Study report No. 3931-60-08-56, Zoetis Inc.

<sup>7</sup>Tizard, Ian R. *Veterinary Immunology: An Introduction*. 8th ed. Amsterdam: Elsevier Health Sciences, 2008;59:278.

<sup>8</sup>Data on file, Study Report No. 0709-115, Zoetis Inc.

<sup>9</sup>MDI US Cattle Q4 2011.