

# Calf Notes.com

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## ***Calf Note #14 – Navel Disinfection***

**Introduction.** The keys to disease prevention in newborn calves are passive transfer of immunity and exposure to pathogens. We place a lot of emphasis on the former and too little emphasis on the latter. Minimizing the calf's exposure to pathogens is one of the surest, easiest, and most cost effective methods of improving calf survival. And it doesn't take too much effort.

Pathogens that cause calfhood diseases (rotavirus, Salmonella, *E. coli*, *Cryptosporidium*, etc.) are usually passed to the calf through the calf's environment. Bedding and manure that contain organisms or oocysts are a ready source of contamination. The mother can also harbor organisms that can infect the calf - be it through the colostrum and milk (e.g., Johne's) or from manure on the dam's body. Newborn calves are at a real disadvantage when it comes to fighting disease. Not only are they highly stressed, but their immune defenses are minimal until it begins to consume colostrum. In addition, the animal has an opening into its circulation - the umbilical cord. Infection of the cord can result in rapid disease (septicemia, or "bacteria in the blood") and death. It is very important to minimize the potential infection of the navel cord by disinfecting the navel. Unfortunately, a recent USDA (NAHMS) study revealed that only about 47% of calves have their navels dipped. Studies have shown that calf mortality is reduced when the navel is dipped shortly after calving. Therefore, it should be a consistent management practice for all dairy producers.

Be sure to use a strong tincture of iodine to dip the navel (at least 7% iodine), and not dilute iodine solutions such as teat dip. This will inhibit microbial migration into the calf's body. Tincture of iodine also contains alcohol, which will help seal and dry the cord. Dip the navel, don't use a spray. Sprays don't cover well enough unless you really work at it. You can purchase inexpensive devices designed specifically for navel dipping. They're well worth it.

According to Dr. G. A. Donovan, University of Florida, you should dip the navel as soon as possible after birth, when you move the calf to the hutch or pen, and again 12 to 18 hours later. Remember, dipping the navel is one way to reduce an animal's exposure to disease causing pathogens. It's easy, inexpensive, and pays great dividends in terms of reduced calf mortality, morbidity, and treatment expenses.

Written by Dr. Jim Quigley (14 May 1997).  
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