

Internal teat sealants revisited: New options

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Internal teat sealants are a common tool used at dry off to provide a physical barrier in the teat canal against microorganisms, including those that cause mastitis. There are many research studies that have shown the use of internal teat sealants significantly reduce the number of new infections during the dry period when used aseptically. Benefits can be seen when used with dry cow antibiotic therapy or when used alone, such as in selective dry cow therapy.

Orbeseal, manufactured by Zoetis, has been the main teat sealant on the market for a period of time. However, there are several other options that have recently become available for use, including the following:

- Lockout (Boehringer Ingelheim)
- MastiShield (Aspen Veterinary Resources, Ltd)
- BoviBlock (VetOne)

These teat sealants are 4 gram sterile pastes. Orbeseal, MastiShield, and BoviBlock are white pastes while the Lockout teat sealant from Boehringer is a blue paste. Teat sealants typically do not have a meat or milk withdrawal but the dry cow antibiotic intramammary tubes do have a milk and meat withdrawal that should be followed.

No matter the brand of teat sealant used, take care to perform infusions aseptically to avoid pushing microorganisms into the teat canal. One study actually found an association between *Prototheca* mastitis cases and use of an internal teat sealant when not used in a sterile manner.

General tips for internal teat sealant use include the following:

- Follow the product-specific label instructions for the infusion of teat sealant at dry-off and the removal of after freshening.
 - One helpful tip: Orbeseal contains some air in the tube that should be expressed before insertion and infusion into the quarter.
- Use the partial insertion technique.
- Store tubes in a clean, dry environment.
- In the winter, do not warm tubes up by placing them in a bucket of water.
- Wear clean gloves.
- Use larger alcohol wipes or sterile gauze soaked in alcohol to disinfect the teat ends if the alcohol wipes provided with the tubes are very small. Use only 1 wipe per teat.
- Clean the teat end by holding the teat steady with the thumb and forefinger of one hand, while using an alcohol wipe in the other hand to vigorously wipe back and forth across the teat end.