



***Trueperella pyogenes*:** **A Practical Summary for Controlling Mastitis**

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Trueperella pyogenes are environmental pathogens that typically cause an acute, purulent form of mastitis that is sometimes referred to as “summer mastitis.” *Trueperella pyogenes* are Gram-positive bacteria that can appear like coccobacilli — an intermediate between cocci and bacilli. When plated on blood agar, scant to no growth is visible at 24 hours. However, at 48 hours, tiny, pinpoint, smooth, whitish colonies develop and are surrounded by a narrow zone of hemolysis.

Information in this publication was summarized from the National Mastitis Council’s Laboratory Handbook on Bovine Mastitis (Hogan et al. 1999).

Where are these organisms found?

Reservoirs of *Trueperella pyogenes* include teat injuries, wound infections, udder infections, abscesses, and genital tracts.

How do *Trueperella pyogenes* spread to the mammary gland?

Trueperella pyogenes is spread by flies, though recent research shows its transmission cannot be fully attributed to flies alone (Wente et. al., 2024).

How can you prevent and control mastitis caused by *Trueperella pyogenes*?

Prevention must include an effective fly control program as well as maintaining clean, dry environments, particularly for calving areas. Fly control programs should include routine manure removal; maintaining clean, dry pens; routine cleaning of waterers and feed bunk areas; and the use of insecticides and/or fly traps.

Other control strategies include “killing” or drying off the infected quarter or removing the cow from the herd.

When are *Trueperella pyogenes* mastitis infections most likely to occur?

Trueperella pyogenes typically cause mastitis in dry cows or heifers prior to calving, particularly during the summer or humid weather. It is for this reason it is sometimes referred to as “summer mastitis.” Infection can occur in lactating animals with teat injuries or due to the use of cannulas or dilators.

How likely is *Trueperella pyogenes* mastitis to cure?

Once the infection is established, prognosis is poor, and cows will typically lose function of the infected quarter. In order to prevent the spread of *Trueperella pyogenes*, infected cows will typically need to have the quarter dried off, or they will need to be removed from the herd.

Quick Notes

- *Trueperella pyogenes* are environmental pathogens associated with teat injuries.
- *Trueperella pyogenes* mastitis typically occurs prior to calving, during the dry period.
- *Trueperella pyogenes* are spread by flies; thus, an effective fly control program is very important.
- Prognosis after infection is established is poor; therefore, “killing” or drying of the quarter or removing the cow from the herd is necessary to prevent the spread of this pathogen.

References

- Hogan, J. S., R. N. Gonzalez, R. J. Harmon, S. C. Nickerson, S. P. Oliver, J. W. Pankey, and K. L. Smith. (1999). *Laboratory Handbook on Bovine Mastitis*. Madison, WI: National Mastitis Council.
- Wente, N., Leimbach, S., Woudstra, S., & Krömker, V. *Trueperella Pyogenes—Strain Diversity and Occurrence in Dairy Herds*. *Pathogens*, 13(7), 534. 2024.

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