Streptococcus agalactiae

Unlike other Strep species, *Strep agalactiae* is an obligate udder pathogen, meaning it lives and reproduces only in cows’ udders and is generally not found in the environment. Although it used to be a significant mastitis pathogen in the US, *Strep agalactiae* is now relatively uncommon due to its susceptibility to common control measures.

**Source / Transmission**

*Strep agalactiae* is a contagious pathogen. Intramammary infections occur primarily during milking, when milk from an infected cow comes into contact with the teat end of an uninfected cow. The infection is spread by contaminated milk on milking equipment, towels or milker’s hands. Heifers may become infected as calves due to cross-sucking in herds where non-pasteurized waste milk containing *Strep agalactiae* is fed. These heifers may freshen with blind or infected quarters.

**Infection**

Infections caused by *Strep agalactiae* are usually subclinical with periodic clinical flare-ups. Clinical episodes are mild or moderate. However, infected cows usually have a high somatic cell count and decreased milk production. These bacteria infect the gland cistern and ductal system of the udder, producing irritants that damage the gland and its production capacity.

Bacteria may be shed in high concentration from infected cows, occasionally resulting in increased bulk tank bacterial counts. This or an elevation of bulk tank somatic cell count to very high levels (>1,000,000 cells/ml) despite a low rate of clinical cases should lead one to suspect a problem with *Strep agalactiae*.

**Treatment**

*Strep agalactiae* is generally very susceptible to beta-lactam antibiotics. Therefore treatment with a beta-lactam intramammary product, either in a lactating or dry cow formulation, is most often effective. The rare cow that fails to cure after an appropriate course of therapy should be culled due to the high risk of transmission.

**Control**

Because *Strep agalactiae* only survives inside cows’ udders, it is possible to eradicate it from a herd. In cases where a high prevalence of infection with *Strep agalactiae* is present, “blitz” therapy may be considered. In blitz therapy every cow in the herd is treated at one time. A second option is whole herd culturing to identify infected cows for treatment. Consultation with the herd veterinarian is recommended to determine the most appropriate and economical course of action.

In herds where whole herd treatment or culturing is impractical, the use of herd records to identify cows with a high somatic cell count or recurrent clinical episodes is necessary. In addition, cows that have been treated should be monitored for a persistently elevated somatic cell count as an indication of treatment failure.

New outbreaks of *Strep agalactiae* mastitis in formerly unaffected herds may be caused by purchasing infected animals. Biosecurity practices, such as testing and segregating all new animals, are recommended to avoid bringing contagious mastitis pathogens into the herd. Periodic bulk tank culturing is an effective way to monitor for the presence of *Strep agalactiae* infections.

Other standard measures for controlling contagious mastitis should be applied, including blanket dry cow therapy, use of effective pre- and post-milking teat disinfectant, wearing milking gloves and single-use towels.

**References**

A Practical Look at Contagious Mastitis. [http://nmconline.org/contmast.htm](http://nmconline.org/contmast.htm)