



### **Streptococcus agalactiae (Strep ag) (reviewed April 2017)**

*Streptococcus agalactiae* (Strep ag) is an important mastitis pathogen because of its highly contagious nature and its ability to degrade milk quality. Most infected cows show no overt signs of disease such as abnormal milk, but have high somatic cell counts and decreased milk production. Herd level Strep ag infections can produce enough bacteria to raise the bulk tank Standard Plate Count [SPC] or Plate Loop Count [PLC]. Strep ag can only grow and multiply in the udder, but can survive for short periods on hands, milking machine parts, and teat skin. Infected cows are always the source of new infections. Strep ag is spread mechanically by items mentioned above or by the mouths of sucking calves. Strep ag can be introduced into an uninfected herd with the purchase of an infected cow or by the use of contaminated milking equipment at a fair, auction, etc. Milk culture from suspect animals is the only means of identification of infection. The economic impact of Strep ag mastitis is primarily due to lost milk production and degradation of milk quality. Infection does not usually cause life threatening illness, and often shows few or no obvious clinical signs of mastitis. Increased bacteria and somatic cell counts can cause a loss of quality bonus, decreased milk quality in general and loss of the farm's milk market. The insidious nature of the disease allows it to spread in a dairy without notice until a significant problem arises such as a high bacteria or somatic cell count. Replacing inflations, assuring proper function and cleaning of the milking system and proper cooling of the milk does not lead to significant improvement in controlling the problem. If a problem of this nature is suspected, bulk tank milk cultures can demonstrate the presence of Strep ag in the herd. Occasionally, a single bulk tank milk culture does not reveal the infection in large herds with few infected cows so routine monitoring (monthly) of bulk tank milk is indicated.

Once a bulk tank sample has been found to be positive for Strep ag:

1. Consult with QMPS and your herd veterinarian.
2. Immediately institute pre and post milking infection control procedures which include pre and post milking teat dipping, wipe teats clean and dry with single use towels, all milkers wear gloves during milking.
3. All cows in the herd should be sampled and their milk cultured. This service is available through QMPS
4. Treat all 4 quarters of infected cows with an approved intramammary antibiotic as directed by your veterinarian.
5. Establish a milking routine where known infected/treated cows are milked last until they are culture negative at the next herd sampling (3 weeks post treatment).
6. Follow-up herd sampling at 3-4 week intervals and treat new and repeat infections with approved intramammary antibiotics.
7. Cull the cows that do not respond to aggressive treatment.
8. Monitor herd infection status with weekly bulk tank milk cultures for 3 months after the last negative herd culture.



Following the elimination of this pathogen from the herd, establish excellent mastitis prevention procedures:

1. Good milking technique including pre-milking udder and teat sanitation.
2. All milkers should wear gloves while milking and rinse, sanitize and dry gloved hands often during milking especially if hands become contaminated with milk.
3. Post-milking teat dipping.
4. Treatment of all clinical cases with an appropriate antibiotic.
5. Dry treating all quarters of all cows with an effective antibiotic.
6. Proper maintenance of milking equipment.
7. Sample and culture milk from all new or returning cows and heifers.