

CONTAGIOUS BACTERIA

Mastitis is caused by two different types of pathogens:

- Bacteria living and multiplying in the environment, called “environmental bacteria”
- Bacteria living and colonizing the skin (udder skin, teat skin or hand skin), named “contagious bacteria”.



Environmental bacteria



Contagious bacteria

Photo: Courtesy of DVM Josephine Verhaeghe, dairy technical support, CID LINES

Contagious bacteria are mainly associated to subclinical mastitis (without visible signs), engendering a reduction in milk production and economical losses for the farmer.

The milking time is the main risk period. Indeed, contagious bacteria are spread by some vectors during milking from an infected cow to healthy animals. The principal vectors are: milker hands, collective towels, teat liners... Maintaining a good teat skin condition and choosing an adequate post-milking disinfection are essential techniques to control contagious infections.

Key factors to avoid transmission of contagious bacteria during milking:

- Wearing gloves prevent hand skin to be colonized by bacteria during milking.



Photo: Courtesy of M-team^{UGent}, Faculteit Diergeneeskunde, Universiteit Gent.

- Using individual paper towel to clean teats before milking avoid a cross contamination between cows.

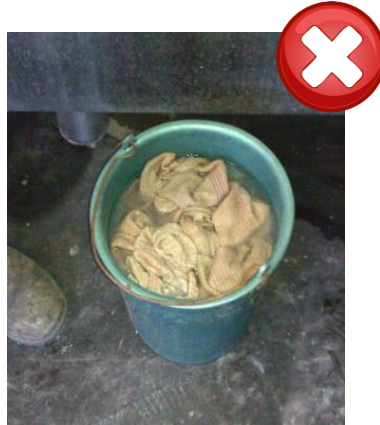


Photo: Courtesy of DVM Josephine Verhaeghe, dairy technical support, CID LINES

- Disinfecting the liners after each infected animals prevents the transmission of pathogens via the milking machine .



Automatic portable streamer used in a milking parlour to disinfect milking liners

Photo: Courtesy of M-team^{UGent}, Faculteit Diergeneeskunde, Universiteit Gent.

- Finally, the post dipping disinfection is a crucial step in the management of contagious mastitis. First, it kills bacteria deposited on the teat skin by the milking liners, reducing the risk for the teat end and teat canal to be colonized. Secondly, a good post-dip disinfectant must take care of the teat skin. Indeed, a bad teat skin condition is a direct risk for mastitis: lesions, wounds or dry skin provide a perfect environment for contagious bacteria multiplication thanks to blood, humidity and "hiding places".



Photo: Courtesy of DVM Robin Franzon, dairy technical support, CID LINES