

## Research program IZS VE 02/13

### Development of a mastitis surveillance program for dairy cattle herds

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Mastitis is considered a major disease in dairy cattle, causing relevant production losses. Cow welfare, reduction of the (ab)use of antibiotics, food safety, and financial aspects are the major reasons to apply control programs for mastitis. So far, *S. aureus* and *S. agalactiae* are well recognized agents of mastitis while the pathogenicity of other microorganisms like *Mycoplasma*, *Klebsiella*, *Serratia*, *Prototheca*, as well as their prevalence, seem to be underestimated.

The design of an efficient and rational control program is pivotal to improve dairy herd sustainability. The program requires to assess in an objective way herd management risk factors and this involve farm data accessibility and availability, a clear planning and a dynamic team for farm assistance and diagnostics.

Moreover, a molecular epidemiology approach will allow a better understanding of udder infection dynamics in dairy herds. Aim of this project is hence to implement a surveillance program to prevent, early detect and reduce the occurrence of mastitis on dairy cattle farms in North-Eastern Italy with a novel approach based on the best epidemiological techniques both at management and diagnostic level.