

## Research program IZS VE 12/16

**Evaluation of different strategies to decrease the use of antimicrobials in dairy and beef cattle herds**

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The reduction of antimicrobial usage in food-producing animals has emerged as a worldwide task priority. Italy is one of the European countries with the highest usage of livestock antimicrobials. This study aims at evaluating different strategies to decrease the use of antimicrobials in cattle with the ultimate goals to:

- evaluate the main risk factors affecting the occurrence of mastitis due to an intramammary infection (IMI) during the dry period in large dairy herds in Northern Italy;
- evaluate the main risk factors affecting the occurrence of Bovine Respiratory Disease (BRD) in large beef herds in Northern Italy;
- set up a strategy in dairy herds to reduce the use of antimicrobials at the dry-off of the cows without negatively affecting milk production and quality;
- set up a strategy in beef herds related to management and environmental conditions which lead to reduce of antimicrobials against BRD

The outcomes of the project will indicate the most effective strategies to reduce antimicrobial usage in cattle herds without affecting the production and the economy of the farms. Data will support the development of practical guidelines for veterinarians for the reduction of antimicrobials drugs in cattle herds.