

## Research project IZS VE 08/11

**Chemical, physical and microbiological monitoring of drinking water in swine and turkey herds of the Veneto Region: investigating the impact of water quality on drug administration efficacy, livestock welfare and food safety**

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Reg. 852/2004/EC establishes requirements for livestock drinking water as “potable water or clean water, whenever necessary to prevent contamination to livestock production” without specifying any qualitative parameter for clean water. Water from farm wells (used for drinking supply) may be subject to contaminant infiltration: inorganic substances, fertilizers, bacteria, pathogens like *Campylobacter* and *Salmonella*.

Few data are available about water quality influence on animal production, but surface or ground water reservoirs may alter chemical, physical and microbiological parameters modifying dissolution and stability of antibacterial and anthelmintic ingredients used for mass medication.

Dir. 99/2003/EC requires member states to enact surveillance programs to define the incidence of antibiotic resistance among bacteria causing foodborne diseases. The aims of the study are to: monitor the quality of water supply for livestock of the Veneto Region, investigate the relationship between water quality, drug administration efficacy, animal welfare and food safety, assess the prevalence of foodborne pathogens at primary production, and collect data on antimicrobial resistance in both pathogen and indicator bacteria.