

# Salmonella Dublin

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**Canadian Animal Health Surveillance System  
Dairy Network**

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# CONTEXT

- *Salmonella* Dublin infections in cattle
  - Disease has emerge in Quebec in 2011
  - Present in several regions of the world, including the United States, Europe and other Canadian provinces
  - Severe disease (\$) which mainly affects calves less than 3 months old
- *Salmonella* Dublin infections in humans
  - Disease has emerge in Quebec in 2011
  - Severe disease, but rarely reported
  - Sources of contamination in humans
    - Consumption of raw milk or cheese made from raw milk
    - Contaminated beef products
    - Direct contact
- Concerted action plan

# PREVALENCE SURVEY

- Results

- 2015 : Prevalence of *Salmonella* Dublin seropositive dairy herds in Québec is estimated at

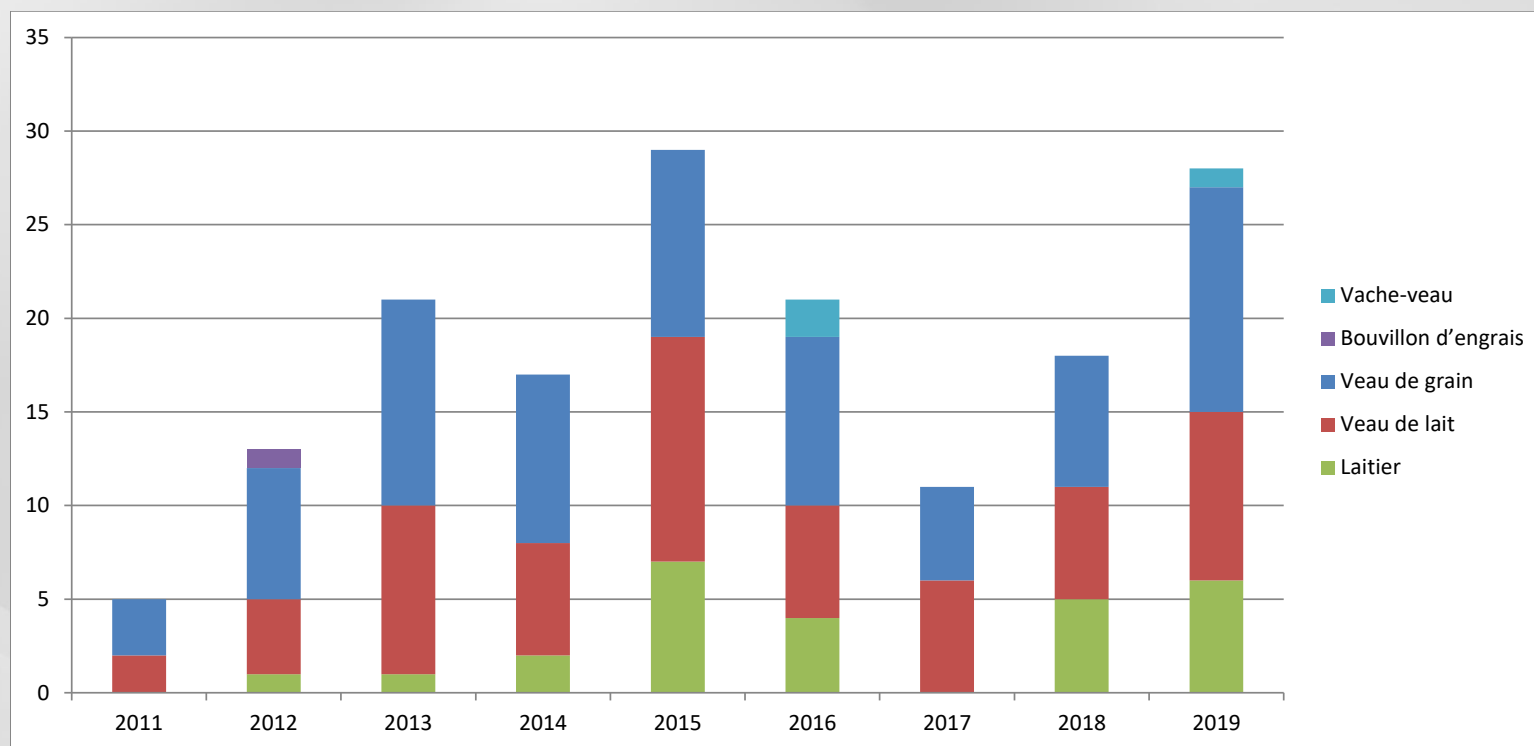
6,8 % (4,4 % à 10,4 %)

- 2016 : Prevalence of *Salmonella* Dublin seropositive cow-calf herds in Québec is estimated at

1,0 % (0,2 % à 5,6 %)

# NUMBER OF CATTLE CLINICAL CASES

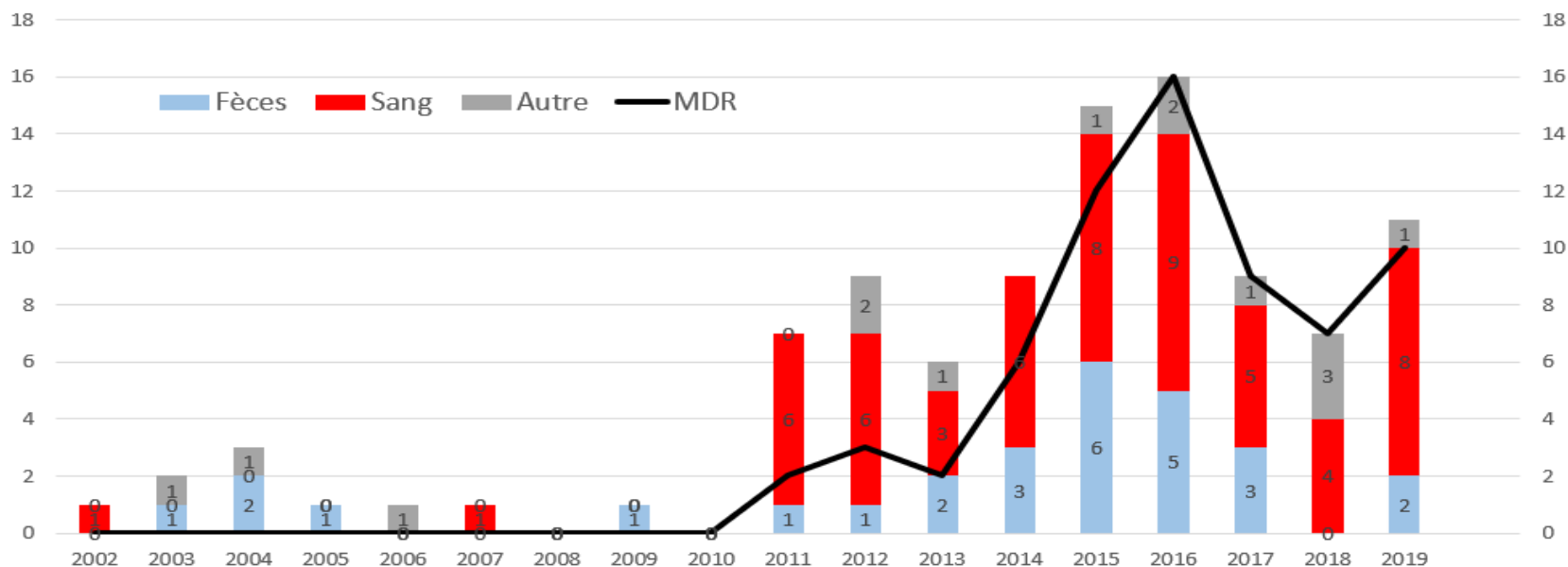
Figure 1. Nombre d'élevage ayant eu des cas d'infections à *Salmonella* Dublin confirmés par une culture bactérienne ou par une PCR dans les laboratoires du MAPAQ ou déclarés\* par d'autres laboratoires de 2011 à 2019 selon le type d'élevage



\* À partir du 30 avril 2015, soit la date d'entrée en vigueur du Règlement sur la désignation des maladies contagieuses ou parasitaires, des agents infectieux et des syndromes.

# NUMBER OF HUMAN CLINICAL CASES

Évolution des infections humaines à *S. Dublin* au Québec  
Données LSPQ



↑  
Émergence parallèle de *S. Dublin* multi-résistants chez les animaux

# PREVENTION

- Implementation of an awareness campaign for producers and service providers on *Salmonella* Dublin infections and the importance of biosecurity and management practices, including movement of animals
  - Information session for producers and service providers
  - On farm visits by veterinary practitioners as part of the PISAQ program
    - Salmonella Dublin infections awareness
    - Development of an adapted biosecurity plan
    - Visits free of charge
  - Information document for veterinary practitioners:  
[https://www.mapaq.gouv.qc.ca/SiteCollectionDocuments/Santeanimale/Reseaubovins/Document\\_information\\_Salmonella\\_Dublin\\_decembre\\_2016.pdf](https://www.mapaq.gouv.qc.ca/SiteCollectionDocuments/Santeanimale/Reseaubovins/Document_information_Salmonella_Dublin_decembre_2016.pdf)

# CONTROL

- Intervention protocol
  - Objective: limit the spread of this disease on Quebec territory, ensure food safety and protect public health
  - Intervention following a positive laboratory test result for Salmonella Dublin in a dairy cattle herd
  - Level of intervention based on risk
  - Intervention done by veterinary practitioner and coordinated by MAPAQ
    - Prevention of zoonosis recommendations
    - Biosecurity and management practices recommendations
    - Milk pasteurization circuit
    - Tracing activities

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