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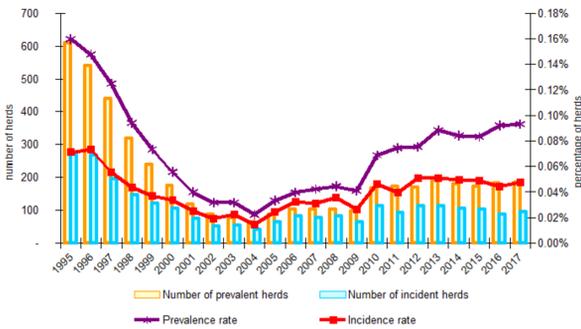


Figure 1 : bTB annual incidence and prevalence in France since 1995

Context: Bovine Tuberculosis (bTB) in France

- France has been declared **officially bTB free in 2001**
- However, **incidence rate has risen unexpectedly in the middle of 2000s (Fig 1)**
- **National action plans** were implemented in 2010 and 2012 in order to maintain France bTB-free status necessary to maintain trade and financial sustainability of many cattle farms
- Between 2015 and 2017 several studies and evaluations were conducted on bTB epidemiology and control, pointing out the necessity to focus efforts in particular on the quality of screening and the development of biosafety measures towards major risk factors
- These efforts must be accompanied by adapted financial support and incentive measures. This is the aim of the **3rd National strategy against bTB in France covering 2017-2022**

FACTS

Surveillance issues

- South-West region
 - 82% of outbreaks (Fig 2)
 - Difficulties to perform single intradermal skin tests correctly: suspicion rate is more than 5 times lower than expected given theoretical performances
- Low acceptability for false positive culling
 - Experimental protocol for IFN- γ use to re-test reactors proved higher sensitivity than single intradermal comparative cervical tuberculin test (SICCT) 42 days later (Praud et al. 2016, Praud et al. 2017)

Main risk factors for Outbreaks (Marsot et al. 2016)

- Recent infection of a neighbouring herd at pasture (odds ratio (OR)=3.6; population attributable fraction (PAF)=30.7%)
- Distance of farm buildings from inhabited areas > 300 m (OR=2.3; PAF=27.6%)
- Sharing water points at pasture with a recent neighbouring outbreak (OR=4,1 PAF=16.3%)

Outbreaks management

- Selective slaughter studies (Ladreyt 2017, Poirier 2017)
 - Probability of recovering bTB-free status falsely could be reduced from 3 to 1% by optimizing intervals between testing before recovering the status
 - Low acceptability for culling inconclusive IFN- γ animals
- Re-contamination (17% of outbreaks in 2017)
- Infection present in wildlife in enzootic areas (SYLVATUB surveillance results 2011-2017)

Translation into

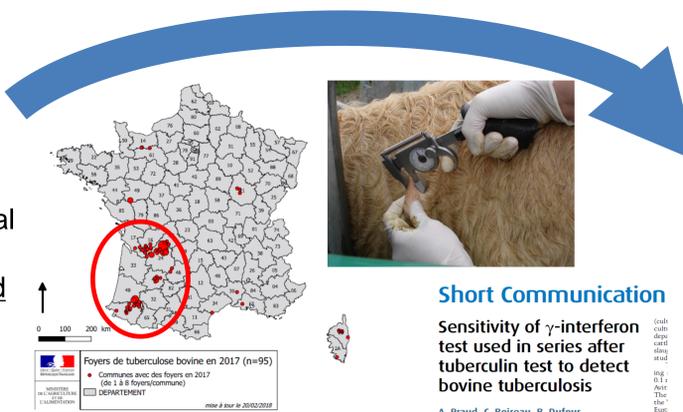


Figure 2: bTB outbreaks in 2017 in France

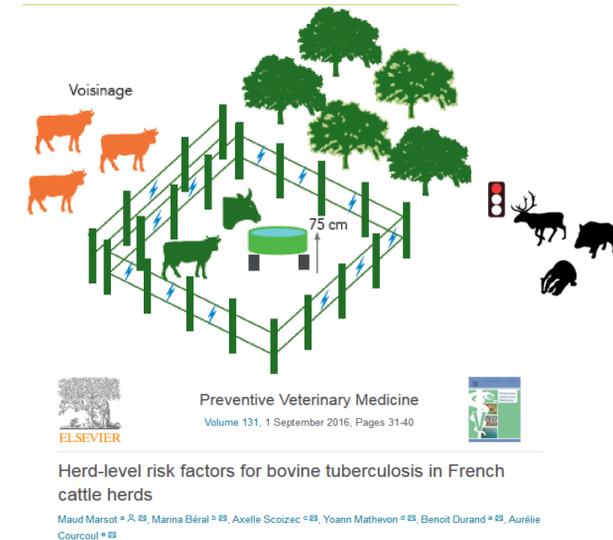


Figure 3: bTB outbreaks per month France

Actions for 2017-2022 bTB control strategy

Goal n°1: design a more efficient surveillance strategy among cattle

- SICCT generalization for screening instead of single skin test (training, regulation revision, financial help)
- EU-level discussion to validate the use of IFN- γ test to shorten the management of SICCT doubtful reactors

Goal n°2: Develop further biosafety

- Biosecurity guidelines and regulatory incentives
- Cost-efficiency evaluation
- Financial support

Goal n°3: Guarantee the eradication of infected areas

- Selecting slaughter procedure evaluation
- Desinfection protocol evaluation
- Adapted control of infected wildlife population

Goal n°4: Adapt management and resources to the challenge of bTB eradication

- Strategy follow-up by a national committee
- Resources, research grants, training, communication ...

Early outcomes and Perspectives

- Early surveillance results are encouraging: suspicion rate increases, 55 outbreaks detected (Fig 3)
- Biosafety guidelines are being discussed in a National Working Group
- There is an opportunity to promote these actions to adapt the European regulations in the course of revision within the framework of the Animal Health Law (regulation 2016/429)