

Development of a risk assessment tool to improve biosecurity against bovine tuberculosis



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The eradication of tuberculosis in animals is one of the political and investment priorities of the European Commission in animal health. This study aims to encourage the improvement of biosecurity in farms, based on individualized solutions for farms taking into their epidemiological context, current biosecurity practices and the probability of tuberculosis introduction.

Research action developed in the frame of the INNOTUB project (https://innotub.eu/en/) which is aimed at improving the control and surveillance of tuberculosis in livestock and wildlife in the trans-Pyrenees region

Considered pathways for tuberculosis introduction in cattle farms Purchase of cattle

- Movements to pasture
- Interaction with wildlife reservoirs
- Interaction with tuberculosis infected neighbouring farms
- Visits of people
- Vehicles picking-up animals from the farm (i.e., to slaughterhouse or calves for fattening)

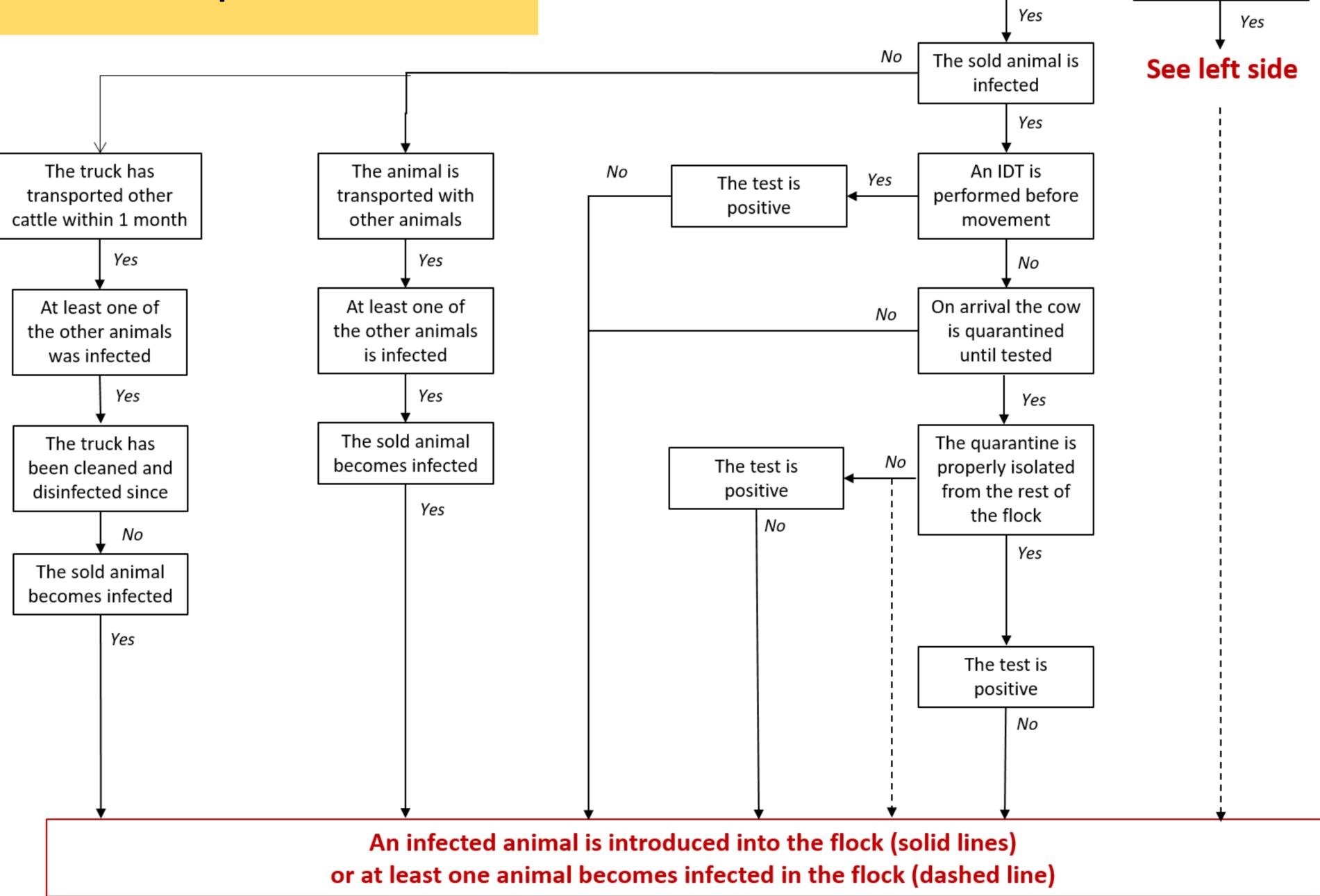
Study population and areas:

- Beef farmers (extensive systems)
- Catalonia (ES)
- Pyrenees-Atlantiques (FR)

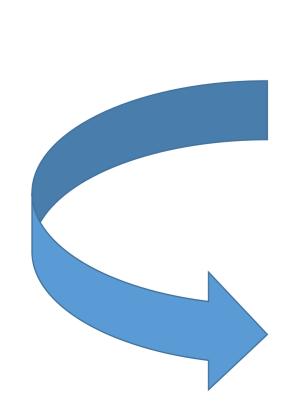
Example of the different parameters considered in the purchase of cattle

50 cattle extensive farms are currently being visited in north-western spain (i.e., Catalonia) and in south western France (i.e., Pyrenees-Atlantiques) to evaluate their biosecurity practices

Relevant parameters for the risk model being assesstment reviewed in the literatute



Development of a quantitative risk assessment model (in process)



Probability of tuberculosis introduction in the herd

Hierarchical list on which biosecurity measures should be reinforced in the farm





The farm buys an

animal in non-

officialy bTB-free

farm

The farm buys an

animal in officialy

bTB-free farm



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