



Special feature of the French beef young bulls' value chain and associated sanitary issue to control bovine respiratory diseases

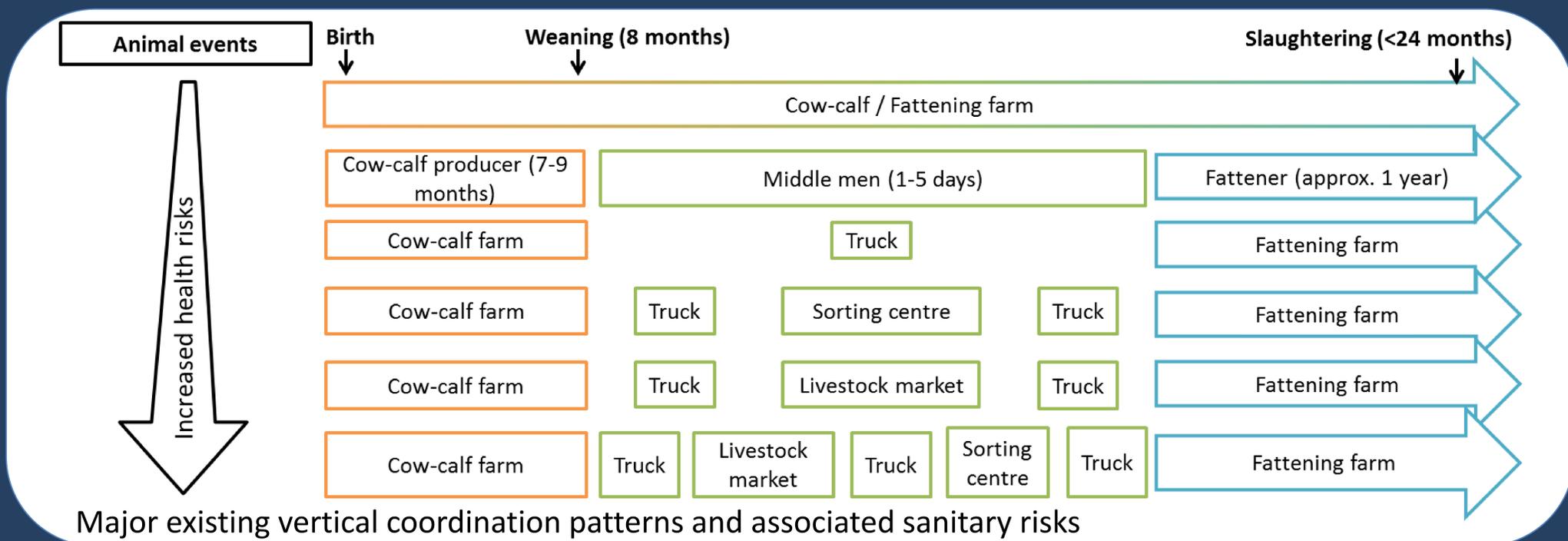
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Context and objective

Preventive antibiotic use should be banished and antibiotic use diminished to preserve antibiotic effectiveness for human and animal health. To control bovine respiratory disease (BRD), antibiotics are used at the beginning of the fattening period in a systematic and preventive manner. Impacts of the BRD are an important economic burden in beef young bulls' sector. We hypothesise that the vertical organization of the young bulls value chain can be in favour of an increased incidence of BRD in fattening unit and can restrain a decrease of antibiotic use. We aim to describe the present organisation of the young bulls' value chain and its influence on BRD risk and control measures.

Material and methods

The economic organisation of the French young bulls' value chain and its influence on health risks was explored using qualitative semi-structured interviews with stakeholders of the value chain (33), and field observations (4).



Results

Cow-calf producers raise weanlings for themselves or deliver them to the lean market. In the simplest scenario, they sell weanlings directly to a **fattener**. Otherwise, they sell them to **middle men**.

Through **middle men**, transfers of animals become more complex. Length of transfers increases stress and decreases immune capacity response of weanlings. In addition, in **sorting centre** and **livestock markets**, there is contact and transmission of pathogens between animals. Finally, batches provided to the fattener are often composed of animals from several farms (up to 10 farms for 10 animals in a given batch).

The vertical organisation of the young bulls value chain increases sanitary risks at the beginning of the fattening period. In using antibiotics, **fatteners** pay for a risk they are only partially responsible for. They technically depend from **cow-calf producers** and **middle men**. From the **cow-calf producer** to the **fattener**, the level of information sharply reduces and doesn't allow a vertical coordination between stakeholders of the value chain.

Key message

There is a lack of coordination in the young bulls' value chain between the production of weanlings and the fattening, which is detrimental to health management. This is due to lack of information transfer and valorisation of health control measures. Improving logistic and economical coordination could allow a reduced number of farms of origin (reduced long mixing of weanlings) and a reduced number of middle men (reduced stress and short mixing of weanlings), resulting in reduced needs for antibiotics.