The mortality of calves in French beef cattle farms: a national review

Béatrice MOUNAIX (1), Philippe ROUSSEL (1) et Sébastien ASSIE (2)

CONTEXT AND OBJECTIVES

- Increase the French beef production.
- Need for national references to estimate individual improvement.

➔ Analysing the mortality of suckling calves to better understand the variability.

METHODOLOGY

- National database of bovine identification: individual dates of birth and death of 8.6 million calves born in 33 982 beef cattle herds between 2005 and 2009.
- Survival models to describe the mortality between the birth and 6 months of age.
- 223 surveys in beef farms to estimate the mortality related to the main pathologies of suckling calves.

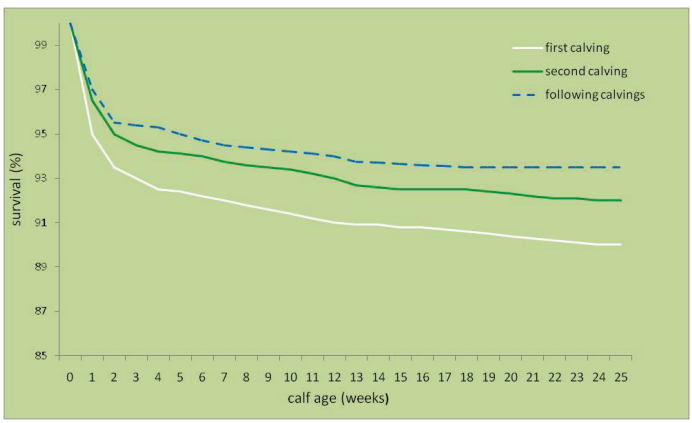
RESULTS

8.36% of average mortality for suckling calves, but high variability between herds: 75% of herds have less than 10% of calf mortality. A significant increase of mortality from 2007 on due to the impacts of the bluetongue.

> Table 1. Mortality of calves according to the breed.

Breed	Average mortality of 0 to 6 months old calves
Aubrac	5.43 %
Salers	5.74 %
Gascone	5.11 %
Limousine	6.53 %
Charolaise	9.78 %
Blonde d'Aquitaine	9.12 %
Parthenaise	13.68 %
Rouge des prés	15.16 %

> Figure 1. Survival of calves according to the calving rank



- Most of the mortality occurs within the first week.
- Males suffer significantly higher mortality (9.5%) than females (7%).
- The breed is the main source of variability in the mortality of calves (Table1), due to the maternal traits of cows (Renand et al, 2010).
- 1st calving rank is significantly associated to a lower survival of calves, but also 2nd calving rank (Figure1).
- Calves mortality is mainly related to calving difficulties and stillbirth, but also to diarrhoea in the 1st week (Navetat et Schelcher, 1999). Respiratory disorders induce lower mortality (Assie et al, 2001).

CONCLUSION: REFERENCES TO SUPPORT IMPROVEMENT

- **First national benchmarks in beef cattle to be used within a tool for intervention by both the veterinary and the farmer to position the herd, and to identify and estimate relevant fields of improvement.**

Assie et al, 2011.Epidémiol. et santé anim., 40: 1-6.
Navetat et Schlecher, 1999. Renc. Rech. Ruminants, 6: 171-175.
Renand et al, 2010. Renc. Rech. Ruminants, 17: 451-454.

(1) UMT « Maîtrise de la santé des troupeaux bovins » - Institut de l'Elevage
(2) UMT « Maîtrise de la santé des troupeaux bovins » - UMR BioEpAR ONIRIS-INRA
Contact: beatrice.mounaix@idele.fr www.idele.fr

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