

ACHIEVEMENT OF EU FREE STATUS FOR BVDV

A long-term collaboration between the Danish authorities and the Danish cattle industry

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1984 Random samples of blood at slaughter (n=1332) selected for bovine leucosis surveillance suggests a **BVD prevalence of 78%** based on neutralising antibodies (Meyling 1984).

1988 A total of 2,570 animals from 19 randomly selected dairy herds were examined. Of the animals **64% were antibody positive** – with positive animals from all herds. Viraemic animals were detected in 10 herds, with a within herd prevalence of 1 to 8% (Houe and Meyling 1991).



1992 Feasibility of eradication was demonstrated on the island Samsø (Figure 1, purple circle). All cattle herds on the island, 36 dairy and 77 beef herds were included. Conclusions: **Sufficient reliability of two Danish developed antigen and antibody tests and surveillance deemed feasible** based on bulk milk testing and randomly blood testing of three young stock. (Bitsch & Rønsholt 1995; Bitsch et al., 1997; Bitsch 2020; Nielsen et al., 2021).



FIGURE 1. BVDV outbreaks the last 10 years, latest outbreak marked red.

1993 **Annual national losses due to BVDV in the dairy cattle population estimated to £13 million per one million calvings** at a constant annual incidence risk of 0.34 (Houe et al., 1993).

1994 The economic losses, the preliminary results of eradication of BVDV from Samsø and the availability of reliable antigen and antibody tests were steppingstones for a **nationwide BVDV control and eradication programme initiated in 1994 by the Bovine Infectious Disease Control Board**. The board included representatives from different cattle farmers’ organisations and the industry. The board was not only represented by decision makers, also observers from the Danish Veterinary and Food Administration and The Danish Veterinary Association were represented. Hereby the table was represented by a broad range of stakeholders, to ensure a continuously ongoing progression in the eradication of BVDV (Bitsch 2020).

1996 **The first national regulation** by the Danish Veterinary and Food Administration was introduced. This second step involved movement restrictions, biosecurity measures and notification requirements. To force a progression in the programme, further restrictions were introduced in the following years (Bitsch 2020; Houe et al., 2014).

2003 **Veterinarians employed by the industry take over preparation of management plans** for eradication in all infected herds.

2006 The eradication programme was **changed to a surveillance programme** with official restrictions for infected herds as the third step in the Danish model for eradication programmes. This could be done due to the low number of infected herds (Figure 2). Since then only sporadic cases have been detected (Figure 1).

2019 **Latest outbreak of BVDV** occurred in a closed dairy herd, located in the northern part of the peninsula Jutland (Figure 1, red dot).

2022 **Achievement of EU free status for BVDV.**

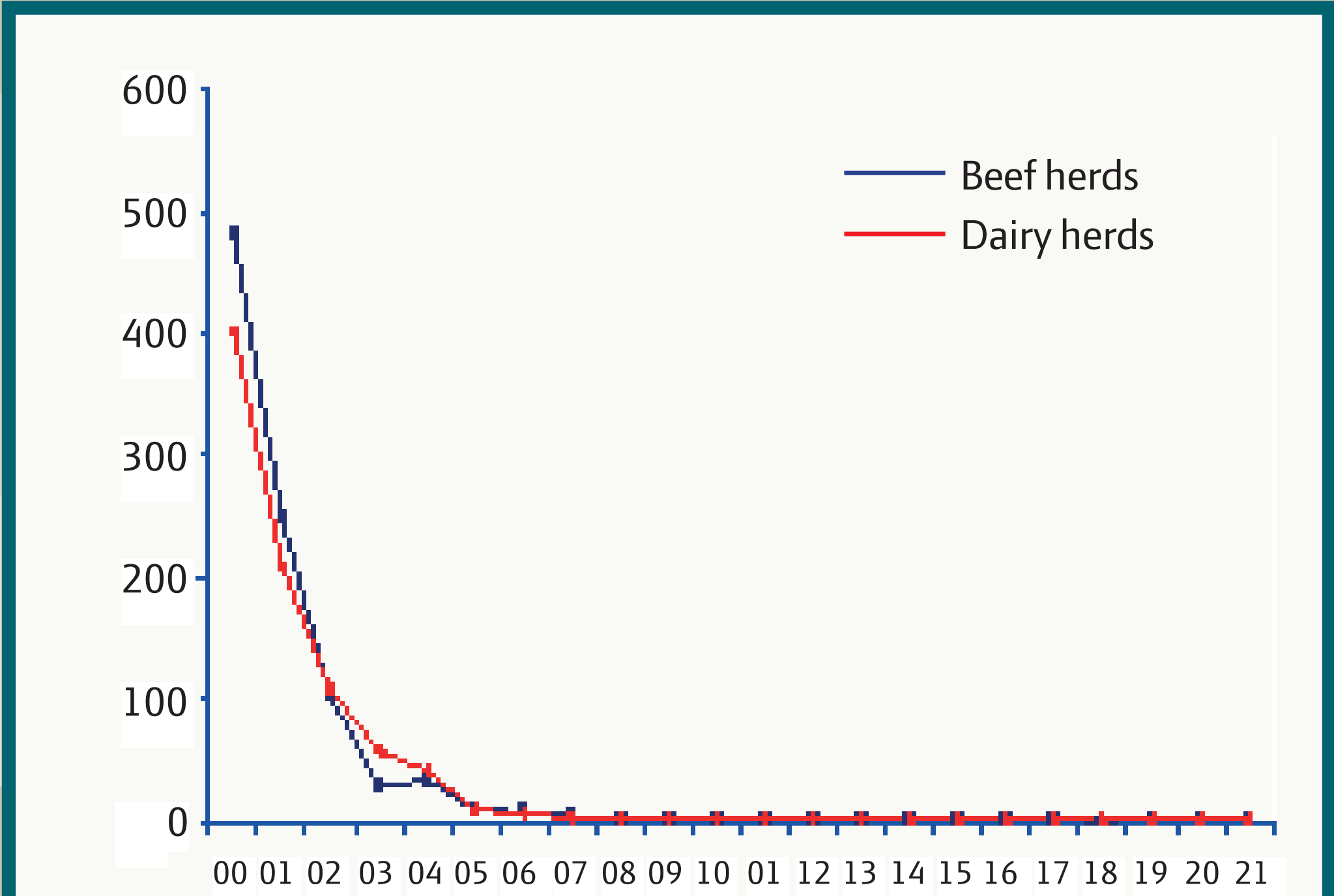
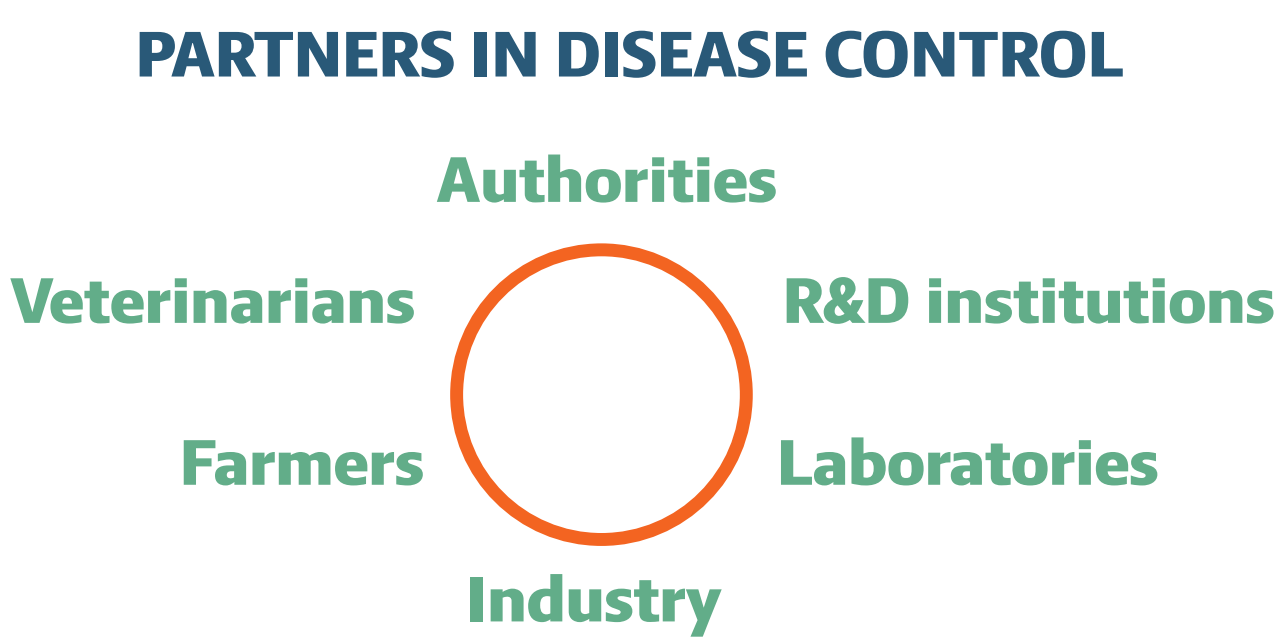


FIGURE 2. Number of establishments not free from BVDV since 2000.

Conclusion
Success in national eradication is depending on involving all stakeholders, dedicated decision makers and financial commitment from both government and industry.



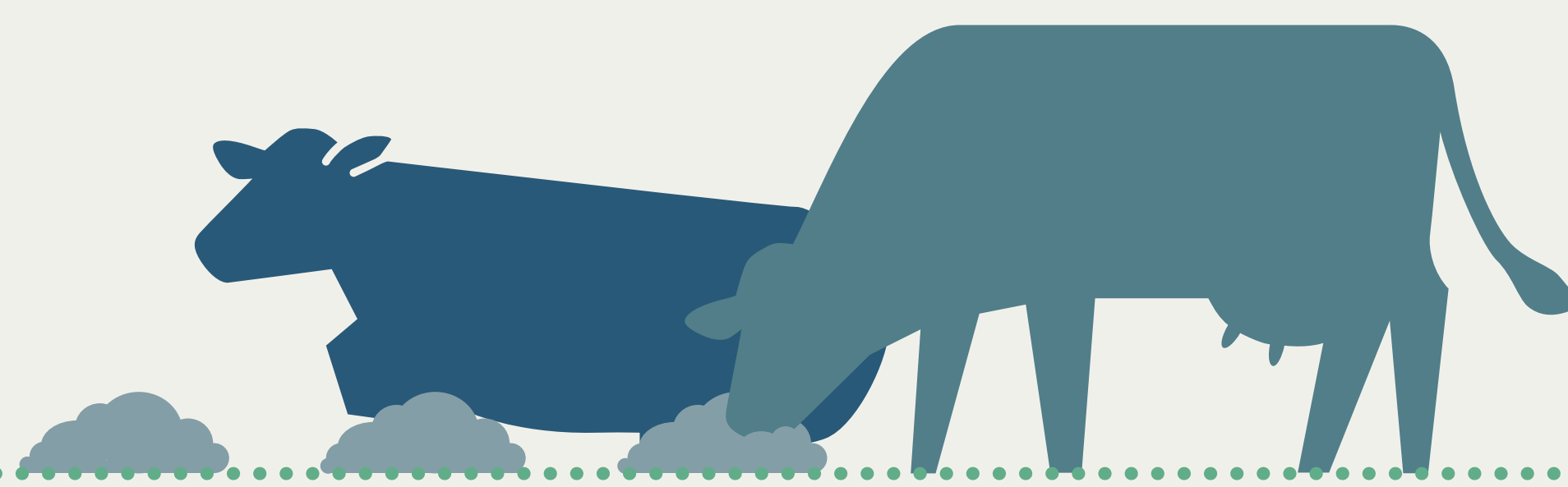
Conclusion
The three steps model is an effective approach for national disease eradication.

- 1 Screening
Voluntary actions
- 2 Eradication
Compulsory actions
- 3 Surveillance
Official restrictions for infected herds

Conclusion
Keep on sufficient surveillance until negligible probability of outbreaks from undetected sources.

Achievement of EU free status for BVDV

A LONG-TERM COLLABORATION BETWEEN THE DANISH AUTHORITIES AND THE DANISH CATTLE INDUSTRY



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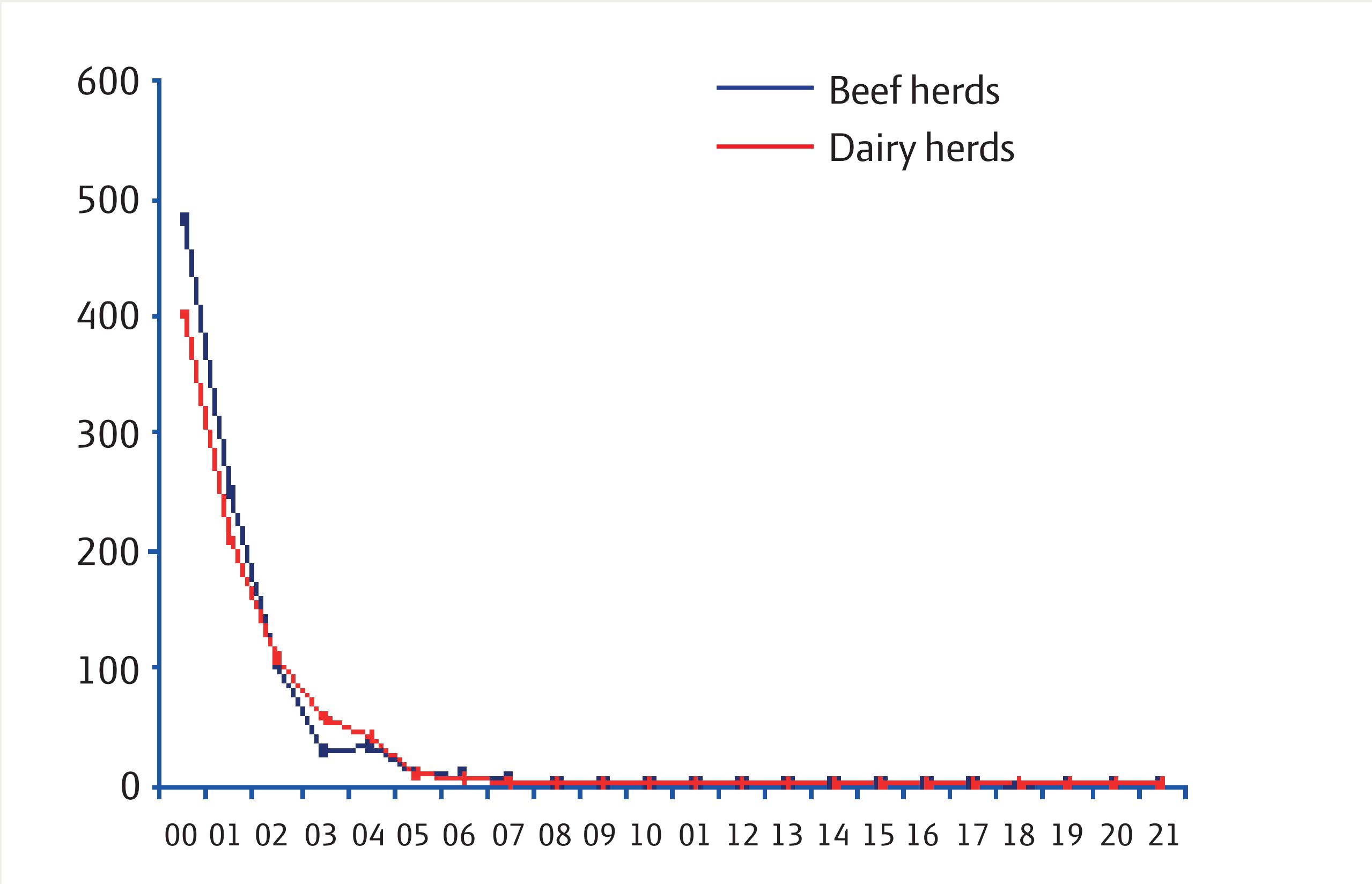
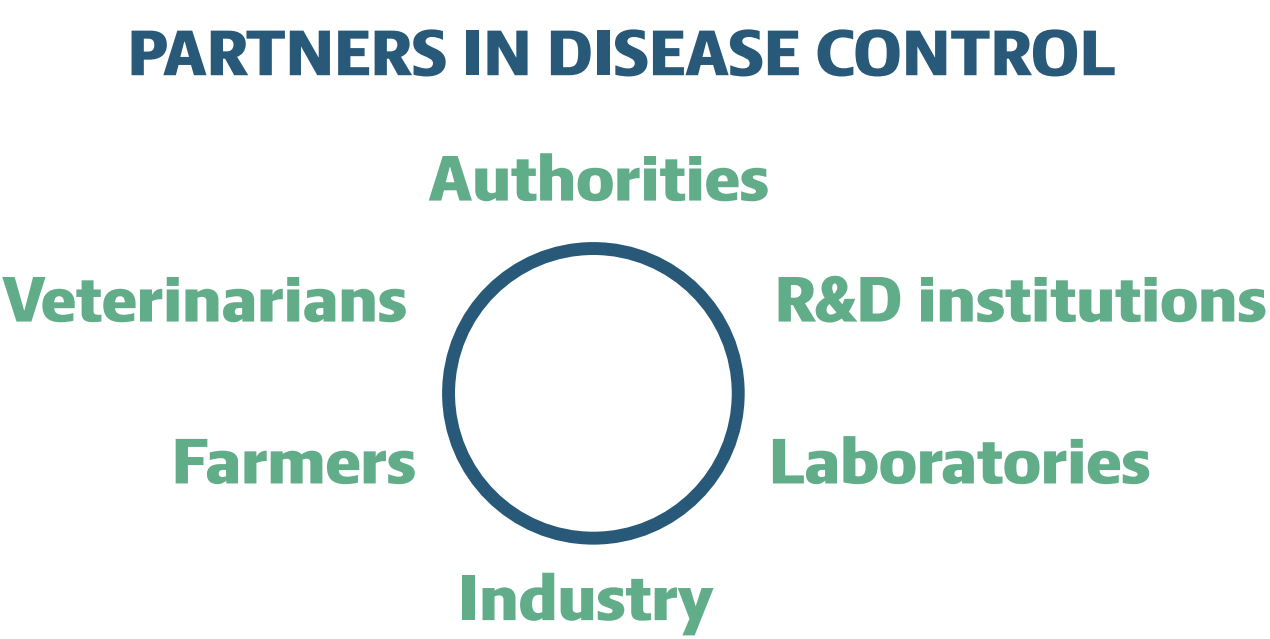


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