

Efficacy of the voluntary BVDV program in the Netherlands between 2007 and 2013

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Study objective

Since 1997, a voluntary herd based program for the control of BVDV is in place in the Netherlands. The results of the program were evaluated in preparation of a national eradication plan.

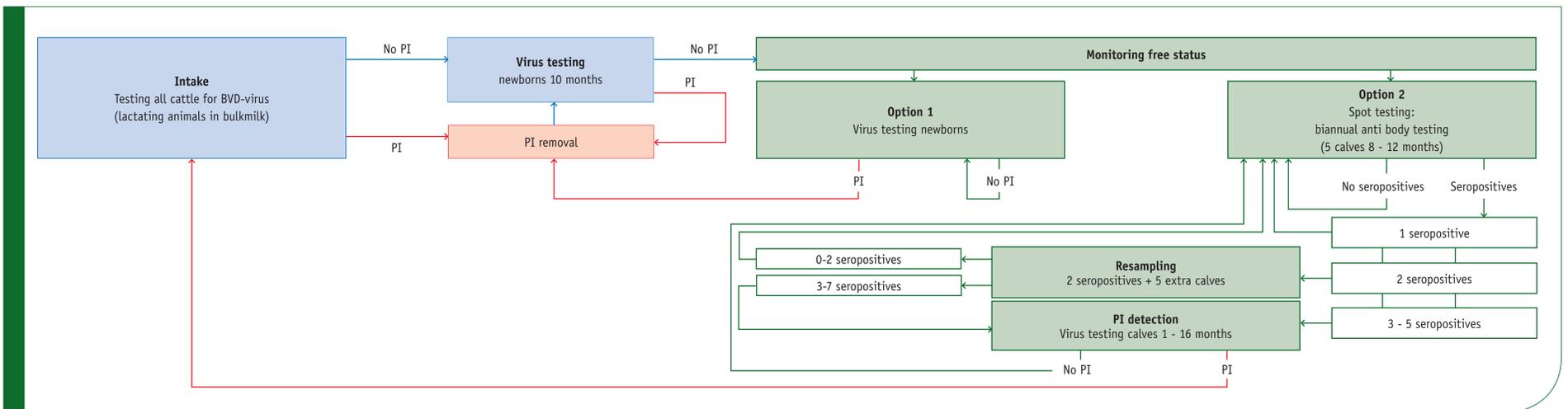


Figure 1. BVDV program in the Netherlands

Methods

Data of all dairy herds that participated in the voluntary program between 2007 and 2013 were used. Data consisted of test results, dates of testing, dates of obtaining or losing the BVDV free certificate. Results of national serosurveys were included.

The program is based on detection and removal of PI animals (Figure 1). GD arranges for the necessary sampling of animals. All costs are paid by the farmer. Herds can get a BVDV free status when all animals have been tested free of BVDV. Monitoring the free status is performed by spot testing sera of five young stock for antibodies, every six months.

Results

In on average 5.4% of the free herds per year, spot tests revealed that BVDV circulation was present. This breakdown % declines during the study period from 7% in 2007 to 5% in 2013. Following the detection of antibodies in young stock, in 29.9 to 67.8% of these herds a BVDV positive animal was detected in the age of 1 to 16 months (age cohort). (Table 1). During the study period the number of participating dairy herds increased and the prevalence of BVDV in the Netherlands decreased (Figure 2).

Table 1. Spot test results related to the finding of BVDV positive animal(s) in subsequent cohort testing.

Seropositive/calves tested	Cohorts (%) with BVDV positive animal(s)
3/5	29,9
4/5	49,5
5/5	67,8

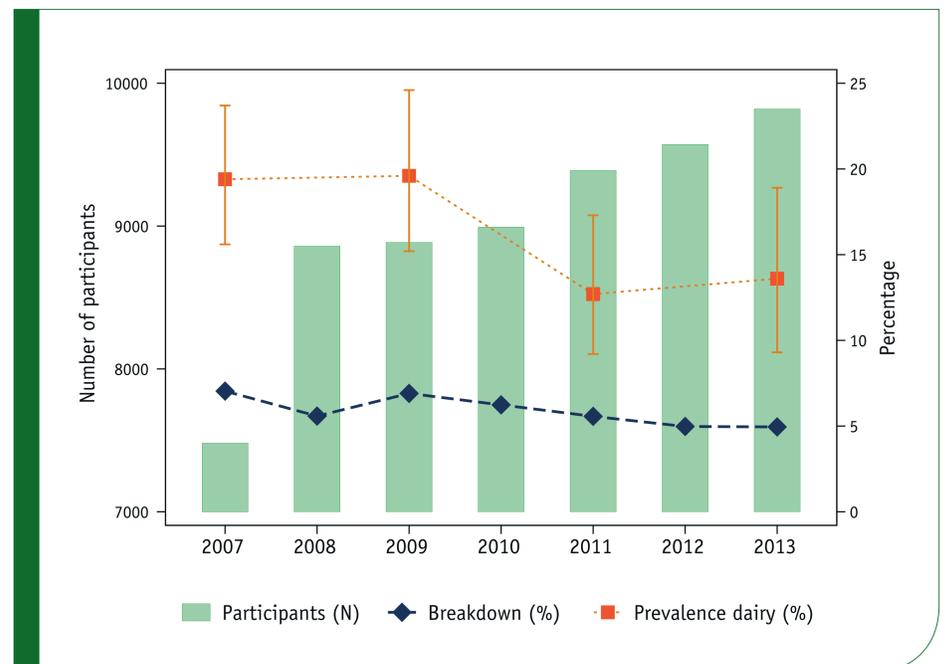


Figure 2. Number of participants, seroprevalence in the Netherlands and the breakdown % per year.



Conclusions

It is possible to obtain and maintain a BVDV free status in an endemic area. The increase of dairy herds participating in the program was accompanied by a decrease in % of the free herds that lost their certificate and a decrease in the national prevalence of BVDV in dairy herds. Therefore, the Dutch dairy industry will proceed with further eradication of BVDV in dairy herds.

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