

Monitoring

Animal Health

Cattle

Highlights Report, Second Quarter 2015

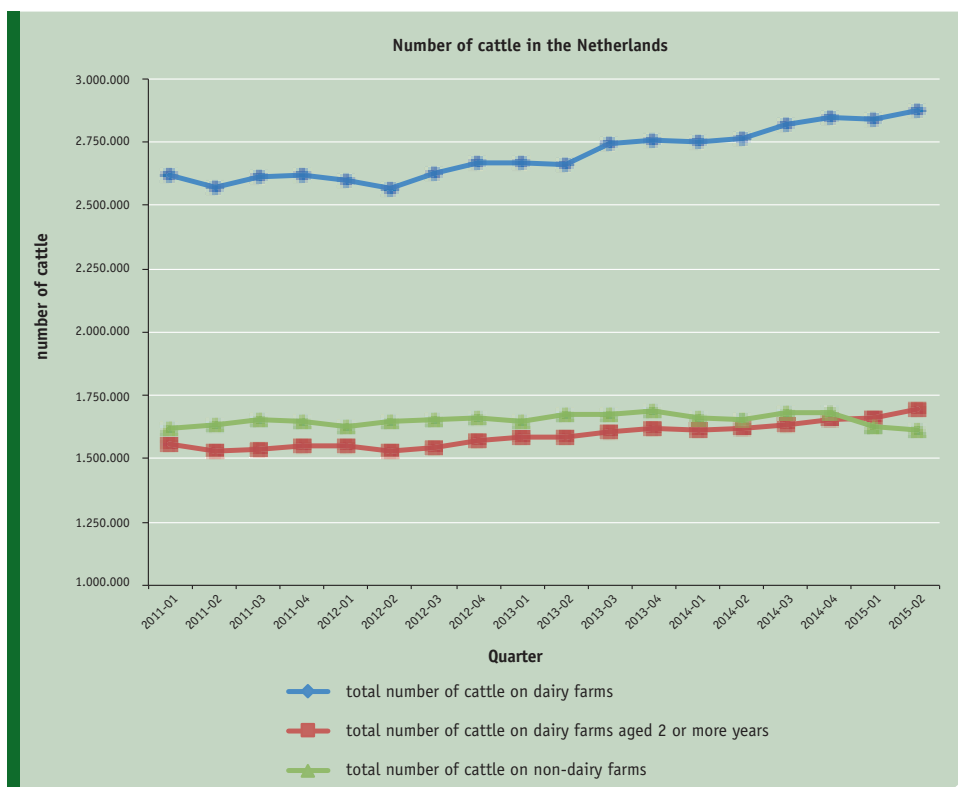
Cattle demographics

Dairy farms: In the second quarter of 2015, there were 17,638 dairy farms with animals in the Netherlands. The total number of cattle on dairy farms and the number of cattle older than two years on dairy farms has been increasing since the second quarter of 2012 (see figure 1). In the second quarter, a dairy farm in the Netherlands had 96 animals older than two years on average (2015-1: 94). 10.9% of dairy herds formed an epidemiological unit with a breeder of young stock (2015-1: 11.1%).

Non-dairy farms: In the second quarter of 2015, there were 19,036 non-dairy farms with animals in the Netherlands. The average number of cattle on non-dairy farms has declined (see figure 1). In the second quarter of 2015, a farm had 84.8 cattle on average (2015-1: 89.3). The non-dairy farms cover various types of farms. When divided into types of farms, small-scale farms had an average of six animals, suckler farms had an average of 32 cows, young cattle rearing farms an average 67 cows and beef cattle farms an average of 391 calves.

Short news

- **Leptospirosis:** frequent purchase of dairy cattle from the Netherlands and abroad. The number of farms with 'suspected/treated' status has increased due to some of these animals having antibodies.
- **BVD:** There has been an increase in the number of BVD-virus free status and BVD bulk-milk antibody unsuspected status. This was 38% in the second quarter (2015-1: 35%).
- **IBR:** There has been an increase in the number of IBR free and IBR bulk-milk antibody unsuspected status. This was 48% in the second quarter (2015-1: 45%).
- **MCF:** Pathological examination detected four infections.
- **Neosporosis:** the cause of 10% of aborted foetuses, this is comparable with previous quarters.
- **TBC:** No TBC cases were confirmed in the Netherlands. TBC cases were, however, detected in neighbouring countries. These included 51 in France, one in Germany and nine in Poland.



Graph 1 Number of cattle in the Netherlands (source: GD-BRBS and I&R)

Information that is used for the surveillance is collected from different sources. The initiative comes in part from veterinarians and farmers, and partly from GD Animal Health. The information is fully interpreted to achieve the objectives of the surveillance programme – the rapid identification of health problems on the one hand and the following of more general trends and developments on the other. The livestock farming sector, in the form of the Dutch inter-branch organisations DairyNL (ZuivelNL) and Calf Industry Association (SBK) and the Ministry for Economic Affairs (EZ) is co-financier of the surveillance programme.



Data analysis (1-4-2010 to 31-3-2015)

Sustainability

The mortality percentage of cattle and calves on beef cattle farms has been declining favourably for some time (figure 2). In the first quarter of 2015, an average 1.75% of the cattle died, versus 1.90% in the same quarter of 2014.

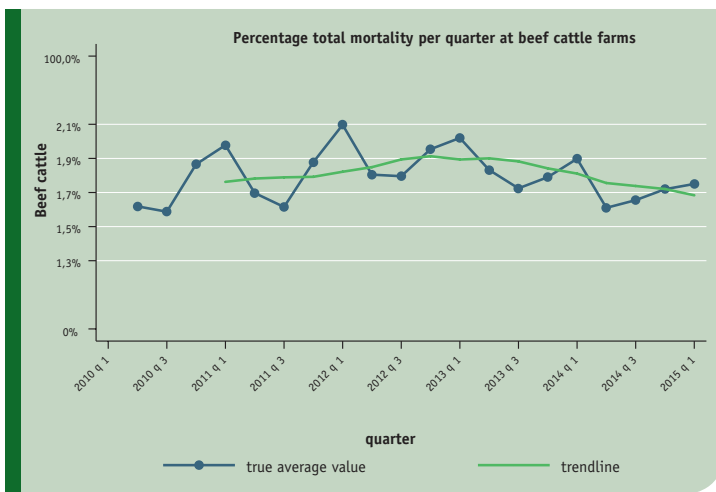


Figure 2 Percentage total mortality per quarter at beef cattle farms during the 1 April 2010 – 31 March 2015 period (Source: Data analysis based on I&R)

Udder health

In the fourth quarter of 2014 and first quarter of 2015, the average bulk-milk somatic cell count was 191 and 171 $\times 10^3$ cells per ml (figure 3). These cell counts are lower than those of the same quarters a year earlier (193 and 184 $\times 10^3$ cells per ml).

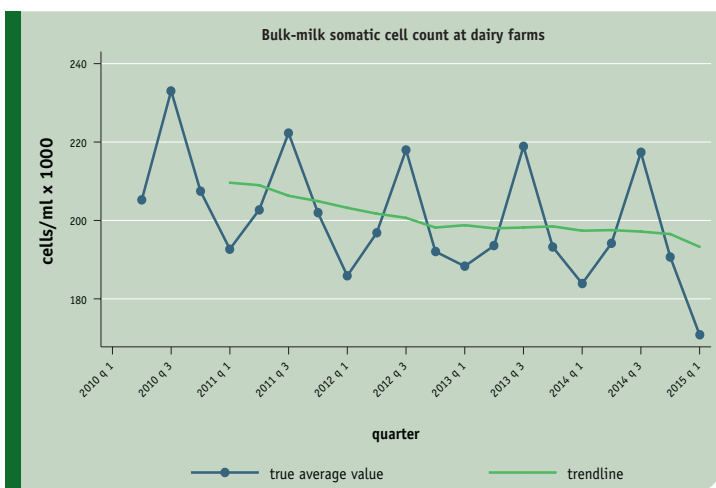


Figure 3 Average bulk-milk somatic cell count at dairy farms, per quarter in the 1 April 2010 – 31 March 2015 period (Source: Data analysis based on Qlip data)

The percentage of high somatic cell count cows and the percentage of new high somatic cell count cows continues to decline slightly. The percentage of high somatic cell count cows was 16.9% in the first quarter of 2015, versus 17.7% a year earlier (figure 4). The percentage of new high somatic cell count cows in the first quarter of 2015 was 7.9%. This was 8.2% in the same quarter of 2014.

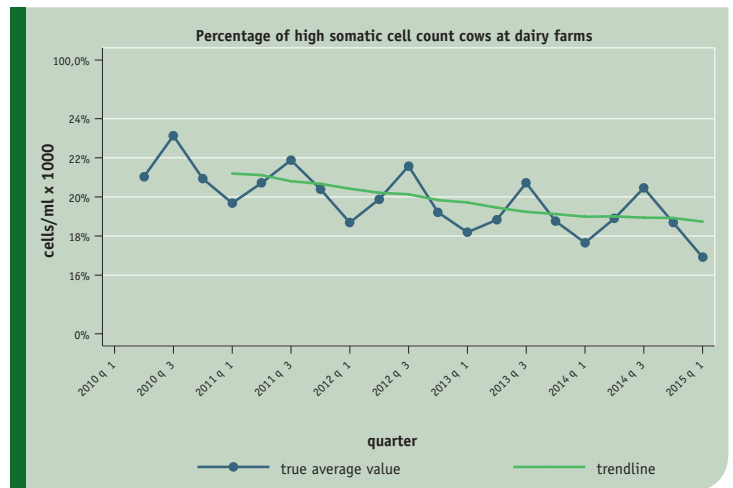


Figure 4 Average percentage of high somatic cell count cows at dairy farms, per quarter in the 1 April 2010 – 31 March 2015 period (Source: Data analysis based on CRV data)

Surveillance highlights

Cluster of calves with Schistosoma Reflexum

In 2015, one veterinary practice reported to the 'Veekijker' telephone helpdesk a cluster of calves born with the congenital syndrome Schistosoma Reflexum' (SR; 'inside out calf'). Within a period of a few months, five calves and one lamb were born with this defect. SR is a well known but rarely occurring congenital defect caused by a malfunction during early development of the foetus. In the literature, SR is sometimes described in clusters, though this had not previously been reported in the Netherlands. The cause of the clustering was not determined in the cases described. Considering the clinical presentation and the fact that the report concerned a number of farms in a limited area, GD Veekijker conducted a pilot study in order to identify any common (risk) factors, by means of farm visits and detailed (telephone) questionnaires. Over the course of the study, a total of seven calves and one lamb were reported by the one practice. One calf was presented for necropsy. Besides the



anatomic defects, the only striking finding at necropsy was an overly low level of cobalt in this calf's liver. There is no known clinical relevance to SR. In four of the seven calves, the mother animal was a heifer. It also became apparent that the syndrome did not occur in all animals in the case of multiple births; both the lamb and one of the calves were one of a multiple birth.

There was no indication of any common genetic background, nor were there any (common) treatments or vaccinations of the mother animals during the early gestation period. It was concluded that no (common) risk factors could be indicated in this cluster of SR cases.

Animal Health Situation in the Netherlands

DISEASE	DUTCH SITUATION	Surveillance – Highlights Second Quarter 2015
Article 15 diseases (compulsory notification and eradication)		
Foot and Mouth Disease (FMD)	Officially free since 2001, last regional outbreaks in 1986 and 2001	No abnormalities
Bovine tuberculosis	Officially free since 1999	TBC cases were detected in neighbouring countries, including 51 in France, one in Germany and nine in Poland.
Anthrax	Not detected since 1994	No abnormalities
Rabies	Officially free since 2012	No abnormalities
Aujeszký's disease	Officially free since 2004	No abnormalities
Brucellosis	Officially free since 1999	Single detection of antibodies (also in retesting) in blood samples of aborting cows, additional clinical testing is under way
Leucosis (EBL)	Officially free since 1999	No infections detected upon monitoring using bulk-milk testing and slaughterhouse blood samples.
BSE	No more cases detected upon monitoring since 2010 OIE status 'negligible risk'	No abnormalities
Bluetongue	Officially free since 2012 (all serotypes)	No circulation detected in 2014. Alertness due to BTV-4 outbreaks in South-East Europe in 2014.
Article 100 diseases (compulsory notification)		
Leptospirosis	97% of the dairy farms have <i>L. hardjo</i> -free status. Just 1% of the non-dairy farms had animals with antibodies.*	No infections detected upon bulk-milk monitoring, doubling of number of cows purchased from farms with a lower status.
Salmonellosis	All dairy farms know their status via Qlip bulk-milk monitoring; no antibodies detected in 95% in the second round. 9.5% of the non-dairy farms had animals with antibodies.*	Infection detected GD Animal Health diagnostics) at 259 farms (low versus count in second quarter of previous years).
Listeriosis	Main source is poorly preserved grass silage.	Three infections were detected.
Q-fever	68% of dairy farms had antibodies in bulk milk.* 11% of the non-dairy farms had animals with antibodies.**	No infections were detected in examination of aborted foetuses.
Yersiniosis	Detected incidentally in cattle, specifically in aborted foetuses.	No infections detected
Sexually transmitted diseases	Over the last five years, no infections detected for <i>Campylobacter fetus</i> ssp. <i>venerealis</i> and <i>Tritrichomonas foetus</i> upon monitoring.	No infections detected



Table continuation

DISEASE	DUTCH SITUATION	Surveillance – Highlights Second Quarter 2015
Other OIE list diseases		
IBR	48% of dairy farms have IBR-free or IBR bulk-milk antibody unsuspected status (increase). 21% of dairy farms tested bulk-milk antibody positive for IBR. ** 18% of the non-dairy farms had animals with IBR antibodies. **	New infections detected in 0.2% of the IBR-free farms; new infections detected in 1.6% of the IBR bulk-milk antibody unsuspected farms. IBR field virus was detected in 10% of the 69 farms who had submitted nasal swabs (three outbreaks at IBR-free farms).
Paratuberculosis	99% of dairy farms have a PPN (Paratuberculosis Programme Netherlands) status, 75% of which have status A (“unsuspected”).	The percentage of farms with status A is stable.
MCF	Infections with <i>Ovine herpes virus type 2</i> occur incidentally.	Four infections were detected upon necropsy.
Tick diseases	Ticks infected with <i>Babesia divergens</i> , <i>Anaplasma phagocytophilia</i> and <i>Mycoplasma wenyonii</i> are present in the Netherlands.	Three cases of tick infections were detected.
BVD	38% of dairy farms have BVD-virus free status or bulk-milk antibody unsuspected status. 14% of dairy farms have had recent BVD-virus circulation.* 19% of non-dairy farms have had recent BVD-virus circulation.*	An increasing number of farms have BVD-virus free status or bulk-milk antibody unsuspected status.
Neosporosis	Important cause of abortions	Infections detected in 10% of submitted aborted foetuses.
Liver fluke	Infection present, severity dependent on water levels and rainfall	Infection detected in samples from 46 cattle farms.

* Final Report Specific Surveillance 2013–2014; prevalence studies

** Final Report Specific Surveillance 2011–2012; prevalence studies

