



## **FACTSHEET**

### **Q-fever in the Netherlands**

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Since 2007 the Netherlands has been faced with a severe outbreak of Q-fever. Over the past three years almost 3500 people have been diagnosed with the disease, some suffering from chronic infections or chronic fatigue syndrome. In the Netherlands Q-fever-infected large dairy goat farms, and to a lesser extent dairy sheep farms, are related to the human epidemic. We are very concerned about this development and are taking measures to prevent the spread of the disease from animals to humans.

The causal agent *Coxiella burnetii* can survive in the environment for a long period and may still infect humans or animals after months or even years. Knowledge about the bacterium, the disease and its epidemiology is still far from complete. However, we do know that the bacterium can persist in the environment, which makes control of Q-fever very difficult. Finally, the disease is the subject of intense public debate.

Several measures have been taken to control Q-fever in animals, in particular in dairy goats and dairy sheep, but also in small ruminants that come into close contact with the general public. The measures were taken in close cooperation between the Ministries of Agriculture, Nature and Food Quality and of Health, Welfare and Sport and are based on scientific advice both from a veterinary point of view and from a public health point of view, while adequate consideration has been given to animal welfare concerns.

#### ***Vaccination***

Our first line of defence is and remains the compulsory vaccination of all dairy goats and dairy sheep. Due to limited availability of the vaccine in 2009, only part of the animals could be vaccinated so far. The vaccination campaign will be continued in 2010, but the actual efficacy of the vaccine cannot be measured until after the lambing season of 2010.

#### ***Culling***

Preference has been given to a set of measures that maximizes the protection of public health and minimizes the number of animals to be culled. While we originally planned to make a distinction between infected

and non-infected animals and between vaccinated and unvaccinated farms while culling pregnant animals on infected farms, experts advised us that it is not possible to make an absolute distinction between infected and non-infected animals on these farms. The risk of obtaining false-negative results in testing one sample at one given moment before an abortion or normal delivery is too great. We have, therefore, decided to cull all pregnant animals on infected farms (vaccinated and unvaccinated). Because of the risk of Q-fever transmittal through the semen of infected male animals to non-infected females, all male animals on infected farms will be culled as well.

Experts have advised us that the movement of pregnant animals to a slaughterhouse is undesirable both for animal welfare and public health reasons. The risk of abortion while in transit is unacceptable. This would also form an unnecessary health risk for transporters, slaughterhouse personnel and people living in the neighborhood. Therefore, the unpopular measure to cull all animals on the farm and offer all cadavers for destruction has been taken.

The culling campaign will start without delay on Monday, December 21, 2009, and will cover 55 infected farms with 64.000 dairy goats, 34.500 of which are pregnant animals. The non-pregnant female animals will be kept alive, but cannot be used for breeding purposes anymore during their lifetime.

### ***Surveillance***

A higher frequency of mandatory tank-milk testing for the presence of *Coxiella burnetii* (once every two weeks) for all holdings with 50 dairy goats or dairy sheep and more has been established. The holding is to be regarded as suspect after one positive sample. After a positive result in confirmation testing by the CVI, the holding is declared infected.

### ***Notification***

Based on national legislation all farmers, veterinarians and other persons involved have to notify symptoms of a contagious disease to the competent authority. After notification of a suspicion based on abnormal abortion numbers, the competent authority will visit the farm and take a sample of the tank-milk. If the milk tests positive for Q-fever bacteria, the farm is declared infected.

### ***Suspension of expansion***

All farms in the Netherlands with more than 50 dairy goats or dairy sheep will not be allowed to expand beyond the reference number of the November 2009 census and can only bring in vaccinated animals. The reason for this measure is that animals do not continuously secrete the Q-fever bacteria, which makes it impossible to recognize all infected farms in time. We expect to find more infected farms in the coming months until the end of the lambing period.

### ***Ban on breeding***

Although most animals have been mated already, a general ban on breeding for all farms with 50 or more dairy goats or dairy sheep has been established until July 1, 2010. This again has to do with the fact that the bacteria are secreted intermittently, which means that some of the farms which are currently not infected may become infected later on. On such farms, pregnant animals will have to be culled and we aim to minimize that number.

### ***Manure and hygiene measures***

On infected farms it was already prohibited to remove the manure during the lambing period until 30 days after the end of the lambing period. After 90 days of covered storage, the manure was allowed to be spread on the land. For infected farms there will now also be a ban on manure removal from the moment of culling the animals until 30 days after. The other measures will remain in place.

Because farms, which are currently not infected, could become infected in the next couple of months, the manure and hygiene measures will now be in effect for all other dairy goat farms and dairy sheep farms. All farms will have to store the manure under cover on the farm before moving it away from the farm.

### ***Visitors***

As of June 2008, infected farms are not allowed to receive visitors. People visiting the farm stables in a professional capacity are exempted.

### ***Transportation restrictions***

As of October 2009, infected farms cannot move animals to other farms which supply milk. Animals were allowed to be moved to a slaughterhouse, while young animals could be moved to a fattening farm. In addition to these measures for infected farms, we now also prohibit the movement of young animals to breeding farms.

Infected farms can only bring in vaccinated animals from non-infected farms. We have now expanded this measure to all non-infected farms, i.e. all farms can only bring in vaccinated animals.

### ***Other farms with sheep and goat***

The measures on commercial dairy goat and dairy sheep farms are far-reaching in order to prevent the secretion of too many bacteria. Q-fever may also occur in other sheep and goats, such as on animal farms for children, and in other species of animals, such as cats, bovines and horses.

Experts have told us that the cause of the outbreak can be found in the commercial dairy goat and dairy sheep sector. Therefore, all measures taken are aimed at this category. We will, however, closely monitor the situation in other establishments and other types of animals. We will also seek further scientific advice about the possible risks associated with

animal farms for children and other types of public facilities with susceptible animals present.

For more information (Dutch language only): <http://www.gkoortsinnederland.nl/>

Information provided by:

Ministry of Agriculture, Nature and Food Quality

Directorate for Food, Animal Health and Animal Welfare  
and Consumer Policy

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