

Contingency plan

Lumpy skin disease

Contingency plan for dealing with outbreaks of lumpy skin disease in the Netherlands, in accordance with Article 20 of directive 92/119/EEC. The criteria posted in Annex IV were used as guidance.

Animal Supply Chain and Animal Welfare Department
Ministry of Economic Affairs
The Hague, the Netherlands

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This document sets out the contingency plan for LSD in the Netherlands, updated in 2015.

Council Directive 92/119/EC

ANNEX IV

MINIMUM CRITERIA FOR THE CONTINGENCY PLANS

Contingency plans shall meet at least the following criteria:

1. the establishment of a crisis centre on a national level, which shall coordinate all control measures in the Member State concerned;
2. a list shall be provided of local disease control centres with adequate facilities to coordinate the disease control measures at a local level;
3. detailed information shall be given on the staff involved in control measures, their skills and their responsibilities;
4. each local disease control centre must be able to contact rapidly persons / organizations which are directly or indirectly involved in an outbreak;
5. equipment and materials shall be available to carry out the disease control measures properly;
6. detailed instructions shall be provided on action to be taken on suspicion and confirmation of infection or contamination , including means of disposal of carcasses;
7. training programmes shall be established to maintain and develop skills in field and administrative procedures;
8. diagnostic laboratories must have facilities for post mortem examination, the necessary capacity for serology , histology , etc., and must maintain the skills for rapid diagnosis. Arrangements must be made for rapid transportation of samples;
9. details shall be provided of the quantity of vaccine against the disease in question estimated to be required in the event of recourse to emergency vaccination;
10. provisions shall be made to ensure the legal powers necessary for the implementation of the contingency.

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1. The disease¹

1.1 Susceptible species

The susceptible species is primarily cattle. Cattle breeds may differ in susceptibility. Wild animals are not thought to play an important role in the spread or maintenance of the disease.

1.2 Aetiology

Lumpy skin disease (LSD) is caused by a virus (LSDV), member of the genus Capripoxvirus of the family Poxviridae. LSDV is closely related to sheep and goat poxviruses, the other two virus species within the genus Capripoxvirus. LSDV is resistant to inactivation, it may survive in desiccated crusts for approximately 35 days, and can remain infectious for long periods outside the body.

1.3 History and spread of the disease

Lumpy skin disease is generally confined to Africa, in particular south of the equator. Until the 1980s, this disease was only found south of the Sahara desert and in Madagascar, but in 1988, it spread into Egypt. In 2013 and 2014, outbreaks in Turkey were reported, and in 2014 also from Cyprus. LSDV is thought to be transmitted primarily by biting insects. Direct contact could be a minor source of infection. The disease is notifiable to the OIE.

1.4 Clinical signs and post mortem examination

The incubation period in the field is approximately two to five weeks. In experimentally infected animals, fever develops in 6 to 9 days and lesions first appear at the inoculation site in 4 to 20 days. The clinical signs range from unapparent to severe. Host susceptibility, dose and route of virus can affect the severity of disease. Fever is usually followed by the development of nodules on the skin and mucous membranes. These nodules occur within two days after a raise in body temperature and vary from 1 cm to 7 cm. They are particularly common on the head, neck, udder, genitalia, perineum and legs. In addition, feed intake by affected animals decreases, milk yield can drop markedly, and animals may become emaciated. Mortality rates are low, but depends on many viral and host factors. Recovery is slow.

LSDV is thought to be transmitted primarily by biting insects. Direct contact could be a minor source of infection. LSDV occurs in cutaneous lesions, saliva, respiratory secretions, milk and semen. Shedding in semen may be prolonged.

Characteristic grayish-pink deep nodules with necrotic centers are found in the skin. The regional lymph nodes are typically enlarged. Lesions can also be found in the gastro-intestinal tract and trachea.

¹ Source: Center for Food Security and Health www.cfsph.iastate.edu

2. Legislation

2.1 Statutory Powers

- Council Directives 92/119/EEC and 82/894/EEC
- The Animal Health and Welfare Act (AHWA)
- Wet Dieren
- Regeling Preventie Regeling preventie, bestrijding en monitoring van besmettelijke dierziekten en zoönosen en TSE's.

2.2 Control measures

2.2.1. Notification of suspected Lumpy skin disease case

In the Directive on notification of infectious animal diseases (92/119/EC articles 3 and 4) LSD is denoted as infectious animal disease in livestock. EU legislation (Council directive 92/119/EC) regarding the control of animal diseases is implemented in the AHWA. Section 3 ("Afdeling 3") of this Act deals with the control measures to be taken by the Minister of Economic Affairs (EZ) for diseases in livestock and other animal species, and the compulsory notification of a suspicion of LSD by the owner, animal keeper, or a veterinarian (e.g. practitioner). The Netherlands Food and Consumer Product Safety Authority (Nederlandse Voedsel- en Warenautoriteit NVWA), the Dutch Competent Authority, can be contacted 24 hours per day, 7 days a week (003145.5463188).

When a case of LSD is suspected, a team of veterinarians (see below) will visit the farm and if necessary samples will be collected by the NVWA, and sent to the Dutch reference laboratory Central Veterinary Institute (CVI), Lelystad, for laboratory confirmation. As soon as LSD is confirmed and notified, the measures set down in Articles 4 and 5 of Directive 92/119/EEC are implemented. The NVWA is responsible for the implementation of the necessary control measures. The NVWA has a general contingency plan for the control of notifiable diseases.

Within 24 h after notification to the NVWA and subsequent laboratory confirmation of LSD by the CVI, the Chief Veterinary Officer (CVO) reports the outbreak to the European Commission (According to Directive 82/894/EC), and to the OIE.

2.2.2 Main control measures

A. Stamping out of infected herds

Article 5, sub-paragraph 1 of Directive 92/119/EEC lays down that as soon as LSD is officially confirmed, all susceptible animals present on the affected farm must be killed. Killing of diseased animals or animals suspected of being infected with LSD virus is mentioned as measure in Article 22, paragraph 1 of the AHWA.

B. Destruction of carcasses and access to sites to be used for this purpose

Disposal of carcasses is mentioned as measure in Article 22, paragraph 1 of the AHWA. The rendering processes are described in 'Wet Dieren'. Animal waste originating from animals killed due to measures taken to control the spread of infectious diseases is designated as 'high-risk material'. This Act also lays down that high-risk material must be rendered under the terms laid down in the Act. The rendering plant (Rendac, Son) has a legal responsibility to destroy material submitted because of measures to control the spread of a notifiable disease.

C. Cleaning and disinfecting and other measures

According to Article 22, paragraph 1h of the AHWA, the officer attending on the basis of Article 21 of the Act can order the cleaning and disinfection of buildings, manure silos and storage areas, and

destruction of contaminated material. If applicable measures to control the vector might be implemented.

Other measures like epidemiological inquiries will be carried out as well. These measures are laid down in Article 5 of the Regulation 92/119/EEC.

D. Standstill and movement restrictions

As soon as LSD is officially confirmed, the Ministry of Economic Affairs will delineate a protection zone around the infected farm with a radius of at least 3 km and a surveillance zone with a radius of at least 10 km (Article 10, 92/119/EEC). Article 17 and 30 of the AHWA provides the basis for the standstill orders to be executed to control the disease. Warning signs on the farm and at the borders of the protection and surveillance areas will be placed. Under the procedure set down in Article 31 of the AHWA the necessary regulation comes into force immediately after it has been published.

Under Article 30, paragraph 1 of the Act, the Minister of Economic Affairs may ban the transport of animals, animal products or materials, which could be infected or contaminated with virus or considered being carriers of virus, in the whole country or in certain regions. Under Article 30, paragraph 2 of the Act a standstill order around an infected or suspected farm may be announced. Under Article 22, paragraph 1, sub-paragraph d of the Act buildings and property can be declared contaminated with virus or suspected of being contaminated by posting official notices. As soon as a notice has been posted the particular farm is automatically subject to the following general legal provisions:

- A ban on animals, products and materials that could be carriers of virus entering or leaving the farm is set down in the Decision on transport to and from buildings and land contaminated or suspected to be contaminated under Article 25, paragraph 1 of the Act;
- Restricted access for persons is set down in the Decision on access of individuals or groups to buildings or land contaminated or suspected to be contaminated under Article 25, paragraph 2;
- The compulsory cleaning and disinfections of persons and/or material leaving the farm is set down in the Regulation on leaving building and land contaminated or suspected to be contaminated, under Article 26 of the Act.

It may be considered following the blue tongue strategy implementing a 20km zone around an outbreak in which transports are limited and in which measures are implemented.

E. Vaccination

According to Directive 92/119/EEC preventive vaccination against LSD is prohibited. According to Article 19 of this Directive it is possible to carry out emergency vaccination as additional control measure. A decision will be made by the EC in consultation with Member States. Attenuated cattle strains, and strains derived from sheep and goats have been used as live vaccines. Whether vaccines are available is questionable. If vaccine is available and considered a reasonable control measure, a vaccination programme will be provided to the EC, after consultation with the expert group. The possibility of applying emergency vaccination is laid down in Article 17 of the AHWA. Vaccinated animals should always be clearly identified at a herd or individual level.

2.2.3 Payment of compensation

Government expenditure for the control of notifiable diseases is financed from the Dutch Animal Health Fund (under the budget of the Ministry of Economic Affairs). This Fund covers all direct costs for disease outbreaks, such as sampling/testing; compensation for culled animals, destroyed animal products and feed, disposal of carcasses, temporary farm staff, veterinary costs, cleaning and disinfection etc.

The Ministry of Economic Affairs has contracts with valuers who will carry out the valuations of animals and products. As guidance for the valuers the Agricultural Economic Institute provides value charts which are updated in every crisis situation. A licensed professional will assess the value of animals and materials. Conditions may be attached to the granting of compensation regarding the layout, hygiene, re-stocking of the animals and veterinary supervision of the farm. The Minister can reduce the amount of compensation, withhold payment or demand repayment if it is determined that the conditions have not been met.

Compensation for animals suspected of being diseased equals the value of healthy non-infected animals and will be compensated for 100% of their economic value; LSD-diseased animals are compensated for 50% of its economic value (before infection), and animals that died due to LSD before the moment of suspicion is reported are not compensated. Products and materials will be compensated according to market value. The organisation for entrepreneurs in the Netherlands, De Rijksdienst voor Ondernemend Nederland (Netherlands Enterprise Agency RVO.nl), a governmental organisation, takes care of payments, the administration and the justification of the payments.

2.3. Enforcement under Article 114 of the AHWA

Under Article 114 of the Act officials designated by the Minister of Economic Affairs are responsible for compliance with disease control as established in accordance with this Act. Detection of punishable offences is the responsibility of the officials so designated under the 'Wetboek van Strafrecht' (Criminal Code).

2.4 Penalties

Violations of Section 3 of the AHWA are subject to a penalty under the Economic Offences Act. If a veterinarian does not fulfil his or her duty of care in the practice of veterinary medicine the measures set down in 'Wet Dieren' come into force.

3. Financial provisions

3.1 Covenant for financing outbreaks of animal disease

Government expenditure for the control of notifiable diseases is financed from the Dutch Animal Health Fund (DGF; under the budget of the Ministry of Economic Affairs), which is based on a cost-sharing scheme between the sector and the government. The AHWA includes a system of compensation, set out in Articles 85-90 of the AHWA.

This fund receives most of its finances through levies on animals and/or animal products from the production sectors (cattle, pigs, sheep/goat, poultry). It also receives funding from the Ministry of Economic Affairs, and handles compensations from the European Union (where relevant).

This cost-sharing scheme covers the costs for monitoring programmes, vaccination campaigns and all direct costs made for the control of notifiable disease outbreaks, such as sampling/testing; value of culled animals, destroyed animal products and feed, disposal of carcasses, temporary farm staff, veterinary costs, cleaning and disinfection. Should the costs for an outbreak exceed the maximum contribution laid down for each particular sector, additional costs would be covered by the government. Provisions for the cost sharing scheme are laid down in a covenant, which is renewed every five years. The covenant is currently being renewed.

3.1.1 Personnel

The Ministry of Economic Affairs covers the cost of staff employed by the Ministry (veterinarians, office staff, laboratory staff and officials of the NVWA, RVO). If additional employees are required on a temporary basis, the costs are paid from the DGF. This fund covers payment, and personnel-related operating costs, e.g. travel and subsistence.

3.1.2 Equipment and consumable items

The costs of equipment and consumable items are covered by the DGF. Small equipment and consumable items are in stock, as are mobile electrocution devices and handheld electric stunning devices used for killing animals. Costs for major items on call to hire or to buy from commercial companies are also covered by the DGF.

3.1.3 Slaughter, transport of carcasses and transport and destruction of contaminated material, sanitation

These costs are covered from the DGF.

3.1.4 Compensation payments

Compensation payments are paid from the DGF. Once valuation is agreed, payment is authorised by the Minister and passed to the Director of the NVWA, who signs for payment on behalf of the Minister of Economic Affairs.

3.1.5 Emergency vaccination and identification

According to the Dutch AHWA, costs of vaccines, and vaccination are at the expenses of the owners. In case of LSD, the Minister can decide to provide the vaccines and pay for the costs of vaccination, in case emergency vaccination is applied.

3.2 Time between valuation and compensation

It is important for a proper co-operation by farmers and the farming community that compensation for depopulated livestock is paid promptly. In general payment takes place within one month after valuation. The Dutch government endeavours to ensure that payments are made no later than 60 days after depopulation.

4. Crisis organisation

4.1 Introduction

The chain of command is described in the departmental handbook 'Crisisbesluitvorming' set down by the departmental management team. This manual can be found on the website www.rijksoverheid.nl.

4.2 Crisis organisation of the Ministry of Economic Affairs

In case of a crisis an organizational Departmental Crisis Staff will be set up under direct control of the Minister of Economic Affairs (EZ) or the Secretary of State. In this Crisis Staff several teams are set up: The Departmental Policy Team, the Departmental Advisory Team, which are both supported by the Departmental Communications Team, the Concern (financial) Crisis Control Team and various Back Offices. The crisis teams consist of a chair person, professional advisors (on veterinary medicine, communications and crisis management) and supportive professionals (secretary, information management and facility management). The chair person is responsible for decision making. Staffing of the crisis staff is assigned by the Director-general in charge of crisis management.

4.2.1 The Departmental Policy Team

In case of a crisis a Departmental Crisis Centre (DCC) will be set up, which contains all necessary facilities. A Departmental Policy team (DBT) will be established. The director-general Agro is chairperson. Members of this group are the Chief Veterinary Officer (CVO), the director of the Department Regio en Ruimtelijke Economie (RRE), directors of the Department of Animal Supply Chain and Animal Welfare (DAD), Netherlands Food and Consumer Product Safety Authority NVWA and the Department responsible for contracts and financial issues regarding outbreaks Netherlands (Netherlands Enterprise Agency RVO.nl).

The DBT acts as executive staff and facilitator in service of the Agro crisis organisation. The EZ crisis organisation has the general duty to make recommendations to the Minister of Economic Affairs about measures to take, assembling and evaluating information about the national and international situation, take measures to ensure a lawful and efficient way of decision-making by the Minister of EA, maintain the necessary internal and external contacts including informing others involved in the crisis. The DBT is primarily concerned with the main policy and regulatory decisions and has as its job: evaluating the crisis situation, formulating and evaluating the possible policy options, making recommendations to Minister about policy measures to be taken, measures to take to ensure a legal and efficient execution of policy decisions taken by the Minister, translating policy decisions into assignments for the operational team, formulating/evaluating the communication/information strategy to be followed etc.

4.2.2 The Departmental Advisory Team

The DBT is supported by the Departmental Advisory team (DAT-EZ), which is in charge of gathering and interpreting information, setting up a policy information system, formulating policy proposals, executing policy decisions, and preparing situation reports. The DAT is managed by the Director in charge, who is responsible for harmonising the work of the operation teams with regional teams and employees working in the field, communication about the formulated policy proposals with the regional and field teams before they are submitted to the crisis staff for decision etc.

The CVO has an independent position within the Ministry and is responsible for advising the Minister regarding veterinary issues. The CVO is member of the DBT.

4.2.3 The Competent Authority NVWA

The director of the NVWA is in charge of the general and logistics management of the regional crisis centre. The crisis manager NVWA is in charge of the disease control. They both report to the DBT directly. The crisis manager NVWA also reports to the director NVWA directly. All staff allocated to a centre for the duration of the epidemic is under their command. They have the necessary authority to designate a holding as an 'infected premises' (after consultation with, and the sanction of the national disease control centre if that is considered necessary), deploy the necessary staff and equipment to infected premises, arrange valuation and killing and destruction of infected and suspected animals, the disposal of carcasses and contaminated material and cleaning and disinfection procedures. They also provide advice on the delineation of protection and surveillance zones, they can close livestock markets and abattoirs, if necessary, stay in contact with police and other authorities over the designation of infected premises, and the maintenance of standstill orders and other restrictions. The NVWA has its own contingency plan (see www.vwa.nl).

4.3. The Regional Crisis Centre

The Director General Agro can decide to set up a Regional Crisis Centre (RCC). This Centre is located in or near by the area of concern, for LSD the infected region. The RCC is in charge of carrying out the control of the disease, and has all necessary personnel and equipment. The Department Regio and Ruimtelijke Economie (RRE) is responsible for the local governance, and administrative coordination in the region.

4.4 The National disease communication centre NDCC

The NDCC has at up-to-date audio-visual equipment and other communication and information systems for communication with all stakeholders involved.

4.5 The National Crisis Centre

The NVWA has set up a national crisis centre to give veterinary-technical support to the operation team and the local crisis centre. Together with regional crisis teams, it focuses on implementation of the control measures, and is responsible for the execution of the control of the disease. The NVWA has its own contingency plan for execution of the control measures.

5. Disease control

5.1 Responsibilities

The director of the NVWA is in charge of the general and logistics management of the regional crisis centre. The crisis manager NVWA is in charge of the disease control. They both report to the DBT directly. The crisis manager NVWA also reports to the director NVWA directly. All staff allocated to a centre for the period of the epidemic is under their command. The crisis manager NVWA is in charge of the general and logistics management of the regional crisis centre (RCC), and responsible for implementation of the veterinary control measures. They have the necessary authority to designate a holding as an "infected premises" (after consultation with, and the sanction of the national disease control centre if that is considered necessary), deploy the necessary staff and equipment to infected premises, arrange valuation and killing and destruction of infected and suspected animals, the disposal of carcasses and contaminated material and sanitation procedures.

5.2 List of regional crisis centres

The NVWA disease control centre maintains a list of regional crisis centres. This list provides the name of the persons in charge, contact information, and a map showing the control area. This list is available for the Commission as required.

5.3 Temporary regional crisis centre

In the event of a disease outbreak the Director-general in charge of crisis management may decide to set up a temporary regional crisis centre located closely to the infected region. The Netherlands will inform the EC of its geographical location. A control centre will be organised if necessary and in the vicinity of the affected farm or region.

5.4. Regional crisis centre

The director of the NVWA is in charge of the general and logistics management of the regional crisis centre. The crisis manager NVWA is in charge of the disease control. They both report to the DBT directly. The crisis manager NVWA also reports to the director NVWA directly. All staff allocated to a centre for the period of the epidemic is under their command. They have the necessary authority to designate a holding as an "infected premises" (after consultation with, and the sanction of the national disease control centre if that is considered necessary), deploy the necessary staff and equipment to infected premises, arrange valuation and killing and destruction of infected and suspected animals, the disposal of carcasses and contaminated material and sanitation procedures. They also provide advice on the delineation of protection and surveillance zones, they can close livestock markets and abattoirs if necessary, stay in contact with police and other authorities over the designation of infected premises and the maintenance of standstill orders and other restrictions.

5.5 Equipment

The local centres are equipped with up-to-date communication equipment, record systems, maps covering the territory overseen by the centre, lists of persons and organisations in the area covered by the centre to be contacted in the event of an outbreak, and facilities for showering for personnel, and cleaning and disinfecting of clothing, equipment and vehicles.

6. Expert groups

6.1 Expert group

An expert group in the Netherlands is operational for all notifiable diseases to give advice about veterinary control measure to be taken to control the disease. The group will give veterinary advice to the CVO. The composition of the expert group may vary, but consists of epidemiologists, veterinarians, and microbiologists. Additional experts could be asked, such as practitioners, specialists for certain animal species etc. The list of members can be found on the website www.deskundigengroepdierziekten.nl. An expert group is obligatory based on Council Directive 2001/89/EC.

6.2 Specialist teams

At the national level, specialist teams are available to visit farms in case of a suspicion. At the regional level screening, tracing and culling teams (all veterinarians from the NVWA) are available to carry out the necessary and obligatory epidemiological investigations.

6.2.1 Animal Disease Specialist teams

In case of a suspicion, a team of three veterinarians, one from the Animal Health Service in Deventer (GD Animal Health), the practitioner of the suspected farm and an official veterinarian from the NVWA, visit the farm. All NVWA veterinarians participate regularly in training programmes. The veterinarian from the GD is a specialist in cattle health, trained by the a senior colleague from the GD and well-experienced due to yearlong working in cattle health and the cattle veterinary practice. The practitioner is part of the team because he/she knows the farmer and farm best. The decision whether to send in samples to the CVI is taken by the NVWA official veterinarian.

At the farm, the specialist team will:

- describe the situation at the infected holding;
- describe the number and species of susceptible and other livestock; the method of husbandry;
- describe the number of clinically affected and dead animals and the presumed date of infection, based on number of affected animals and clinical signs;
- take samples of animals with clinical symptoms;
- describe the size and location of the holding and its relationships with other holdings etc.;
- describe the recent movements (animals and personnel) to and from the holding.

6.2.2 Screening teams

These teams:

- carry out inventory screening to get an impression of the spread of the virus within de protection zone as soon as possible;
- make an inventory of the number of animals in this area;
- do a follow-up screening to stay informed about the number of susceptible animals and the possible spread of the virus within the area by making farm visits in a zone of 10 km around the infected farm;
- carry out a final screening by taking blood samples for serological examination of animals on farms within the area. This is one of the conditions for lifting control measures.

6.2.3 Tracing teams

These teams:

- tracing of possible contact farms of the infected farms, upward and downward;

- do surveillance of contact holdings and all other suspected holdings till the suspicion of LSD is ruled out;
- take samples on infected farms to get knowledge of the origin of the virus and the length of period between introduction and detection;
- give advice on holdings for preventive culling, taking samples on holdings that will be preventively culled to investigate if the holding was infected or not and if to determine a possible date of introduction;
- do tracing sources of origin of the virus.

6.2.4 Culling teams

Tasks of these teams are:

- killing of infected and strongly suspected farms as soon as possible;
- determining the value of the susceptible animals to take over, animal feed to be taken over and the utensils (taxation);
- killing and carrying off susceptible animals;
- carry off animal feed, milk and milk products and materials;
- supervision of disinfections procedures.

6.3 Training

Members of specialist teams receive a high level of training regularly. The 'Wet Dieren' states that every veterinarian is obliged to conduct his profession according to the normal rules and practices. This means that a veterinarian is obliged to ensure that no damage is inflicted to animal health or that there is no damage to public health or the national economy.

6.4 Other Experts

In addition to the experts and specialists mentioned above there are specialist teams on marking, welfare and restocking. The national crisis centre also has staff with expertise on specific aspects of the control of animal disease, for instance specialists in cleaning and disinfections and hygiene.

7. Personnel resources

7.1 List of staff

At the national NVWA disease control centre a list of the staff dealing with a disease emergency is available. The NVWA is responsible for the provision of an adequate number of well-qualified staff both at the national and regional level.

7.2 Agreements

There are standing agreements on the deployment of personnel with the Animal Health Service (GD). GD is responsible for ensuring that qualified personnel, specialised in Lumpy skin disease or cattle diseases, is available and guarantees that in a case of an outbreak they can be deployed under the responsibility of the NVWA. The Royal Dutch Veterinary Association has names and addresses of all practitioners in the Netherlands and provides support in the recruitment of extra personnel.

7.3 National NVWA disease control centre

The veterinarian in charge of the national NVWA disease control centre has at her/his responsibility veterinarians and other staff who have been trained in the management of disease emergencies.

7.4 Regional crisis centres

Regional crisis centres RCC's are minimally staffed as follows:

- The officer in charge is the regional director Ministry of Economic Affairs
- NVWA crisis manager
- 2 - 3 veterinarians
- 2 - 4 lay support staff for field duties
- 2 - 5 office support staff

7.5 Training

Article 6 of Regulation 882/2004 requires the competent authority to ensure that all staff performing official controls receive, for their area of competence, appropriate training enabling them to undertake their duties competently and to carry out official controls in a consistent manner. The NVWA Academy within the Personnel and Organisation Department is responsible for organising and facilitating training of officials. The training plan is determined annually. Staff from Border Inspection Posts receive formal training by different means: veterinarians and assistants receive formal training from a senior colleague when they start work in a new job and during training sessions

7.6 Personnel resources in the Netherlands

The Ministry of Economic Affairs ensures that sufficient trained staff is immediately available.

8. Equipment and facility resources

8.1 Availability

Equipment is readily available, and immediate access to facilities is provided.

8.2 Equipment

The NVWA has the following equipment:

- Protective clothing
- Disinfectants effective against LSD virus, detergents and soaps
- Pumps, shovel and scrapers
- Drugs for euthanasia
- Autopsy and sampling equipment
- Sign posts/warning notices for use at infected premises and in protection and surveillance zones
- Maps of the Netherlands
- Vaccination equipment if applicable

8.3 Transport of carcasses

As carcasses must be transported to rendering plants in sealed vehicles, the NVWA ensures that these facilities are available in sufficient quantity to deal with major epidemics.

8.4 Office equipment

Each RCC has office equipment available including:

- Office furniture, photocopiers, etc.
- Pre-printed forms (restrictions, valuation, epidemiological, public, tracing, movements)

9. Diagnostic laboratories

9.1 Laboratory tests

Laboratory tests for the confirmation of a LSD suspicion are carried out at the Central Veterinary Institute (CVI, Lelystad), which has validated diagnostic techniques. Material of a first outbreak will also be sent to the OIE reference laboratory IAH in Pirbright, United Kingdom.

A PCR is available for antigen detection, a commercial ELISA for the detection of antibodies against LSD is not available. If a serological test is needed, a virus neutralisation test will be developed which may take a long time.

Tests will be carried out according to Chapter 2.4.14 of the OIE manual of standards for diagnostic tests & vaccines.

9.2 Duration of diagnostic procedure

Identification of the agent by PCR and/or virus isolation will take between 1 and 21 days if tests are available. A commercial ELISA is, however, not available. Development of a neutralisation test will take time, which will cause a delay in the test procedure. Based on time needed for this type of tests, developed for other diseases, detection of antibodies might take between 7 and 14 days after having received the samples, if the test is available at CVI.

9.3 Capacity

The minimal laboratory capacity immediately available for virus detection by PCR is 200 samples per week. An ELISA for detection of antibodies against LSD virus is not available. Extra capacity can be created by instructing and deploying extra personnel that is familiar with this kind of diagnostic work.

9.4 Sampling

Instruments and tubes necessary for sample collection are stored at every district office of the NVWA and at GD.

10. Vaccination

10.1 Legal possibilities

The Minister of Economic Affairs can determine if and with which vaccine an emergency vaccination programme is to be carried out. In principle, Only vaccines registered in the Netherlands may be used, according to the 'Wet Dieren', although it is possible to use a non-registered vaccine in case of an emergency.

10.2 Stocks

Four live attenuated strains of capripoxvirus have been used as vaccines specifically for the control of LSD. It is possible to protect ruminants against LSD using strains of capripoxvirus derived from sheep or goats (OIE, 2014). No vaccine is available at CVI.

10.3 Distribution

Not relevant.

10.4 Administration

Vaccination can only be applied by veterinarians.

11. Training programmes

11.1 Training of NVWA

All members of the specialist teams receive regular training. The programme includes training in disease control in general (epidemiological enquiries, procedures, diagnostics), and specific animal diseases (clinical and laboratorial diagnostics, post-mortem examination). The participants take an exam, which they have to pass to receive a certificate. This certificate is required to be a member of the specialist teams group.

Once or twice a year a one-day refreshment course is given to inform members of the specialist teams about changes in: clinical disease aspects, (laboratory) diagnostics, legislation, risk assessment etc. For regular training and education in the Netherlands see section 12.

11.2 Veterinary education at the University

The control measures and notification procedures are taught generally for infectious animal diseases at the Veterinary Faculty. Special attention is paid to the veterinarian's responsibility. The OIE site highlights the epidemiological situation in other OIE-Member States and non-member countries.

11.3 Agricultural education

Agricultural education also covers the clinical symptoms of the various diseases. Agricultural education is also making use of the possibilities that the Internet offers for maintaining awareness of the situation elsewhere.

12. Communication

The AHWA states that if an animal shows signs of a contagious animal disease, the owner or veterinarian must report this immediately to the authorities (NVWA). A national 24-hour telephone line is open for 7 days per week (045.5463188).

In cases of, for example, an increased risk of an outbreak due to the disease situation in another country, there is a possibility of deploying extra measures. The NVWA publishes the measures that are implemented on their website. The Ministry of EA takes care of communication to various stakeholders and others who may be involved in the outbreak. Topics are the epidemiological situation, the risk, the measures etc. The approach is described in the Handbook 'Communicatie bij crises'.