# Animal infectious diseases, animal health legislation II

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### Classification of infectious diseases

- By type of agent, genus, species
- By susceptible animal species (including zoonoses)
- After pathology localization
- Epizootic (legislation)/Disease categories (AHL)
  - Foot and mouth disease
  - African Swine Fever
  - Avian influenza
  - ...
- By frequency of notification
- Economic:
  - Bovine viral diarrhoea
  - Paratuberculosis
  - ..
- Competence of animal owner and veterinarian
- Legislation is not always applicable

Republic of Latvia

Cabinet
Regulation No. 127
Adopted 19 March 2002

Procedures for Liquidation and Prevention of Danger of Epizootic Outbreaks

Issued pursuant to Section 26, Paragraph one of the Veterinary Medicine Law

# Principles for the control of infectious animal diseases

### Prevention (Animal health visits)

# Diagnostics

### Action in case of illness

- Isolation
- Restrictions on movement

in case of illness or not following state programm

• ...

# Animal infectious disease prevention

- 1. Assessment of the risk
- 2. Preventive measures and actions
  - 1. Purchase of animals and preventive quarantine of animals
  - 2. Active specific prevention vaccination
- 3. Veterinary Border Inspection (status of the diseases in the country)
- 4. Responsibility of veterinarians and animal owners

# Status of the diseases in the country

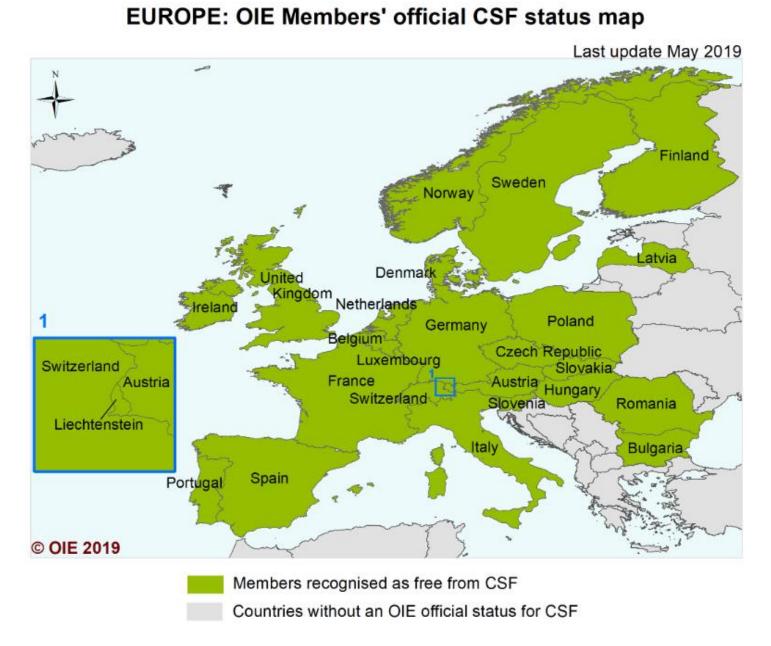
#### **Latvia has disease-free status from:**

- EBL (Bovine leucosis European Commission Implementing Decision 2012/449/EU of 27 July 2012)
- infection with Brucella abortus, B. melitensis and B. suis in bovine animal populations (Bovine brucellosis European Commission Implementing Decision 2012/204/EU of 19 April 2012)
- infection with Brucella abortus, B. melitensis and B. suis in ovine and caprine animal populations (Ovine and caprine brucellosis - European Commission Implementing Decision 2010/695/EU of 17 November 2010)
- from MTBC (MYCOBACTERIUM TUBERCULOSIS COMPLEX (M. BOVIS, M. CAPRAE AND M. TUBERCULOSIS) (Bovine tuberculosis - European Commission Implementing Decision 2011/675/EU of 12 October 2011)
- from infection with BTV
- from infection with RABV

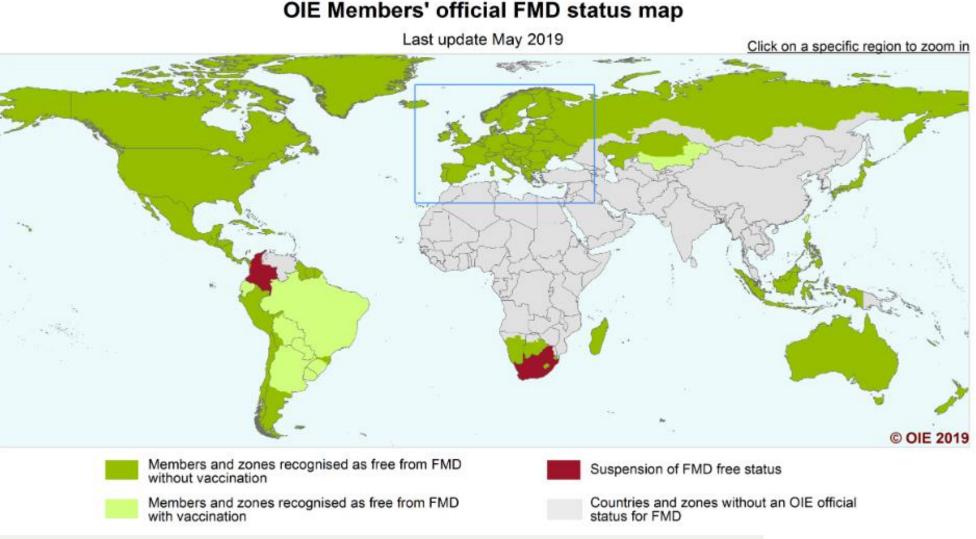
COMMISSION IMPLEMENTING REGULATION (EU) 2021/620 of 15 April 2021 laying down rules for the application of Regulation (EU) 2016/429 of the European Parliament and of the Council as regards the approval of the disease-free and non-vaccination status of certain Member States or zones or compartments thereof as regards certain listed diseases and the approval of eradication programmes for those listed diseases

<sup>\*</sup>Latvia has received the status of a negligible BSE

# Classical Swine Fever (CSF)



# Foot and Mouth Disease (FMD)



https://www.oie.int/en/animal-health-in-the-world/official-disease-status/fmd/en-fmd-carte/

# Rinderpest

- Paris, 25 May 2011 The national Delegates of the World Organisation for Animal Health (OIE) Members declared today that rinderpest, one of the deadliest diseases of cattle and of several other animal species, is now eradicated from the surface of the earth.
- The world was officially declared free from rinderpest in 2011 in the course of the 79th OIE General Session.

https://www.oie.int/fileadmin/Home/eng/Animal Health in the World/docs/pdf/A RESO 2011 techniques RP15.pdf

# Reporting of infectious diseases

### 1. Animal owners

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✓ Veterinarians/FVS

✓ Laboratory

✓ FVS

✓ EU MS, WOAH, European Commission
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### • Orders/Intructions

- FVS
  - Vveterinarians
    - Animal owners

# Prevention Biosafety

Republic of Latvia

Cabinet
Regulation No. 291
Adopted 9 June 2015

Regulations Regarding a Set of Biosecurity Measures for Holdings Where Livestock is Kept

Issued pursuant to Section 25, Clause 19 of the Veterinary Medicine Law

- <a href="https://likumi.lv/ta/en/en/id/274930-regulations-regarding-a-set-of-biosecurity-measures-for-holdings-where-livestock-is-kept">https://likumi.lv/ta/en/en/id/274930-regulations-regarding-a-set-of-biosecurity-measures-for-holdings-where-livestock-is-kept</a>
- FVS biosafety guidelines
- Veterinarian advices

### Prevention

# Responsibility of animal owners

#### **Veterinary Medicine Law**

- 1. to organise, in co-operation with practising veterinarians and FVS, prevention and combating of infectious animal diseases monitored by the State
- 2. to ensure the implementation of measures for prevention of infectious animal diseases monitored by the State within the specified time periods
- 3. in cases of combating infectious animal diseases monitored by the State, to do the following upon the request of the State food and veterinary inspector or a practising veterinarian:
  - 1. to show all the animals, as well as the animal lodgings and the veterinary documentation (diagnostic examinations and vaccination documents, lists of diagnostically examined and vaccinated animals, results of laboratory examinations)
  - 2. to subject animals to diagnosing of infectious diseases, treatment and preventive measures
  - 3. to ensure disinfecting of animal lodgings and equipment
  - 4. to ensure quarantining, treatment and liquidation of animals

# Quarantine

# Veterinary Medicine Law

- In the case of an epizootic outbreak in Latvia or in its neighbouring states, the State chief food and veterinary inspector shall immediately determine a quarantine and the Prime Minister shall proclaim a state of emergency in the State or a part thereof in accordance with the Civil Defence Law
- In the case of an epizootic outbreak in Latvia or in its neighbouring states, the State chief food and veterinary inspector shall determine, after co-ordination with the State Forest Service, quarantine measures with respect to the hunting of wild animals

# Veterinary Medicine Law

### A quarantine shall include:

- the area affected by the epizootic outbreak (the place where the animal, or the herd, affected by the infectious animal disease, is located)
- the protection area (not less than within a radius of three kilometres around the area affected by the epizootic outbreak)
- the supervision zone (not less than within a radius of 10 kilometres around the area affected by the epizootic outbreak)
- In the case of a danger of the further spreading of an epizootic outbreak, the State chief food and veterinary inspector shall determine a territory to be controlled around the supervision zone, in which compulsory vaccination of animals shall be performed
- Under the circumstances of a quarantine, the hunting of wild animals may be arranged only in accordance with the procedures set out by the Cabinet

### Animal Health Law

<u>Biosecurity</u> - means the sum of management and physical measures designed to reduce the risk of the introduction, development and spread of diseases to, from and within:

- an animal population, or
- an establishment, zone, compartment, means of transport or any other facilities, premises or location

# Animal Health Law Definitions

- Quarantine means the keeping of animals in isolation with no direct or indirect contact with animals outside the epidemiological unit, for the purpose of ensuring that there is no spread of one or more specified diseases while the animals in isolation are undergoing observation for a specified length of time and, if appropriate, testing and treatment
- Epidemiological unit means a group of animals with the same likelihood of exposure to a disease agent
- Outbreak means the officially confirmed occurrence of a listed disease or an emerging disease in one
  or more animals in an establishment or other place where animals are kept or located
- **Restricted zone** means a zone in which restrictions on the movements of certain animals or products and other disease control measures are applied, with a view to preventing the spread of a particular disease into areas where no restrictions are applied; a restricted zone may, when relevant, include protection and surveillance zones
- **Protection zone** means a zone around and including the location of an outbreak, where disease control measures are applied in order to prevent the spread of the disease from that zone
- **Surveillance zone** means a zone which is established around the protection zone, and where disease control measures are applied in order to prevent the spread of the disease from the protection zone;

#### ANNEX XI

#### DURATION OF THE MEASURES IN THE SURVEILLANCE ZONE

(as referred to in Articles 55 and 56 of this Regulation)

Category A diseases	Minimum period of duration of measures in the surveillance zo
Foot and mouth disease	30 days
Infection with rinderpest virus	30 days
Infection with Rift Valley fever virus	45 days
Infection with lumpy skin disease virus	45 days
Infection with Mycoplasma mycoides subsp. mycoides SC (Contagious bovine pleuropneumonia)	45 days
Sheep pox and goat pox	30 days
Infection with peste des petits ruminants virus	30 days
Contagious caprine pleuropneumonia	45 days
African horse sickness	12 months
Infection with Burkholderia mallei (Glanders)	Not applicable
Classical swine fever	30 days
African swine fever	30 days
Highly pathogenic avian influenza	30 days
Infection with Newcastle disease virus	30 days

#### ANNEX V

#### MINIMUM RADIUS OF PROTECTION AND SURVEILLANCE ZONES

(as referred to in Article 21 of this Regulation)

Indicated as radius of a circle centred on the establishment

Category A diseases	Protection Zone	Surveillance Zone	
Foot and mouth disease	3 km	10 km	
Infection with rinderpest virus	3 km	10 km	
Infection with Rift Valley fever virus	20 km	50 km	
Infection with lumpy skin disease virus	20 km	50 km	
Infection with Mycoplasma mycoides subsp. mycoides SC (Contagious bovine pleuropneumonia)	Establishment	3 km	
Sheep pox and goat pox	3 km	10 km	
Infection with peste des petits ruminants virus	3 km	10 km	
Contagious caprine pleuropneumonia	Establishment	3 km	
African horse sickness	100 km	150 km	
Infection with Burkholderia mallei (Glanders)	Establishment	Establishment	
Classical swine fever	3 km	10 km	
African swine fever	3 km	10 km	
Highly pathogenic avian influenza	3 km	10 km	
Infection with Newcastle disease virus	3 km	10 km	

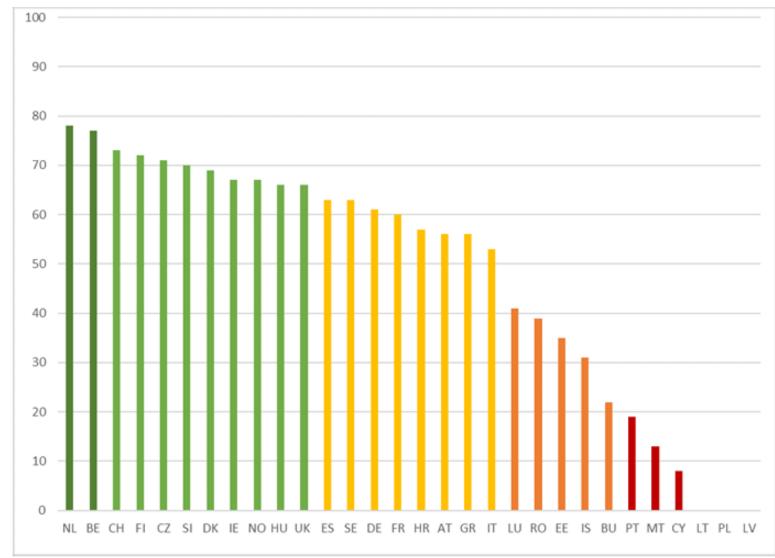
COMMISSION DELEGATED REGULATION (EU) 2020/687 supplementing Regulation (EU) 2016/429 of the European Parliament and the Council, as regards rules for the prevention and control of certain listed diseases

# Contingency plans

- The Member States shall, after appropriate consultation of experts and relevant stakeholders, draw up, and keep up to date, contingency plans and, where necessary, detailed instruction manuals laying down the measures to be taken in the Member State concerned in the event:
  - of the occurrence of a listed disease referred to in point:
    - As regards listed diseases that do not normally occur in the Union and for which immediate eradication measures must be taken as soon as they are detected
  - or, as the case may be, of an emerging disease, in order to ensure a high level of disease awareness and preparedness and the ability to launch a rapid response.

### Animal health visits

- Operators shall ensure that establishments under their responsibility receive animal health visits from a veterinarian when appropriate due to the risks posed by the establishment in question, taking into account:
  - the type of establishment;
  - the species and categories of kept animals on the establishment;
  - the epidemiological situation in the zone or region as regards listed and emerging diseases to which the animals in the establishment are susceptible;
  - any other relevant surveillance, or official controls to which the kept animals and type of establishment are subject



https://fve.org/fve-publishes-fullreport-and-poster-on-situationregarding-animal-health-visits/

Figure 1: Benchmarks of the different countries regarding the implementation of the animal health law visits based on the information received. The maximum score is 100 (covering all species, all types of establishments, full country coverage, mandatory, done by a private practitioner, all subjects), and the lowest score is 0 (no visits). Please note that several countries are the in the progress of implementing these visits, so the scores will change over time.

### Infectious animal diseases

- Rabies
- American Foulbrood
- Enzootic bovine leukosis
- Bovine brucellosis
- Transmissible spongiform encephalopathy
- Equine infectious anaemia
- Newcastle disease
- Maedi-Visna in Ovine Animals
- Swine brucellosis

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### **Enzootic bovine leukosis**

Ministru kabineta noteikumi Nr.880

Rīgā 2011.gada 15.novembrī (prot. Nr.67 29.§)

Govju enzootiskās leikozes uzraudzības, kontroles un apkarošanas kārtība

#### 2.2. DZĪVNIEKU ĪPAŠNIEKU/ŢURĒTĀJU ATBILDĪBĀ ESOŠIE DZĪVNIEKU INFEKCIJAS SLIMĪBU UZRAUDZĪB <a href="Q enzootiskā">Q enzootiskā</a> PASĀKUMI (IZMAKSAS PAR ŠO PASĀKUMU IZPILDI SEDZ DZĪVNIEKU ĪPAŠNIEKI/TURĒTĀJI)

#### 2.2.1. DIAGNOSTISKIE IZMEKLĒJUMI

#### 2.2.1.1. Liellopi

N.p.	Cli=b	Vocamo omno	Diagnostiskie izmeklējumi			Specifiskā	
k.	Slimība	Vecuma grupa	Biežums, apjoms	Izmeklējamā substance	Metode	profilakse	Pamatojums
I	2	3	4	5	6	7	8
1.	Govju enzootiskā leikoze <sup>4</sup> /Leucosis enzootica boum/	No 24 mēnešu vecuma novietnēs, kurām piešķirts GEL brīvais statuss  No 24 mēnešu vecuma novietnēs, kuras zaudējušas vai vēl nav ieguvušas GEL brīvo	Ne mazāk kā 20% no valstī reģistrētām liellopu novietnēm, kurām ir GEL brīvais statuss un atrodas govju sugas dzīvnieki, kas vecāki par 24 mēnešiem;  2024.gadā jāizmeklē ~ 2494 novietnēs 100% govju sugas dzīvnieku, kas vecāki par 24 mēnešiem  2x12 mēnešu laikā ar vismaz 4 mēnešu intervālu 100% govju sugas dzīvnieku, kas vecāki par 24 mēnešiem	Asins serums/piens  Asins serums	ELISA	Specifiskās	MK noteikumi Nr.880 (15.11.2011.), 17. un 24.14.1. punkts  EK Deleģētā Regula (ES) 2020/689 IV pielikums, III daļa, 2.nodaļa 2.iedaļa  EK Īstenošanas Regula (ES) 2021/620 IV pielikuma I daļa
2.	Govju bruceloze <sup>4</sup> /Brucellosis/ (terosinātājs Brucella abortus, B. melitensis, B. suis)	No 24 mēnešu vecuma novietnēs, kurām piešķirts brucelozes brīvais statuss  No 24 mēnešu vecuma novietnēs, kuras zaudējušas brucelozes brīvo novietnes statusu	Nosakot valstī slimības izplatību 0,2% govju novietņu ar 95% ticamību;  2024.gadā jāizmeklē ~ 1579 novietnēs 100% govju sugas dzīvnieku, kas vecāki par 24 mēnešiem  100% govju sugas dzīvnieku, kas vecāki par 24 mēnešiem	Asins serums/piens	RBR, KSR, AR, ELISA	profilakses nav	MK noteikumi Nr.881 (18.12.2012.) 28. punkts EK Deleģētā Regula (ES) 2020/689 IV pielikuma I daļas 3.nodaļas 2.iedaļa EK Īstenošanas Regula (ES) 2021/620 I pielikuma I daļas 1.nodaļa

### Enzootic bovine leukosis

- Latvia is officially free
- In order for Latvia to maintain its status, it is necessary to continue laboratory examinations of animals in all cow holdings where they have reached the age of 24 months
- Notifiable and monitored by the State infectious diseases

### Enzootic bovine leukosis

- The diagnosis is confirmed by the reference laboratory blood, milk
- Samples shall be taken by a practicing veterinarian or a FVS official veterinarian
- The animal owner/keeper pays
- Infected animals should be slaughtered and the animal owner may receive compensation from the State

Therapeutic treatment and vaccination against enzootic bovine leukosis is prohibited

## Official enzootic-bovine-leukosis-free farm

The owner of the animals shall ensure that the animals in the officially enzootic-bovine-leukosis-free holding do not come into contact with animals from a holding which is not officially enzootic-bovine-leukosis-free

\* the holding is located in the territory or administrative territory of an officially enzootic-bovine-leukosis-free country

# **Bovine brucellosis**

Ministru kabineta noteikumi Nr.881

Rīgā 2012.gada 18.decembrī (prot. Nr.71 34.§)

### Kārtība, kādā veic brucelozes profilakses un apkarošanas pasākumus govīm

Izdoti saskaņā ar Veterinārmedicīnas likuma 25.panta 4.punktu

## Bovine brucellosis

- Latvia is officially free
- In order for Latvia to maintain its status, animals over **24 months** of age, not less than 20% of the total number of holdings in the country, must be laboratory tested for bovine brucellosis **every year**
- Notifiable and monitored by the State infectious diseases

2.	Govju bruceloze <sup>4</sup> /Brucellosis/ (ierosinātājs B.abortus)	No 24 mēnešu vecuma novietnēs, kurām piešķirts brucelozes oficiāli brīvais statuss	Nosakot valstī slimības izplatību 0,2% govju novietņu ar 95% ticamību;  2021.gadā jāizmeklē ~ 1587 novietnēs 100% govju sugas dzīvnieku, kas vecāki par 24 mēnešiem
		No 24 mēnešu vecuma novietnēs, kuras zaudējušas brucelozes oficiāli brīvo statusu	100% govju sugas dzīvnieku, kas vecāki par 24 mēnešiem

## Prohibited in Latvia

- Preventive vaccination of animals and use of hyperimmune serums against brucellosis, except:
  - (female animals until six months of age have been vaccinated against brucellosis with Strain 19 live vaccine or until 15 months of age with inactivated 45/20 auxiliary vaccine)
  - animals have not been vaccinated against brucellosis, except female animals, which have been vaccinated three years earlier, before the status of an officially brucellosis-free holding was requested)
- Importation of animals that have been vaccinated against brucellosis, except:
  - the animals stationed are more than 18 months old and vaccination against brucellosis of these animals has been performed not more than one year before moving
  - female animals are moved from a holding, if two years have passed since granting of the status of a brucellosis-free holding to such holding, and no animals vaccinated against brucellosis have been stationed at the respective holding for two years
- Therapeutic treatment of brucellosis

# Transmissible spongiform encephalopathy I

- Bovine spongiform encephalopathy
  - Notifiable and Monitored by State
  - Latvia has received the status of a negligible BSE
  - Brain sample:
    - all dead cows over 48 months old
    - all cows over 48 months of age if clinical signs have been established in ante-mortem inspection
    - animals (all age) of the bovine species suspected of being infected with BSE
  - Practicing veterinarian with agreement/Official veterinarians
  - Sample to BIOR

# Transmissible spongiform encephalopathy II

- Scrapie sheep/goats
- Registret and Monitored by State
- Brain sample
  - all ovine/caprine animals dead or killed older than 18 months of age or for which the incisors have changed
  - ovine and caprine animals of all ages with clinically suspicious of scrapie
- Practising veterinarian with agreement
- Sample to BIOR

**REGULATION (EC) No 999/2001** OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 May 2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies

# Equine infectious anaemia

- Notifible and Monitored by State
- Samples blood
  - once a 3 years (from age of 12 months)
- A practising veterinarian shall make an entry on the horse's passport regarding the results of laboratory examinations
- Important for competitions!
- Therapeutic treatment prohibited

### Newcastle disease

• Notifible and Monitored by State

Rabies + newcastle d

- Compulsory vaccination for registered holdings
- Confirmation of the disease all birds on the holding are destroyed
- Sample body (brain, trachea, lung and liver tissues, blood)

### Maedi-Visna in Ovine Animals

Republic of Latvia

Cabinet
Regulation No. 251
Adopted 20 May 2014

# Procedures for Performing Surveillance, Control and Eradication of the Disease Maedi-Visna in Ovine Animals

Issued pursuant to Section 25, Clause 17 of the Veterinary Medicine Law

### Brucellosis in Swine

Registret and Monitored by State

• <a href="https://likumi.lv/ta/en/en/id/254533-procedures-for-taking-preventive-and-eradication-measures-of-brucellosis-in-swine">https://likumi.lv/ta/en/en/id/254533-procedures-for-taking-preventive-and-eradication-measures-of-brucellosis-in-swine</a>