



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Crisis preparedness in food, animals and plants
Animal health

**SUBMISSION OF ERADICATION PROGRAMMES FOR CATEGORY B AND C
DISEASES OF TERRESTRIAL ANIMALS BASED ON GRANTING DISEASE-FREE
STATUS AT ESTABLISHMENT LEVEL**

**Template in accordance with Article 10 of
Commission Implementing Regulation (EU)
2020/2002**

1. Date of submission

31 May 2021

2. Member State :

Croatia

3. Name of the disease¹

Infection with *B. abortus*, *B. melitensis* and *B. suis* in ovine and caprine population

4. Contact details

5. Territorial scope with a description and demarcation of the geographical and administrative areas covered by the eradication programme and the names of the zones and regions, if more than one region is included in the territorial scope of the programme.

The eradication programme will be implemented on the whole territory of Croatia. Croatia has 21 regional administrative units (counties – “županije”). Map with 21 administrative counties is attached to this document (Attachment 1).

Final goal of the eradication programme in Croatia is to fulfil requirements of Annex IV, Chapter 4, Section 1 for the whole territory of Croatia in the time period set in the point 10 of this eradication programme. Taking into account possible sporadic occurrence of infection with *Brucella abortus*, *B. melitensis* and *B. suis*, during the duration of the eradication programme that would prevent application for free status for the whole territory of Croatia, fulfilment of requirements for gaining of the free status will be assessed and applied at the county levels. This will enable limitation of the further eradication programme only to county(ies) where infection was confirmed.

6. A description of the epidemiological situation for each zone or region, if more than one region is included in the territorial scope of the programme:

¹ This template is to be used for the submission of the following eradication programmes for the following listed diseases:

Category B-diseases

- a) Infection with *Brucella abortus*, *B. melitensis* and *B. suis*
- b) Infection with *Mycobacterium tuberculosis* complex

Category C-diseases

- a) Enzootic bovine leukosis
- c) Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis
- d) Infection with Aujeszky's disease virus
- e) Bovine viral diarrhoea

(a) the number of establishments keeping animals of the targeted animal population by health status (Disease-free, infected or unknown) excluding establishments falling under the derogation referred to in point (6)(f) at 31 December;

Targeted animal population are kept ovine and caprine animals. Number of establishments keeping animals of the targeted animal population by health status is presented in the table in the Attachment 2 - amended.

(b) the number of animals of the targeted animal population kept in the establishments referred to in point (a) by health status;

Detail information on targeted animal population are presented in the Attachment 2 - amended.

(c) maps indicating the density of the targeted animal population referred to in point (b) by health status;

Maps indicating the density of establishments keeping the targeted animal population and additional information of the structure of establishments are presented in the Attachment 3. Density of establishments with unknown health status, per county, is presented in Attachment 2 – amended.

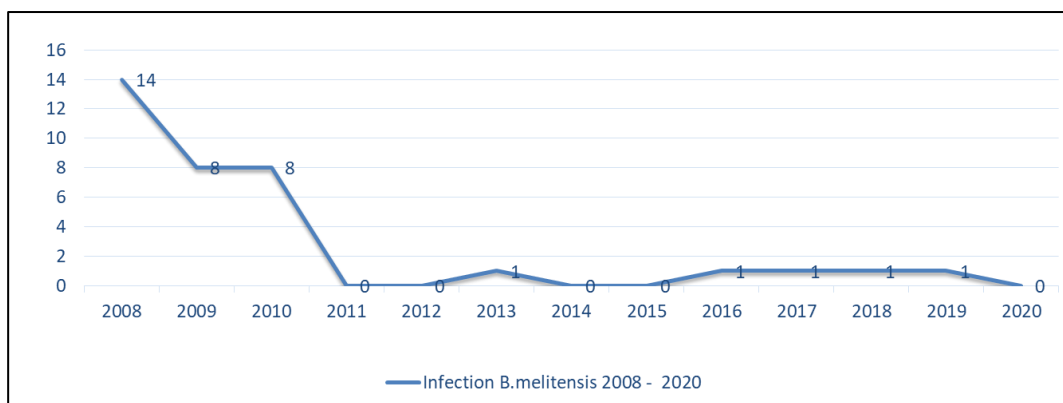
(d) timeline with prevalence, incidence data and, where relevant, vaccination history covering at least the past 5 years; and

Brucellosis in bovine, ovine and caprine population in Croatia has been controlled for many years. Designation of establishments keeping ovine and caprine animals as officially free from sheep and goat brucellosis, fully aligned with Directive 91/68/EEC started in 2012. In 2012 -2013, only dairy flocks were included in the programme. From 2014th whole ovine and caprine population is included in the programme.

During the last five years, four outbreaks of *B. melitensis* were confirmed.

Timeline with the prevalence in period 2008-2020 is presented in the Figure 1 (below).

Figure 1 – *B. melitensis* 2008-2020 infection



B. abortus has not been confirmed in Croatia since 1965.

B. suis was never confirmed in ruminant population in Croatia. In domestic and wild pigs *B. suis* biovar 2 was detected. In one outbreak in 2017 (described below) *B. melitensis* was confirmed in one sow.

Additional information of outbreaks in the last 5 years (*B. melitensis*)

October 2016, municipality Cetingrad, Karlovac county

Description of the infected establishment and population: establishment with 333 sheep (animals for meat production)

Summary: In 2016 representative number of animals was tested in the establishment, according to the rules of Directive 91/68, Annex A, Chapter I B. One animal was positive on CFT. It was culled and sampled for bacteriology testing. *B. melitensis* was isolated.

All other animals in the establishment older than 6 months were tested with RBT and CFT in parallel, according to the required testing regime and all animals were negative.

Further testing was performed according to the Directive 91/68.

February 2017, municipality Dvor, Sisak- moslavina county

Description of the infected establishment and population: establishment keeping sheep, cattle and pigs

During routine testing in case of abortion, suspicion on brucellosis was raised. *B. melitensis* was isolated from the aborted material (tissue). Additional serological testing of all susceptible animals on the establishment revealed 15 positive sheep and 6 positive pigs. Decision for total stamping put - depopulation of all animals on the infected establishment was made and all sheep and pigs on the establishment were culled by euthanasia. Subsequently, additional samples were taken from culled animals. *B. melitensis* was isolated from one sow (11 porcine animals culled and sampled).

October 2018 , municipality Topusko, Sisak- moslavina county

Description of the infected establishment and population: establishment keeping 29 bovine animals

Suspicion was raised during regular annual brucellosis surveillance in bovine animals. 10 bovine animals revealed positive results on serology (CFT 7 positives, ELISA 10 positives, cELISA 7 positives). Due to different test results on serological tests, additionally, brucellin skin test was performed on all bovine animals older than 12 months out of which five animals were positive. Bovine animals positive on BST were slaughtered and samples were taken for bacteriological testing. *B. melitensis* was isolated (in supramamary lymph nodes) originating from three bovines. According to the results of bacteriological testing whole herd was considered as infected and whole herd was sent for slaughter.

May 2019, municipality Metković, Dubrovnik-neretva county

Description of the infected establishment and population: establishment keeping 46 bovine animals and 148 goats

Suspicion was raised after notification from human epidemiological service on infected human. Serological investigation of the suspect herd detected 45 positive goats (CFT) and 5 positive bovines (CFT, iELISA, cELISA). All goats and five bovine animals were euthanized. *B. melitensis* was confirmed with bacteriological testing. All susceptible animals in 10 km range from the establishment were tested immediately after confirmation of infection. Remaining bovine animals were tested, slaughtered and sampled for bacteriological investigation according to the rules of Directive 64/432.

All four outbreaks were located at the border with Bosnia and Herzegovina that is considered as the main risk factor that corresponds with the epidemiological situation in that country. Locations of four described outbreaks are presented in the Figure 2.

Figure 2 Outbreaks locations 2016 – 2019



(e) information as regards the epidemiological situation in additional animal populations, where relevant.

Analysis of the eradication programme results during previous years and epidemiological investigations of the outbreaks does not indicate additional animal population was involved or could be involved in spreading of the disease or could be a reservoir.

7. A description of the disease control strategy of the eradication programme in accordance with Article 16 of Commission Delegated Regulation (EU) 2020/689 including at least:

(a) the sampling schemes and diagnostic methods to be used in accordance with Annex IV to Delegated Regulation (EU) 2020/689:

(i) for the granting of the disease-free status to establishments and the maintenance of that status;

(a) Sampling schemes

1. Testing scheme in order to grant the disease-free status of establishments

Testing will be in line with provisions laid down in the Annex IV, Part I, Chapter 1, Section 1 of the Commission Delegated Regulation (EU) 2020/689.

2. Testing scheme in order to maintain the disease-free status of establishments

Serological testing to maintain disease free status will be carried out according to Section 2 (b) (i) of Chapter 1 of Part I of Annex IV of Regulation (EU) 2020/689

- all entire ovine or caprine animals over 6 months of age at appropriate intervals of not more than 12 months, determined by the competent authority, taking into account the type of production, the situation of the disease and the identified risk factors.

Additional measures in at risk areas

At risk area covers all municipalities in which epidemiological data show either confirmed infection or epidemiological link with the confirmed cases (Table 1).

Table 1 - List of municipalities included in at risk area:

| County | Municipality |
|--------------------------|------------------|
| Lika –senj county | Plitvička jezera |
| | Korenica |
| Karlovačka county | Cetingrad |
| | Vojnić |
| | Krnjak |
| Sisak-moslavina county | Topusko |
| | Dvor na Uni |
| Šibenik-knin county | Civljane |
| Dubrovnik-neretva county | Metković |

Testing scheme in at risk area includes:

- testing of all ovine and caprine animals older than 6 months on all establishments at intervals not more than 12 months,
- testing must be performed each year by 31 March at the latest
- ovine and caprine animals that will be moved to pasture must be tested twice, before leaving the establishment of origin for pasture and after return to establishment of origin from to pasture

- pre-movement testing is mandatory for all animals originating from at risk area for all movements to other establishments and only animals with negative serological test not older than 30 days can be moved

- mandatory sampling and testing of all abortions.

Diagnostic methods:

Diagnostic of brucellosis is performed in Croatian Veterinary Institute Zagreb, and in four regional branches: Rijeka, Split, Vinkovci and Križevci. Laboratory for Bacterial Zoonoses and Molecular Diagnostics of Bacterial Diseases in CVI Zagreb was appointed as the National Reference Laboratory (NRL) for brucellosis and tuberculosis in 2011. NRL performs serological, bacteriological and molecular diagnostics of the most important bacterial zoonosis (brucellosis, tuberculosis, leptospirosis, coxiellosis). NRL conducts various serological tests (RBT, Complement fixation test (CFT), iELISA and eELISA). Sample testing on brucellosis agent consists of polymerase chain reaction (PCR) method test: affiliation to *Brucella spp.* is evidenced by Bruce-ladder multiplex PCR. Bruce-ladder method may identify majority of species of *Brucella* genus in one step, namely: vaccinal strains (*B. abortus* S19, *B. abortus* RB51 and *B. melitensis* Rev.1), *B. neotomae*, *B. pinnipedialis* and *B. ceti*, *B. abortus* biovars 1, 2, 3, 4, 5, 6, 7, 9, *B. melitensis* biovars 1, 2, 3, *B. ovis* and *B. suis* biovars 1, 2, 3, 4, 5. For type determination of serovars *B. suis*, multiplex PCR method is used. For the requirements of molecular epidemiology, *Brucella spp.* isolates are type-defined by MLVA (Multiple Locus Variable Number of Tandem Repeat Analysis), RFLP (Restriction Fragment Length Polymorphism) and MLST (Multi Locus Sequence Typing). NRL has the methods accredited in the field of serological, bacteriological and molecular diagnostics. In 2008, NRL implemented HRN EN ISO/IEC 17025 quality system and accredited two serological methods for brucellosis diagnostics: Rose Bengal test (RBT) and enzyme immunoassay (ELISA – *B. abortus*).

Regional branches perform only buffered *Brucella* antigen test (RBT). Complement fixation test (CFT), cultivation and identification of *Brucella spp.* is performed only in NRL.

For the granting and maintenance of disease-free status of establishments, buffered *Brucella* antigen test will be used as screening method.

(ii) to confirm or rule out the disease in the event of a suspected case;

In all establishment where disease is suspected disease control measures from Articles 21, 22 and 23 will be implemented.

In all establishment where disease is suspected or confirmed veterinary inspector will suspend or withdraw disease free status of establishment according to Article 20 and Sections 3 and 4 of Chapter 1 of Part I of Annex IV of Regulation (EU) 2020/689.

Maximum period of time during which disease-free status may be suspended will be 40 days.

Samples positive on buffered *Brucella* antigen test will be further tested with CFT.

If more than 5 % of ovine and caprine animals on the establishment have positive results on buffered *Brucella* antigen test, all ovine and caprine animals in the establishment will be tested with CFT.

Animals positive on CFT will be culled and sampled for bacteriology testing.

Samples for bacteriology will include following tissue: uterus, testicles, spleen, foetus, lymph nodes (sumpramammar, inguinal, portal, mandibular and mesenterial) and milk. *B. abortus*, *B. melitensis* or *B. suis* will be identified by PCR.

(b) disease control measures to be applied in the event of a confirmed case;

In case of confirmation of *B. abortus*, *B. melitensis* or *B. suis* in ovine and caprine establishment, measures according to Commission Delegated Regulation (EU) 2020/689 will be implemented:

Article 24 point 1

- withdraw the disease-free status of the infected establishment
- adopt the measures laid down in Articles 25 to 31 in the infected establishment

Article 25

- conduct investigations and apply the measures laid down in Article 21 of Commission Delegated Regulation (EU) 2020/689 in all epidemiologically linked establishments
- epidemiological enquiry conducted by a veterinary inspector
- adapt the surveillance to the identified risk factors, taking into account the conclusions of the epidemiological enquiry.

Veterinary and Food Safety Directorate General (VFSDG) shall consider the need to conduct an investigation on wild animals from additional animal populations where the epidemiological enquiry reveals epidemiological links between kept and wild animals.

VFSDG shall as soon as possible inform about the situation operators and relevant authorities from the Member States concerned by the epidemiological links with the confirmed case and the competent authorities from other Member States or third countries that may be concerned by the epidemiological links with the infected establishment.

Article 26

Veterinary inspector will prohibit movements of animals from targeted animal population out of the infected establishment, unless it has authorised their immediate slaughter in a designated slaughterhouse and:

- order the isolation of the suspected and confirmed cases in the establishment where technically possible
- restrict the movements of animals from targeted animal population within the establishment
- restrict the introduction of animals from targeted animal population in the establishment
- restrict the movement of products of animals from targeted animal population from and to the infected establishment
- testing of all susceptible animals in the confirmed establishment.

VFSDG will extend the measures from Article 26 to animals and products from additional animal populations to prevent the spread of the disease when it considers necessary.

Article 27 point 1 a) and b) (i) and c)

Following confirmation of the disease, veterinary inspector will order testing in infected establishment within a maximum period (to be determined by the veterinary inspector) of those animals whose testing is considered necessary to complete the epidemiological enquiry and subsequent testing to restore the disease-free status (as laid down in Section 4 of Chapter 1 of Part I, Annex IV of Commission Delegated Regulation (EU) 2020/689). Veterinary inspector may order additional testing that considers as necessary to ensure the swift detection of infected animals that may contribute to the spreading of the disease.

Article 27 point 2. (i)

By way of derogation from point (b) of paragraph 1, testing shall not be ordered when disease-free status is restored in accordance with point 2 of Section 1 of Chapter 1 of Part I of Annex IV for infection with *B. abortus*, *B. melitensis* and *B. suis*;

Article 27 points 3, 5 and point 6

Veterinary inspector will order all animals recognised as confirmed cases in infected establishments and, if necessary, killing and safely disposal of all suspect cases. Measures from Article 27 can be extended to animals from additional animal populations when this is necessary to eradicate the disease in the infected establishment.

Article 28 points 1, 2 and 4

Veterinary inspector in all establishments infected with *B. abortus*, *B. melitensis* or *B. suis* will order that milk from confirmed cases shall either be fed only to animals in the same establishment after it has been processed to ensure the inactivation of the disease agent, or it shall be disposed of.

Manure, straw, feed or any other matter and substance which has come into contact with a confirmed case or with contaminated material shall be either collected and disposed of as soon as possible or, following an appropriate risk assessment, stored and processed to reduce to an acceptable level the risk of spreading of the disease.

In all infected establishments foetuses, still-born animals, animals which have died from the disease after birth and placentae shall be collected and safely disposed of.

Veterinary inspector will order the trace-back, the processing or the disposal of any products from infected establishments that may constitute a risk of spreading the disease or affect human health when it considers necessary.

Article 29

Derogations from Article 29 of Commission Delegated Regulation (EU) 2020/689, are not foreseen to be implemented.

Article 30 points 1, 2, 3 and 4

Veterinary inspector will order the operators of an infected establishments and those receiving animals from infected establishments the cleaning and disinfection or, where relevant, the safe disposal of all premises, equipment and material as listed in Article 30 points 1a) to e). yavrsni ispit znanja

Cleaning and disinfection is performed by designated authorised veterinary organisations with special approval from the VFSDG to perform disinfection, insect and rodent control. Veterinary inspector will not restore or grant again disease-free status to the establishment until it considers that the cleaning and disinfection, or where relevant, the safe disposal, has been completed.

Veterinary inspector will, based on a risk assessment, regard a pasture as contaminated and prohibit its use for kept animals of higher health status than that of the targeted animal population or, if epidemiologically relevant, additional animal populations, for a period of time sufficient to consider the risk of persistence of the disease agent to be negligible, and at least 60 days.

Article 31

Before or upon lifting of the disease control measures, veterinary inspector will order proportionate risk mitigating measures to prevent reinfection taking into account relevant risk factors as indicated by the results of the epidemiological enquiry.

Additional measures

Additional measures will be implemented taking into consideration epidemiological investigation and extension of infection.

Additional measures may be ordered by VFSDG, and will include:

- whole herd depopulation at certain circumstances
- additional serological surveillance in a surrounding area

(c) biosecurity and risk mitigating measures to be implemented;

Risk mitigating measures will be implemented in area at risk area including pre-movement testing and testing before and after moving to and from pasture. In addition, increase of frequency of official controls will be implemented in at risk area and on establishments without disease-free status in the whole country continuously.

(d) type of vaccine(s) to be used and the vaccination scheme, if relevant;

Vaccination is prohibited.

(e) measures to be implemented as regards additional animal populations, if relevant;

Not applicable.

(f) derogations to be applied in accordance with Article 19 of Delegated Regulation (EU) 2020/689, if relevant;

Operators of all establishment listed in Article 19 points a) to d) of Delegated Regulation (EU) 2020/689 will be exempted from the obligation to obtain and maintain disease-free status, provided that they comply with the general rules laid down in article 18 (1) a).

(g) coordinated measures with other Member States or third countries, if relevant.

Not foreseen.

(h) targeted animal populations and when applicable, additional animal populations

Targeted animal population are kept ovine and caprine animals. In establishment where *B. abortus*, *B. melitensis* or *B. suis* will be confirmed all susceptible animal species will be serologically tested.

8. A description of the organisation, supervision and roles of the parties involved in the eradication programme including at least:

(a) the authorities in charge of coordinating and supervising the implementation of the programme;

VFSDG of the Ministry of Agriculture is the National competent authority responsible for designing and developing the eradication programme in coordination with NRL for brucellosis in Croatian Veterinary Institute. VFSDG is also responsible for monitoring of implementation of the programme.

Obligations of the VFSDG are to:

- coordinate and organise implementation of eradication programme
- collect, analyse and monitor the collected data
- evaluate the results of the implementation of the programme
- issue decisions and instructions to implement additional measures
- report data required by IR (EU) 2021/2002
- assure financial resources for programme implementation and compensation for the operators.

Veterinary inspectors from the State Inspectorate of the Republic of Croatia (SI) carry out supervision of the implementation of the programme.

Obligations of the veterinary inspection in the SI are to:

- perform official controls in relation to this programme
- issue decisions to operators responsible for suspected and confirmed establishments and epidemiologically linked establishments as listed in point 7 b) of this programme.

(b) responsibilities of all stakeholders involved.

Operators of establishments where ovine and caprine animals are kept have to:

- ensure that requirements of article 10 of Regulation (EU) 2016/429, Article 18 and 52 point 3 of Delegated Regulation (EU) 2020/689 are fulfilled
- give immediate notification to a veterinarian in case of any suspicion of brucellosis (abortion in sheep and goats, clinical signs)
- restrict the movement of an animal suspected of being affected by disease and to prevent contact of other people and animals with the suspected animal or carcass until investigation has been completed.

Obligations of authorised veterinary organisations are to:

Relevant activities under the programme are carried out by authorised veterinary organisations including:

- sampling for brucellosis in all establishments within their county(ies) of competence according to the sampling schemes set out in this programme and delivering of samples to official laboratories
- assign disease-free status to establishment in line with the DR (EU) 2020/689
- investigate every suspicion of the disease
- timely report to the veterinary inspector any suspicion and confirmation of disease.

Obligations of the Croatian Veterinary Institute is to:

- perform laboratory tests in accordance with the articles 16 and 17 of Regulation (EU) 2016/429 and article 6 of Delegated Regulation (EU) 2020/689.
- report to the VFSDG, SI and the authorised veterinary organisation about the results of diagnostic tests (immediately and without delay).

9. *The estimated duration of the eradication programme.*

Estimated duration of the eradication programme is 3 years.

10. *The intermediate targets of the eradication programme including at least:*

(a) the expected annual decrease of the number of infected establishments;

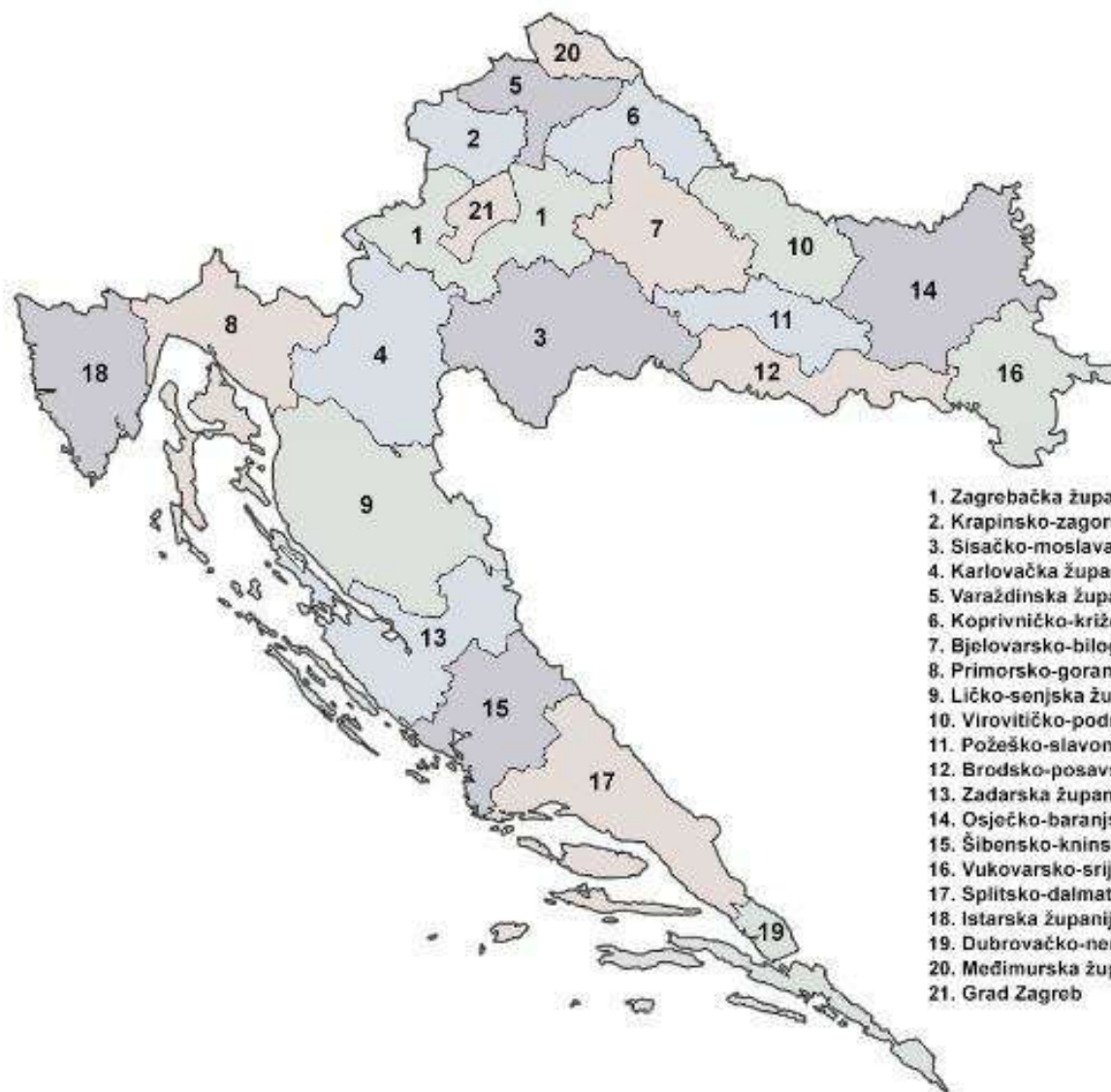
It is expected to have 0 infected establishments in the whole duration of eradication programme.

(b) the expected annual increase of the number of disease-free establishments;

At least 99.8 % of disease-free establishments representing at least 99.9 % of ovine and caprine population from 31 December 2021.

(c) the expected vaccination coverage, where relevant.

Not applicable.



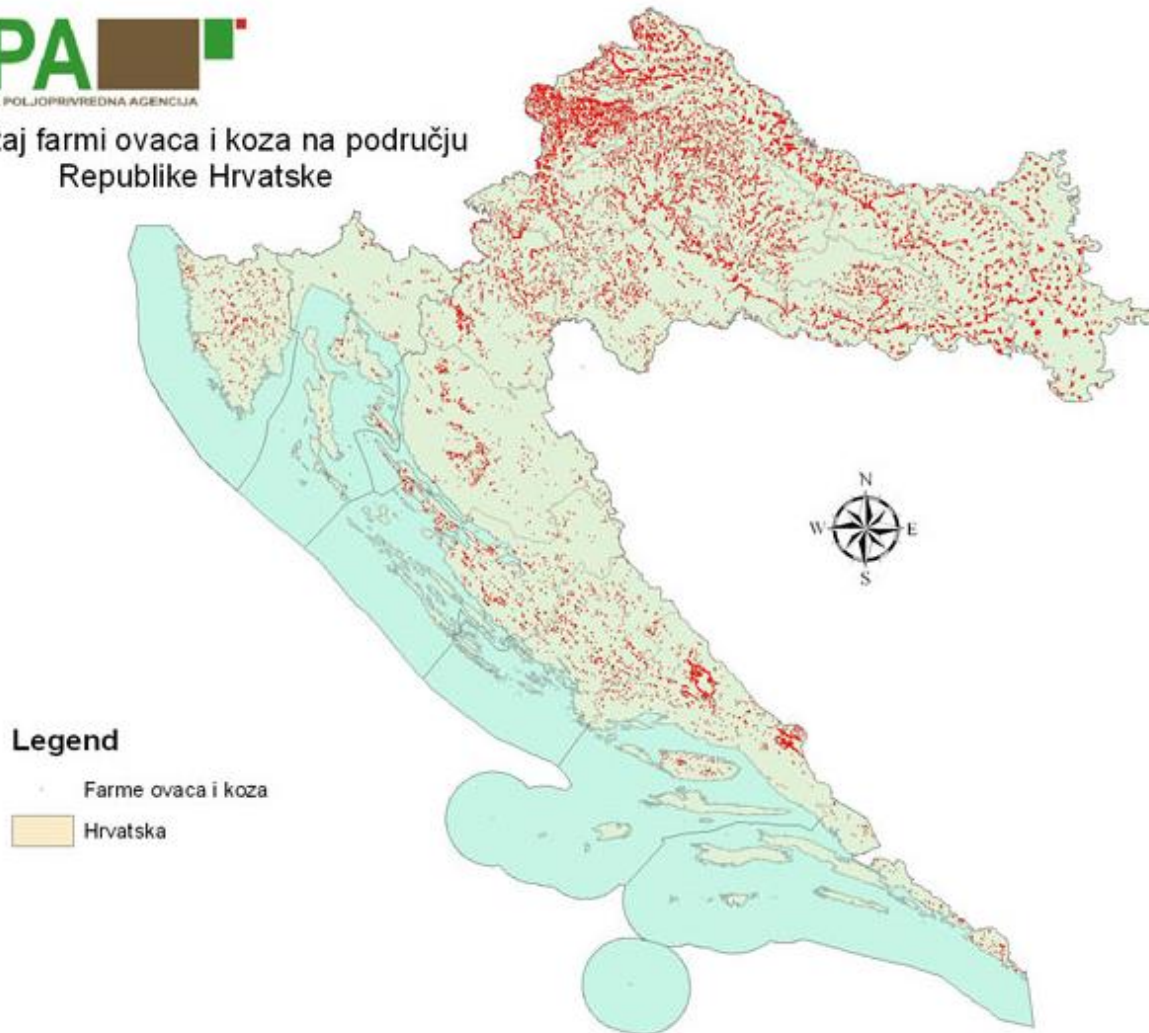
1. Zagrebačka županija
2. Krapinsko-zagorska županija
3. Sisačko-moslavačka županija
4. Karlovačka županija
5. Varaždinska županija
6. Koprivničko-križevačka županija
7. Bjelovarsko-bilogorska županija
8. Primorsko-goranska županija
9. Ličko-senjska županija
10. Virovitičko-podravska županija
11. Požeško-slavonska županija
12. Brodsko-posavska županija
13. Zadarska županija
14. Osječko-baranjska županija
15. Šibensko-kninska županija
16. Vukovarsko-srijemska županija
17. Splitsko-dalmatinska županija
18. Istarska županija
19. Dubrovačko-neretvanska županija
20. Međimurska županija
21. Grad Zagreb

Infection with Brucella abortus, B. melitensis and B. suis in ovine and caprine population eradication programme implemented in 2020 in Croatia - attachment 2

| County | Total number of establishments 31 December 2020 | Tested establishments | % | Total number of animals | Tested animals | Number of establishments Suspended & Withdrawn | Number of animals on establishments Suspended & Withdrawn | Establishments disease-free 31 December 2020 | % of establishments disease-free | Number of animals in establishments disease-free on 31 December 2020 | CFT positive animals | CFT positive establishments | Confirmed infection |
|------------------------|---|-----------------------|-------------|-------------------------|----------------|--|---|--|----------------------------------|--|----------------------|-----------------------------|---------------------|
| Zagrebačka | 1203 | 1035 | 86,0 | 32476 | 14379 | 0 | 0 | 1094 | 90,94 | 25282 | 0 | 0 | 0 |
| Krapinsko-zagorska | 679 | 649 | 95,6 | 6935 | 6408 | 0 | 0 | 630 | 92,78 | 6591 | 0 | 0 | 0 |
| Sisačko-moslavačka | 2335 | 2212 | 94,7 | 48104 | 44060 | 0 | 0 | 2237 | 95,80 | 47037 | 0 | 0 | 0 |
| Karlovačka | 1429 | 1247 | 87,3 | 34743 | 24830 | 1 | 5 | 1299 | 90,90 | 33336 | 1 | 1 | 0 |
| Varaždinska | 383 | 313 | 81,7 | 9639 | 5594 | 1 | 5 | 298 | 77,81 | 8747 | 0 | 0 | 0 |
| Koprivničko-križevačka | 830 | 716 | 86,3 | 14844 | 10889 | 0 | 0 | 738 | 88,92 | 13805 | 0 | 0 | 0 |
| Bjelovarsko-bilogorska | 2423 | 2157 | 89,0 | 67230 | 40386 | 2 | 41 | 2266 | 93,52 | 64876 | 3 | 2 | 0 |
| Primorsko-goranska | 966 | 571 | 59,1 | 40379 | 16580 | 2 | 530 | 853 | 88,30 | 38727 | 0 | 0 | 0 |
| Ličko-senjska | 1974 | 1573 | 79,7 | 87030 | 48778 | 3 | 121 | 1832 | 92,81 | 84044 | 5 | 1 | 0 |
| Virovitičko-podravska | 885 | 804 | 90,8 | 26400 | 13693 | 0 | 0 | 844 | 95,37 | 25989 | 0 | 0 | 0 |
| Požeško-slavonska | 895 | 863 | 96,4 | 23928 | 15275 | 1 | 5 | 861 | 96,20 | 23490 | 1 | 1 | 0 |
| Brodsko-posavska | 646 | 576 | 89,2 | 45211 | 9042 | 0 | 0 | 605 | 93,65 | 44843 | 0 | 0 | 0 |
| Zadarska | 1883 | 1607 | 85,3 | 128639 | 61557 | 2 | 277 | 1766 | 93,79 | 123404 | 0 | 0 | 0 |
| Osječko-baranjska | 1072 | 954 | 89,0 | 44393 | 22940 | 0 | 0 | 979 | 91,32 | 43036 | 0 | 0 | 0 |
| Šibensko-knińska | 1258 | 948 | 75,4 | 68745 | 33817 | 1 | 20 | 1094 | 86,96 | 65524 | 0 | 0 | 0 |
| Vukovarsko-srijemska | 668 | 556 | 83,2 | 22047 | 13021 | 0 | 0 | 593 | 88,77 | 20975 | 0 | 0 | 0 |
| Splitsko-dalmatinska | 1306 | 717 | 54,9 | 66840 | 26033 | 1 | 131 | 1087 | 83,23 | 52971 | 0 | 0 | 0 |
| Istarska | 742 | 677 | 91,2 | 19756 | 12358 | 0 | 0 | 670 | 90,30 | 18861 | 0 | 0 | 0 |
| Dubrovačko-neretvanska | 284 | 86 | 30,3 | 10774 | 3035 | 0 | 0 | 213 | 75,00 | 8725 | 0 | 0 | 0 |
| Međimurska | 124 | 107 | 86,3 | 4418 | 2673 | 0 | 0 | 110 | 88,71 | 4274 | 0 | 0 | 0 |
| Grad Zagreb | 136 | 66 | 48,5 | 2532 | 1288 | 0 | 0 | 111 | 81,62 | 1984 | 0 | 0 | 0 |
| TOTAL | 22121 | 18434 | 83,3 | 805063 | 426636 | 14 | 1135 | 20180 | 91,23 | 756521 | 10 | 5 | 0 |



Položaj farmi ovaca i koza na području
Republike Hrvatske



Attachment 3 - additional information of the structure of establishments (May 2021)

| County | Number of animals in establishment | | | | |
|------------------------|------------------------------------|-------------|-------------|------------|-----------|
| | 1-10 | 11-50 | 51-200 | 201-500 | >500 |
| BJELOVARSKO-BILOGORSKA | 1196 | 1023 | 160 | 44 | 11 |
| BRODSKO-POSAVSKA | 384 | 226 | 38 | 6 | 2 |
| DUBROVAČKO-NERETVANSKA | 145 | 100 | 30 | 6 | 4 |
| GRAD ZAGREB | 89 | 48 | 1 | 1 | 1 |
| ISTARSKA | 397 | 288 | 59 | 13 | 4 |
| KARLOVAČKA | 620 | 738 | 90 | 9 | 5 |
| KOPRIVNIČKO-KRIŽEVAČKA | 457 | 321 | 47 | 1 | 1 |
| KRAPINSKO-ZAGORSKA | 479 | 204 | 7 | 0 | 0 |
| LIČKO-SENJSKA | 439 | 1165 | 337 | 37 | 13 |
| MEĐIMURSKA | 65 | 34 | 26 | 1 | 0 |
| OSJEČKO-BARANJSKA | 488 | 391 | 180 | 32 | 4 |
| POŽEŠKO-SLAVONSKA | 459 | 356 | 77 | 15 | 1 |
| PRIMORSKO-GORANSKA | 323 | 466 | 148 | 22 | 4 |
| SISAČKO-MOSLAVAČKA | 1123 | 1034 | 171 | 10 | 0 |
| SPLITSKO-DALMATINSKA | 499 | 560 | 210 | 37 | 8 |
| ŠIBENSKO-KNINSKA | 327 | 583 | 293 | 41 | 7 |
| VARAŽDINSKA | 234 | 112 | 45 | 4 | 0 |
| VIROVITIČKO-PODRAVSKA | 461 | 341 | 59 | 19 | 6 |
| VUKOVARSKO-SRIJEMSKA | 360 | 237 | 81 | 14 | 3 |
| ZADARSKA | 231 | 965 | 613 | 78 | 11 |
| ZAGREBAČKA | 746 | 380 | 61 | 6 | 7 |
| TOTAL | 9522 | 9572 | 2733 | 396 | 92 |