

WOAH international standards on Brucellosis

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Tuberculosis and Brucellosis Control
in the Asia Pacific



World Organisation
for Animal Health



中华人民共和国农业农村部

Ministry of Agriculture and Rural Affairs of the People's Republic of China



WOAH - A standard setting organisation

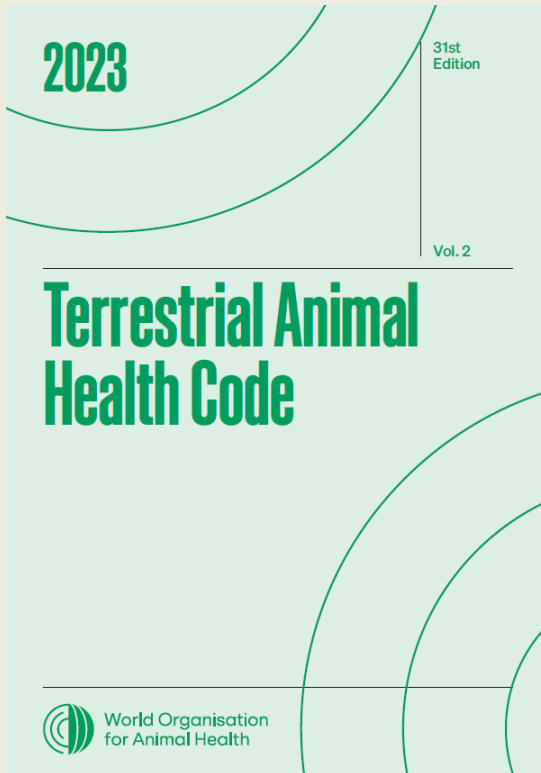
The WOAH develops and publishes standards related to its mandate:

- Codes – Standards for improvement of animal health, animal welfare and veterinary public health, ensure safe trade
- Manuals – Standards for diagnostic tests and vaccines

Updates

- Terrestrial Code: Chapter 8.4. (last updated 2018)
- Brucellosis chapter in Terrestrial Manual: **Chapter 3.1.4.** (last updated 2022) 

WOAHA as a standard setting organisation

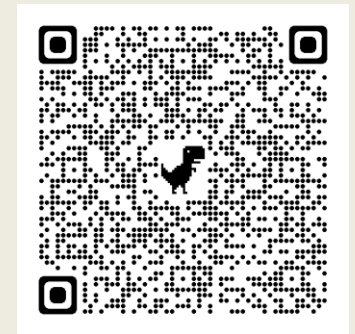


Terrestrial Code

Standards for disease control, surveillance and safe international trade

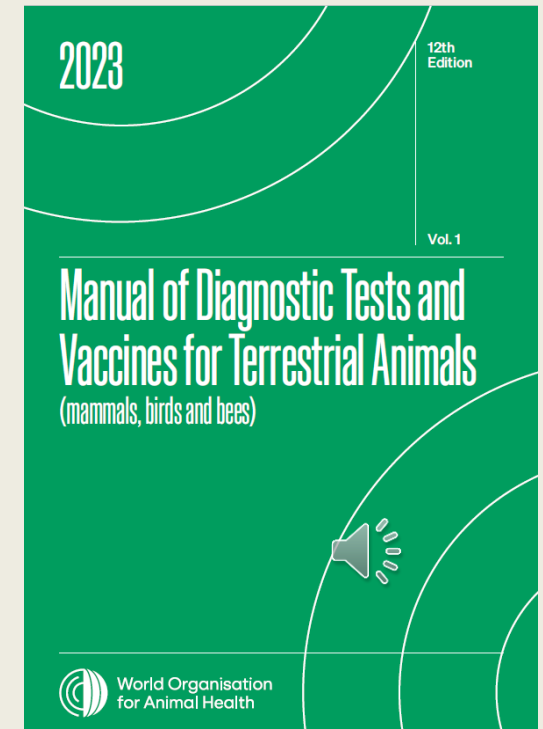
Chapter 8.4 Infection with *Brucella abortus*, *B. melitensis* and *B. suis*

(Case definition, Brucella status, Zoning and compartmentalisation, Importation)



Manual of Diagnostic Tests and Vaccines for Terrestrial Animals

Standards for laboratory diagnostic and vaccine production
Prescribed diagnostic tests





Chapter 8.4. Case definition

3 strains
6 families



Brucella strains

- *Brucella abortus, B. melitensis, B. suis*
- *excluding vaccine strains


Susceptible animals

- Both Domestic and captive wild animals
- Bovids: Cattle, Bison And Water Buffalo,
- Sheep and Goats,
- Pigs, Camelids, Cervids, European hare

Diagnostic criteria

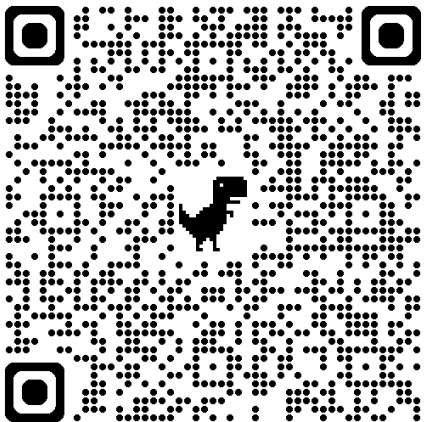
- Clinical + non clinical animals
- Brucella has been isolated from a sample from an animal
- Positive results to a diagnostic test have been obtained, with epidemiological link to a case





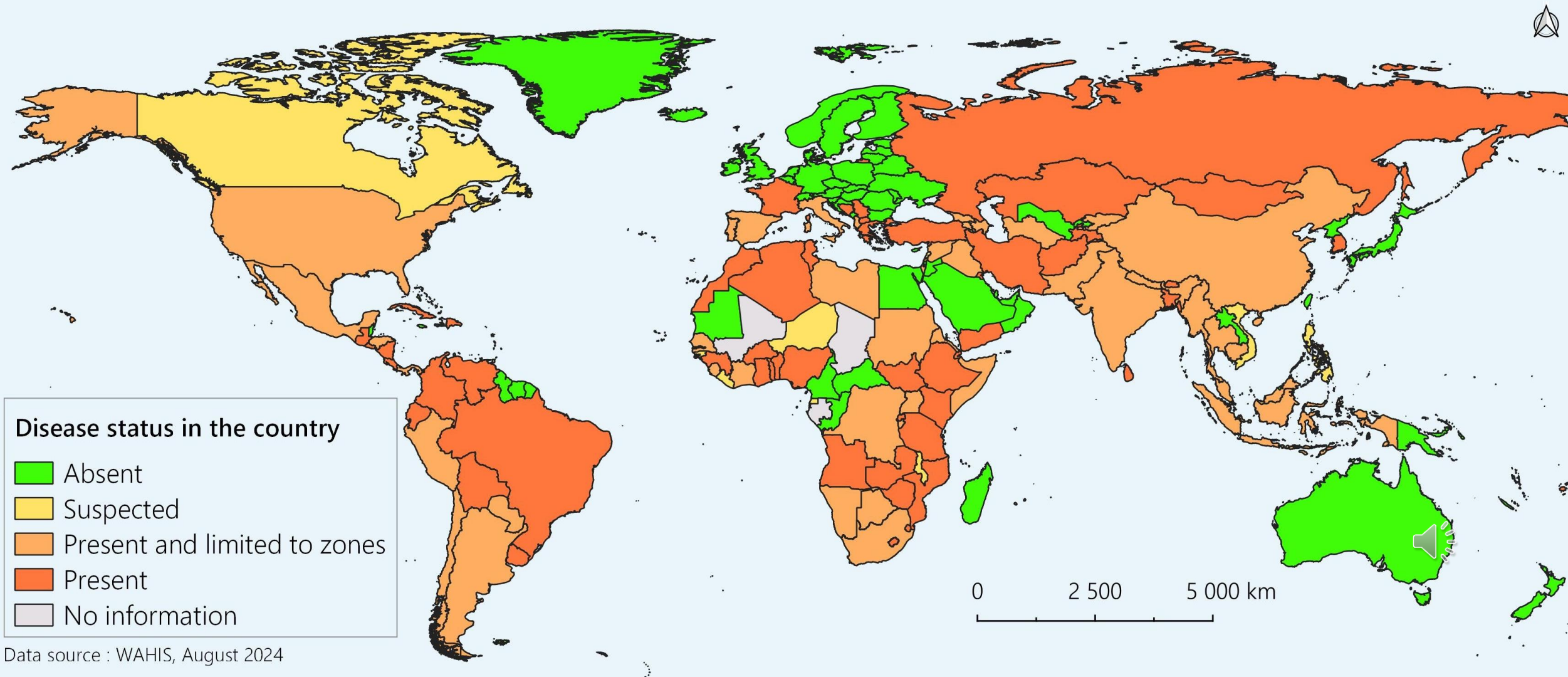
Notification to WOAHA: World Animal Health Information System (WAHIS)

1. A disease is considered present in a country if it has been reported so at least one semester during the covered period (2014-2023)
2. for reporting purposes Brucellosis was split into 3 “diseases”
3. Each caused by the one of the 3 pathogenic agents : *Brucella abortus*, *Brucella melitensis* and *Brucella suis*).
4. Maps show the diseases situation as reported by WOAHA Members through WAHIS for the covered period (2014-2023).



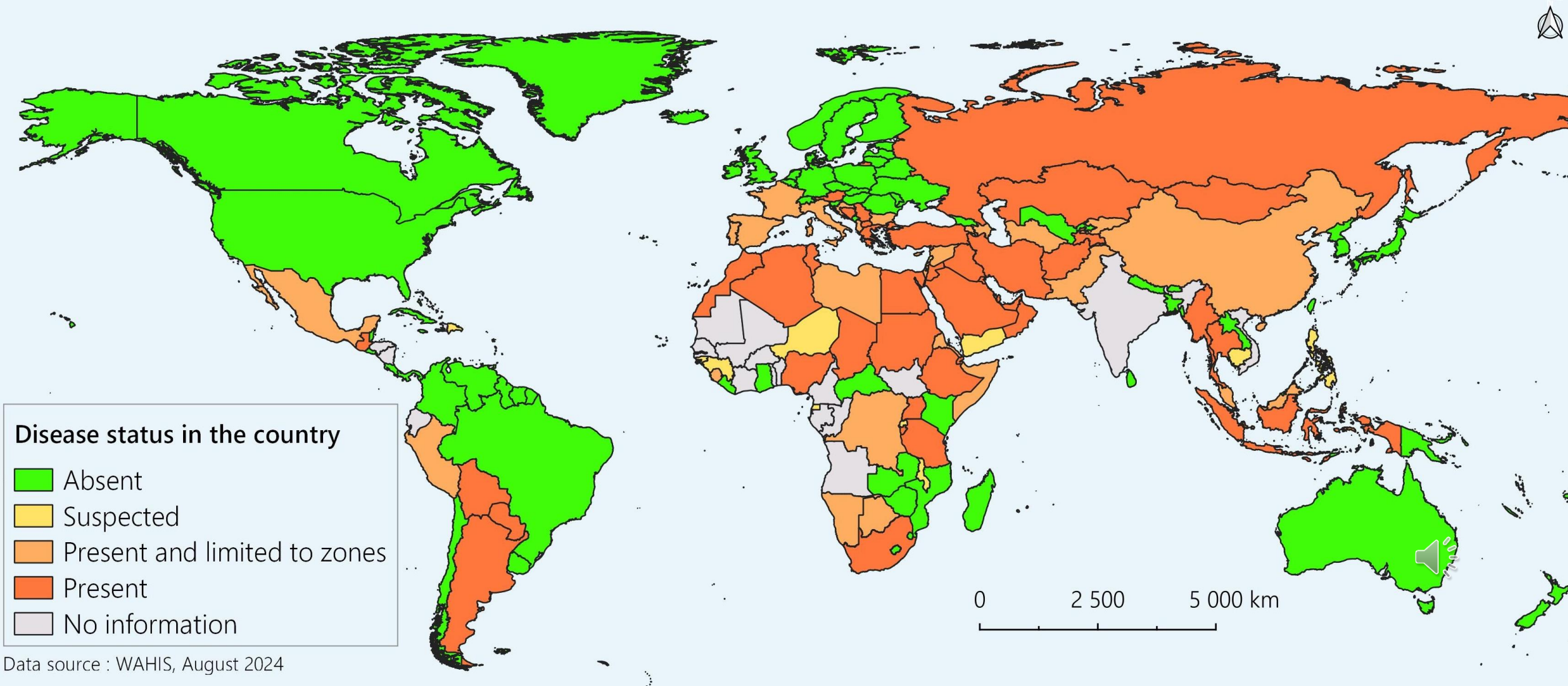


Global distribution of Brucellosis (*B. abortus*) (2014-2023)



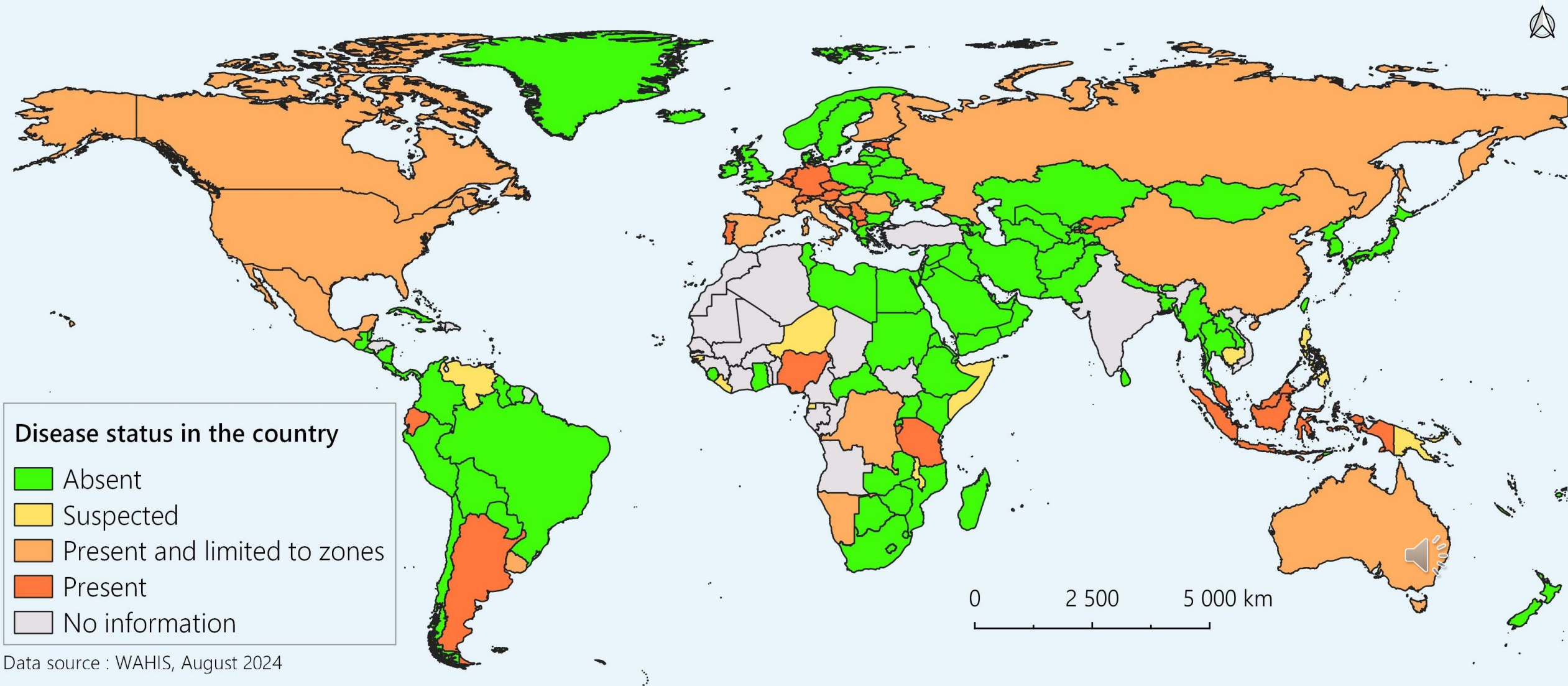


Global distribution of Brucellosis (*B. melitensis*) (2014-2023)





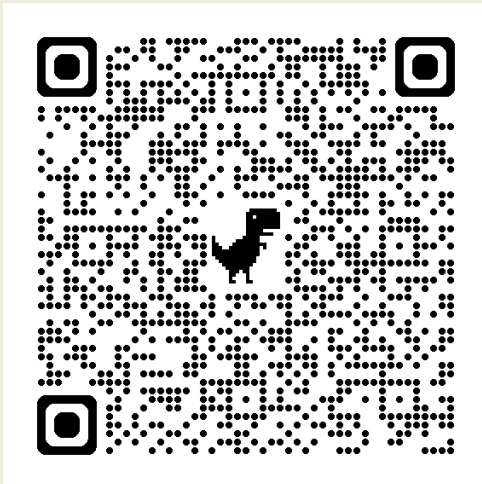
Global distribution of Brucellosis (*B. suis*) (2014-2023)





Chapter 8.4.

Types of Articles for Country, Zone and Herd freedom



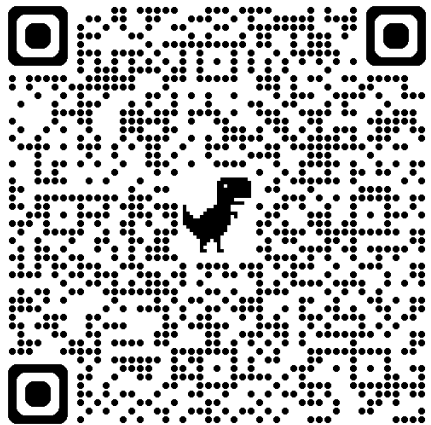
Article	Country / Zone or Flock freedom
8.4.1.	General provisions
8.4.2.	Safe commodities
8.4.3 to 8.4.9	Country or zone freedom in different species
8.4.10. and 8.4.11	Herd or flock freedom in bovids, sheep and goats, camelids or cervids with / without vaccination
8.4.12	Herd free from infection with Brucella in pigs
8.4.13.	Recovery of the Brucella infection free status in a country or a zone





Chapter 8.4.

Types of Articles related to Trade



Article

Recommendations for the importation

8.4.14.

Animals for breeding or rearing

8.4.14.

Pigs for breeding or rearing

8.4.16.

Animals for slaughter

8.4.17.

Semen

8.4.18.

Embryos

8.4.19.

Fresh meat and meat products other
than mentioned in article 8.4.2.

8.4.20.

Milk and milk products

8.4.21.

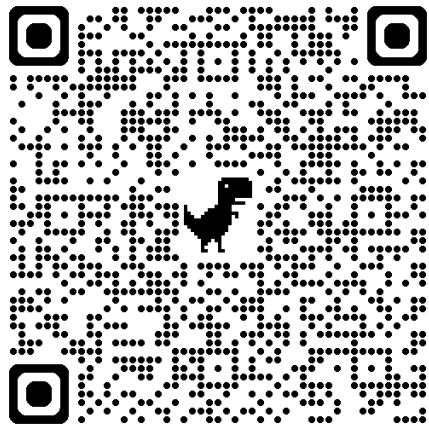
Wool and hair





Terrestrial Manual: Standards on Brucellosis

Chapter 3.1.4. BRUCELLOSIS (*Brucella* *abortus*, *B. melitensis* and *B. suis*)





Terrestrial Manual

Chapter 3.1.4. BRUCELLOSIS (*Brucella abortus*, *B. melitensis* and *B. suis*)



Description of the disease

- Epidemiology, Susceptible Species, clinical infection



Detection of the agent

- Screening of herds and confirmatory tests
- Serological and cellular immunity tests

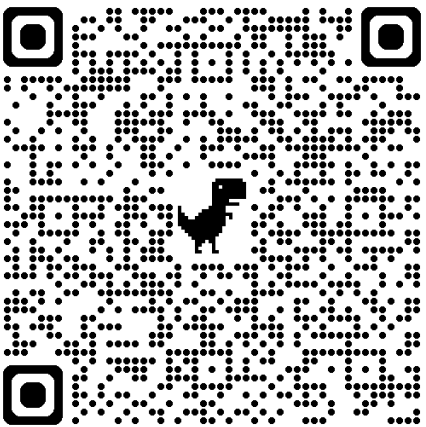


Requirements for vaccines and diagnostic biologicals



Updates to different sections of the chapter

1. Introduction
2. Description of the disease
3. Infection in other species (*B. melitensis* and *B. abortus* may also **infect camels** *B. canis* was also added as one of the species (in addition to *B. abortus*, *B. melitensis* and *B. suis*)
4. Diagnostic techniques (Collection of sample, Detection of the agent, Serological tests, tests for cellular immunity)
5. Vaccines (new section on vaccination in other species)





Reference Lab Network to Support Our Members

**Brucellosis (*Brucella canis*,
1 Laboratory)**

Prof Ulrich Wernery UNITED ARAB EMIRATES

**Brucellosis (*Brucella abortus*,
11 Laboratories)**

Dr Adrian Whatmore UNITED KINGDOM

Prof Ulrich Wernery UNITED ARAB EMIRATES

Dr Jin-Ju Lee KOREA (Rep of)

Dr Mahmoud Hamdy EGYPT

Dr Claire Ponsart FRANCE

Dr Monaya Ekgatat THAILAND

Prof Liangquan Zhu PEOPLE'S REP OF CHINA

Dr Heinrich Neubauer GERMANY

Dr Svetlana Berdenstein ISRAEL

Dr Fabrizio De Massis ITALY

To be decided ARGENTINA





Reference Lab Network to Support Our Members

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Dr Svetlana Berdenstein ISRAEL

Dr Fabrizio De Massis ITALY

To be decided ARGENTINA





Research Coordination for Brucellosis

STAR-IDAZ IRC: coordinate animal health research globally to accelerate delivery of disease control tools and strategies.

Priority areas – Brucellosis

Roadmap for Brucellosis vaccine development released on March 31, 2018.

Next step: survey to identify major research gaps and to plan future steps



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International Research
Consortium on Animal Health





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Thank you!

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