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**OIE requirements for FMD  
(trade, vaccine, diagnostic)**

**23rd meeting of the OIE Sub-Commission for foot and mouth disease  
in South-East Asia, China and Mongolia**

**Siem Reap, Cambodia, 9-10 March 2017**



FMD ?



zoning

Disease  
control

impact

trade

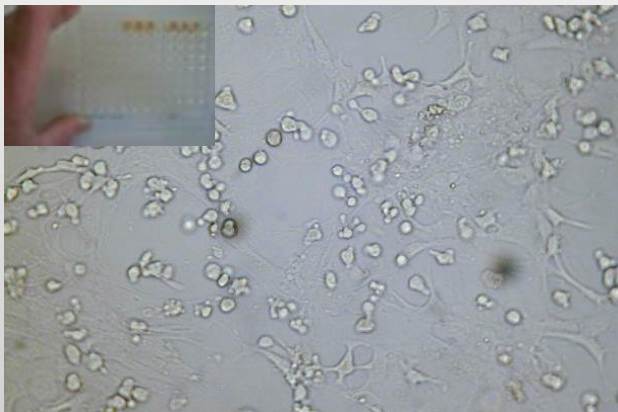
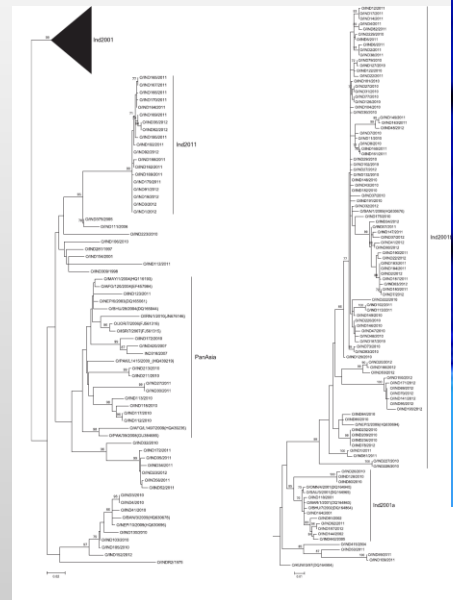
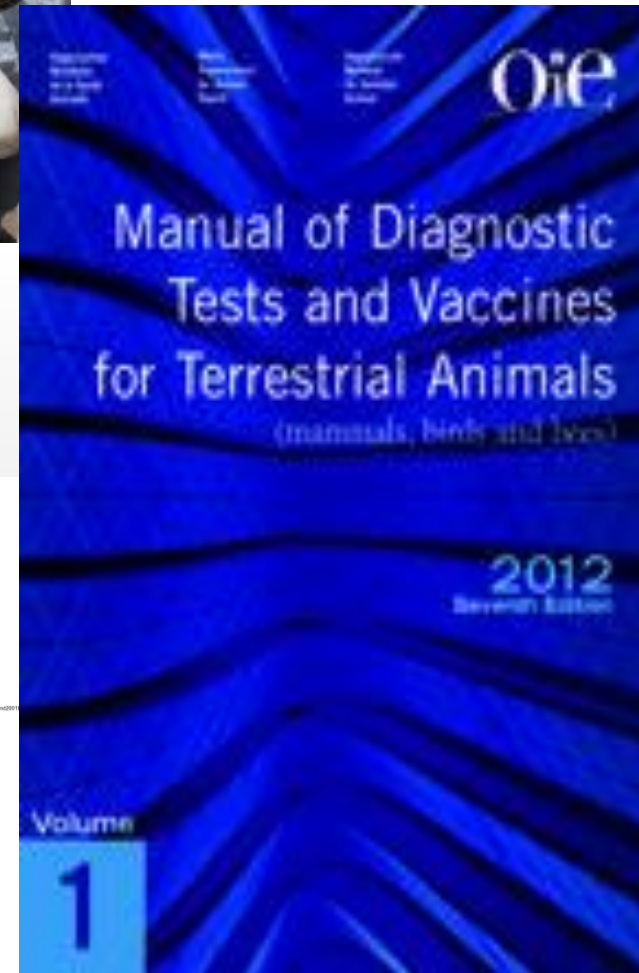
vaccine

official  
status

diagnostic

# FMD diagnostic

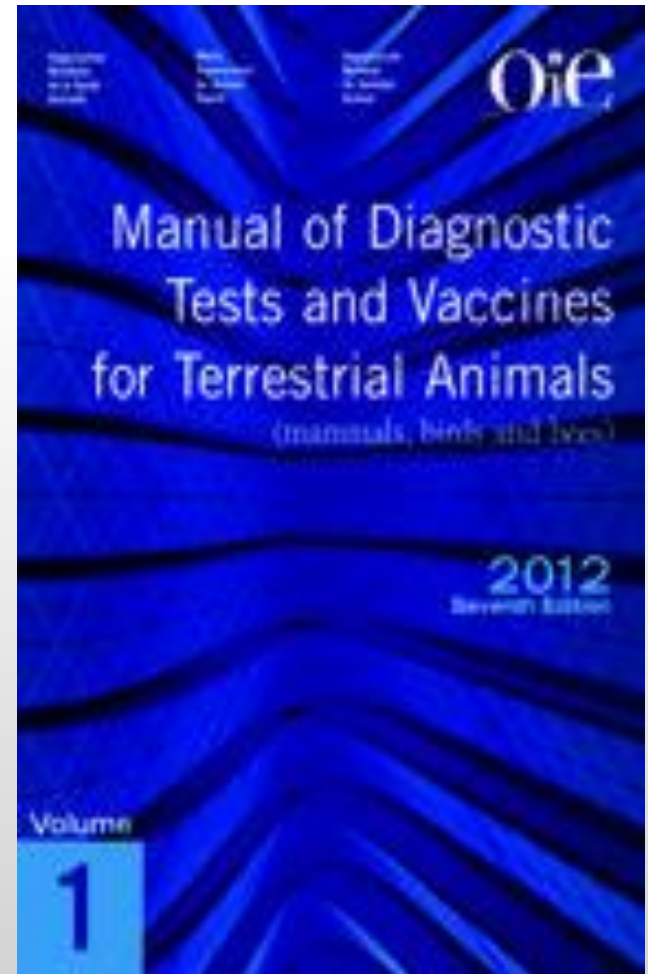
- Case definition
- Sample collection
- Diagnostic tests
- Serotyping
- Characterisation



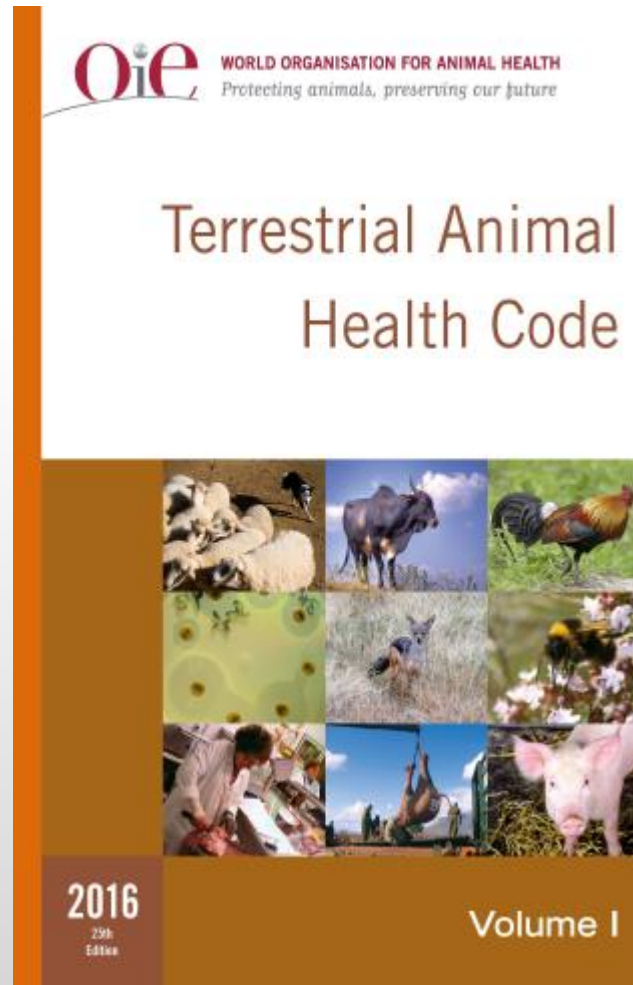
Virus isolation confirmed by Ag ELISA

# FMD vaccine

- Vaccine production
- Quality control
- Vaccine challenges
- Vaccine matching



# Access to regional and international trade



# Importation of live animals from...

## FMD free countries or zones

## FMD infected countries or zones

- no clinical sign of FMD on the day of shipment;

- Animal kept since birth or for at least the past **3 months** in an FMD free country or zone

- Prior to isolation, animal kept in the establishment of origin since birth,
  - for the past **30 days**, if a stamping-out policy is in force in the exporting country / for the past **3 months**, if a stamping-out policy is not in force in the exporting country,
- FMD has not occurred within the establishment of origin for the relevant period as defined in points above; and

- + if vaccination is practiced, were subjected to a test for FMD with negative results

- Animal isolated in an establishment for the **30 days** prior to shipment, and all animals in isolation were subjected to **diagnostic virological and serological tests** with negative results, and that FMD did not occur within **a ten-kilometre radius** of the establishment during that period, or the establishment is a **quarantine station**;

- no exposition to any source of FMD infection during transportation

# Importation of fresh meat from...

FMD free	FMD infected countries or zones Official control programme
FMD susceptible animals	<ul style="list-style-type: none"> <li>• Cattle and water buffalo</li> <li>• Excluding feet, head and viscera</li> </ul>
<p>from animals which</p> <ul style="list-style-type: none"> <li>• kept in a FMD free country or zone without vaccination or which have been imported in accordance with the Code.;</li> <li>• slaughtered in an approved slaughterhouse/ abattoir and have been subjected to ante- and post-mortem inspections with favourable results.</li> <li>• When free with vacc: Exclusion of head, pharynx, tongue and associated lymph nodes</li> </ul>	<p>Animal conditions:</p> <ul style="list-style-type: none"> <li>• at least three months prior to slaughter, in a zone of the exporting country where cattle and water buffaloes are regularly vaccinated against FMD and where an official control programme is in operation;</li> <li>• vaccinated at least twice (...) less than 6 months ago;</li> <li>• 30 days in an establishment without FMD within a 10 kilometer radius, or quarantine station;</li> </ul> <p>Transport conditions without contact with other animals which do not fulfil the required conditions for export;</p> <p>Slaughter conditions</p> <ul style="list-style-type: none"> <li>• an approved slaughterhouse/abattoir officially designated for export;</li> <li>• FMD has not been detected;</li> <li>• ante- and post-mortem inspections</li> </ul> <p>comes from deboned carcasses:</p> <ul style="list-style-type: none"> <li>• removal of the major lymphatic nodes</li> <li>• Matured (&gt; 2°C, &gt; 24 hours, pH &lt; 6.0 (longissimus dorsi)</li> </ul>

# Trade recommendations (Articles 8.8.8. to 8.8.30.)

From countries/zones	FMD free without vaccination	FMD free with vaccination	FMD infeced
Live animals	√	√	√
Fresh & frozen semen	√	√ (frozen)	√ (frozen)
in vivo derived embryos of cattle	√	√	√
in vitro produced embryos of cattle	√	√	√
fresh meat	√	√	√
Meat products	√	√	√
Milk and milk products	√	√	√
blood and meat-meals			√
wool, hair, bristles, raw hides and skins			√
straw and forage			√
skins and trophies from FMD susceptible wild animals	√	√	√

# Terrestrial Code user's guide

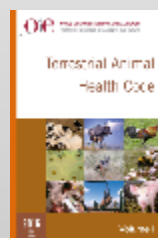
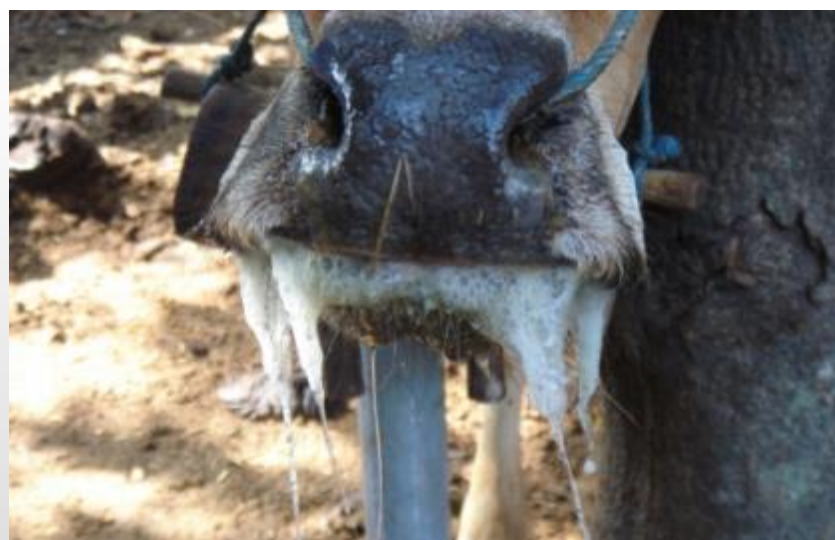
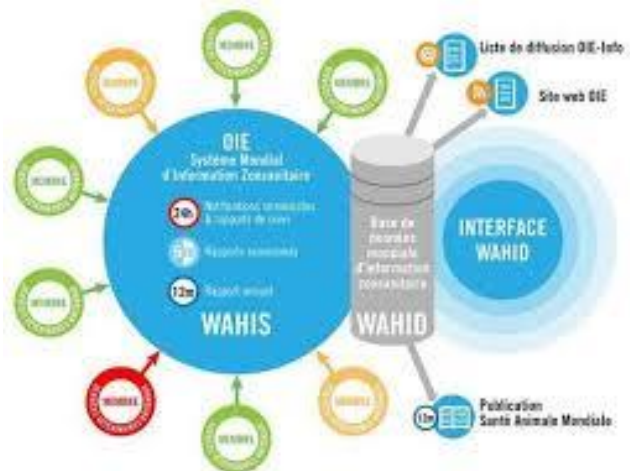
- The standards in each of the disease-specific chapter are designed to prevent the aetiological agents from being introduced into an importing country.
- The standards take into account :
  - the nature of the traded commodity,
  - the animal health status of the exporting country ,
  - the risk reduction measures.
- These standards assume that the agent is either not present in the importing country or is the subject of a control or eradication programme.

# FMD free status



# FMD Terrestrial Code Chapter

Article 8.8.1.	General provisions, including case definition
Articles 8.8.2. to 8.8.7.	Articles related to status: FMD free country/zone/compartiment containment zone/ recovery
Articles 8.8.8. to 8.8.30.	Recommendations for importing commodities
Articles 8.8.31. to 8.8.38.	Virus inactivation
Article 8.8.39.	Endorsement of the official control programme
Article 8.8.40. to 8.8.42.	Surveillance and interpretation of diagnostic test results



Chapter 1.2., Section 3. and  
Articles 8.8.2. & 8.8.3.

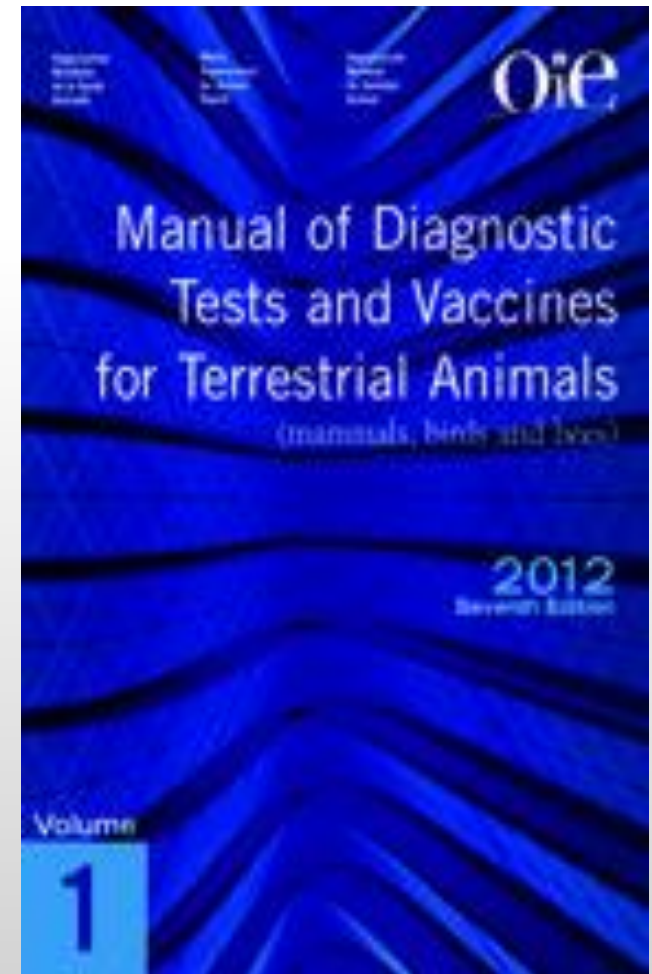
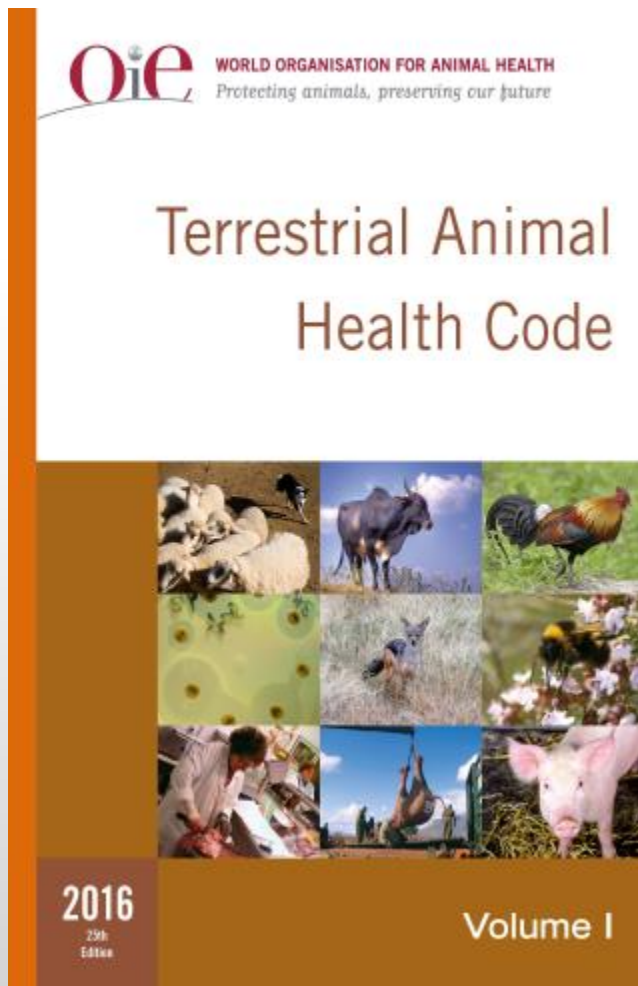
# Zoning

- Distinct sub-population
- Geographical or artificial barriers
- Movement control of animal and products
- IMPLEMENTED AND SUPERVISED



Chapter 4.3. and  
Articles 8.8.2. & 8.8.3.

# The OIE: the WTO reference organisation for standards relating to animal health and zoonoses



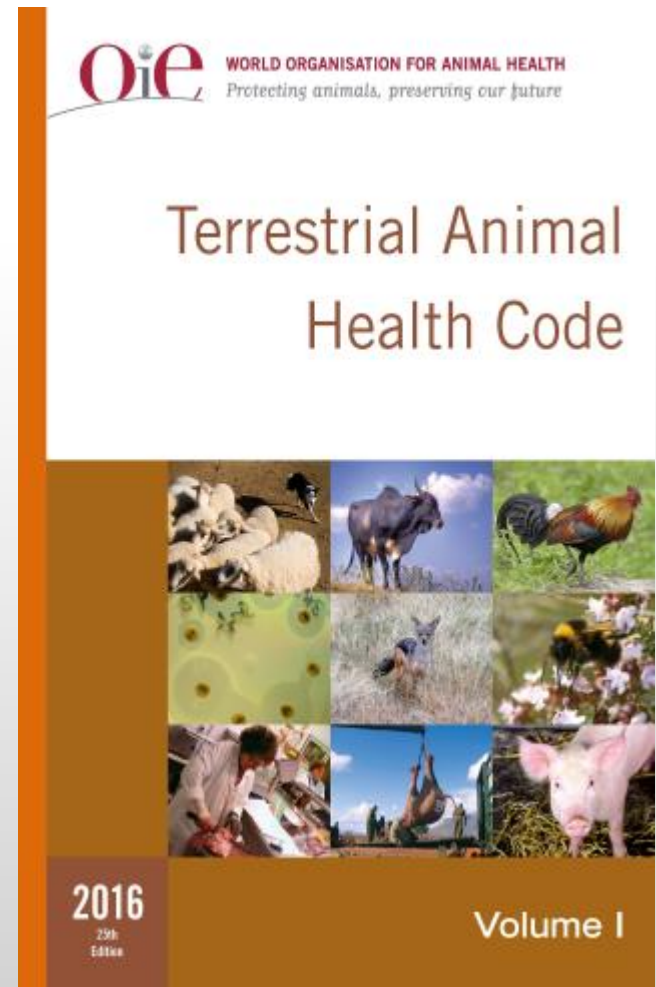
# Terrestrial Animal Health Code

## Horizontal Chapters

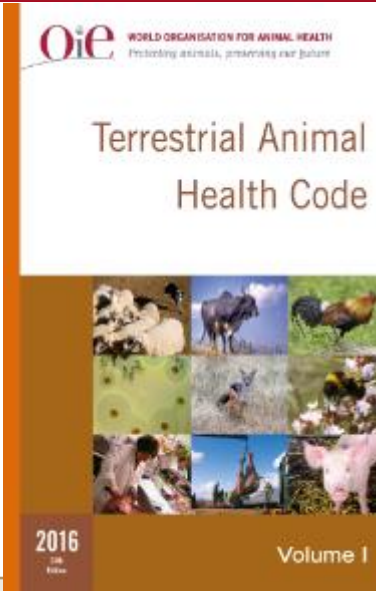
- Disease notification (1.1.)
- Animal health surveillance (1.4.)
- Evaluation of Veterinary Services (3.2.)
- Veterinary legislation (3.4.)
- Import risk analysis (2.1.)
- Import/export procedures (5)
- Obligations related to certification (5.1.)

## Disease Specific Chapters

- General provisions, case definition
- Safe commodities, if any
- Criteria for disease status: country, zone or compartment
- Provisions for import of commodities
- Pathogen inactivation
- Endorsement of official control programme
- Specific disease surveillance



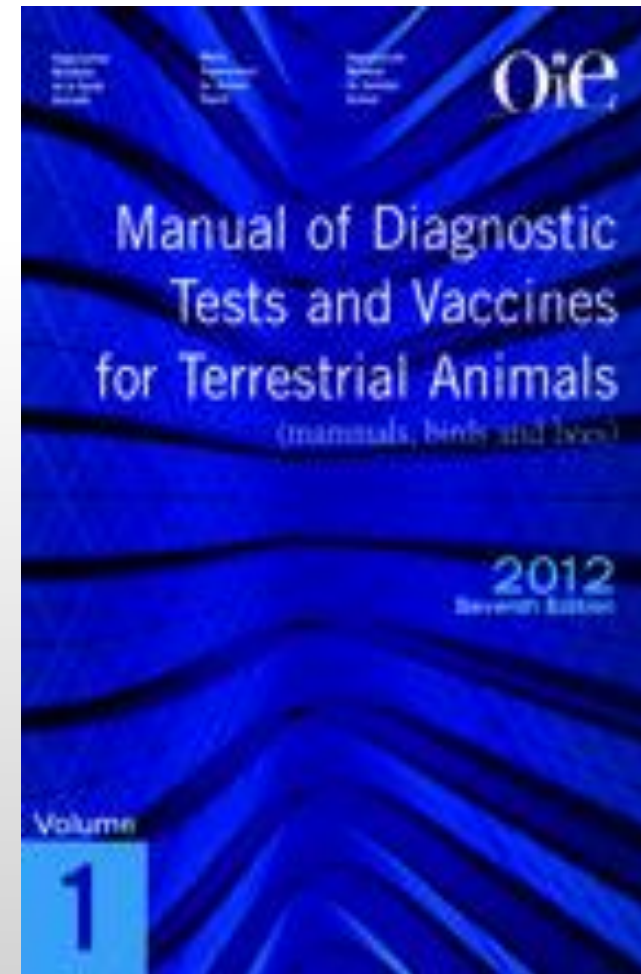
# Chapter 8.8. of the OIE *Terrestrial Code*



Article 8.8.1.	General provisions, including case definition
Articles 8.8.2. to 8.8.7.	Articles related to status: FMD free country/zone/compartiment containment zone/ recovery
Articles 8.8.8. to 8.8.30.	Recommendations for importing commodities
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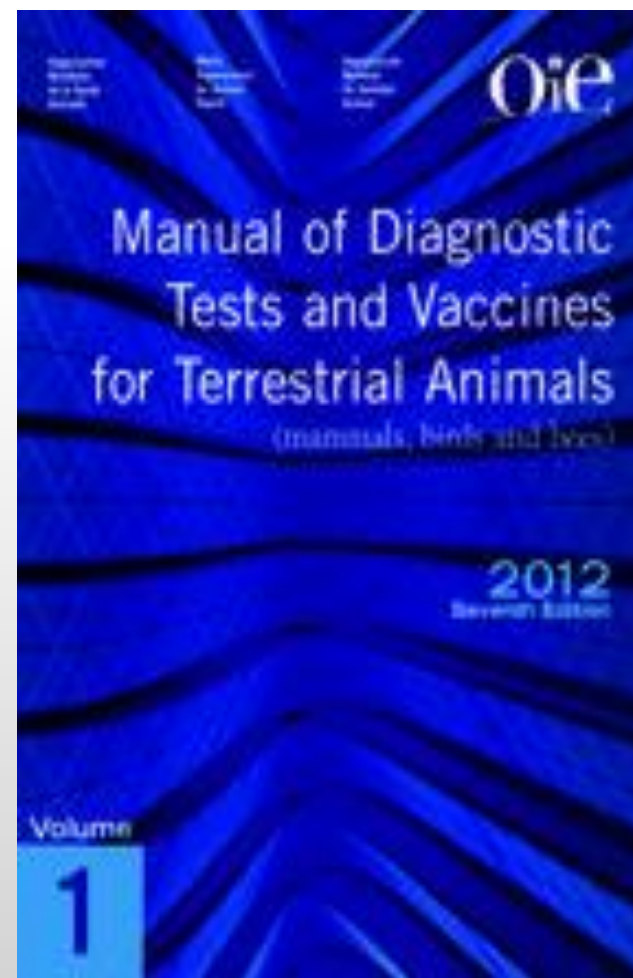
# *Terrestrial Manual* – Introductory chapters

- Management of veterinary diagnostic laboratories (1.1.1.)
- Collection, submission and storage of diagnostic specimens (1.1.2.)
- Transport of specimens of animal origin (1.1.3.)
- Biosafety and biosecurity: Standard for managing biological risk in the veterinary laboratory and animal facilities (1.1.4.)
- Quality management in veterinary testing laboratories (1.1.5.)
- Principles and methods of validation of diagnostic assays for infectious diseases (1.1.6.)
- Standards for high throughput sequencing, bioinformatics and computational genomics (1.1.7.)
- Principles of veterinary vaccine production (1.1.8.)
- Tests of biological materials for sterility and freedom from contamination (1.1.9.)
- Vaccine banks (1.1.10.)



# *Terrestrial Manual* – FMD Chapter 2.1.8.

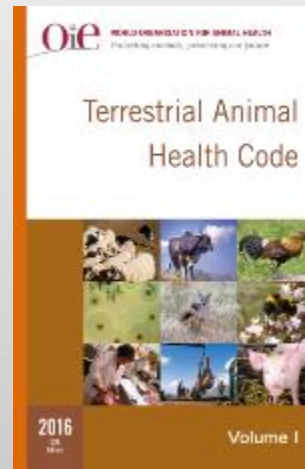
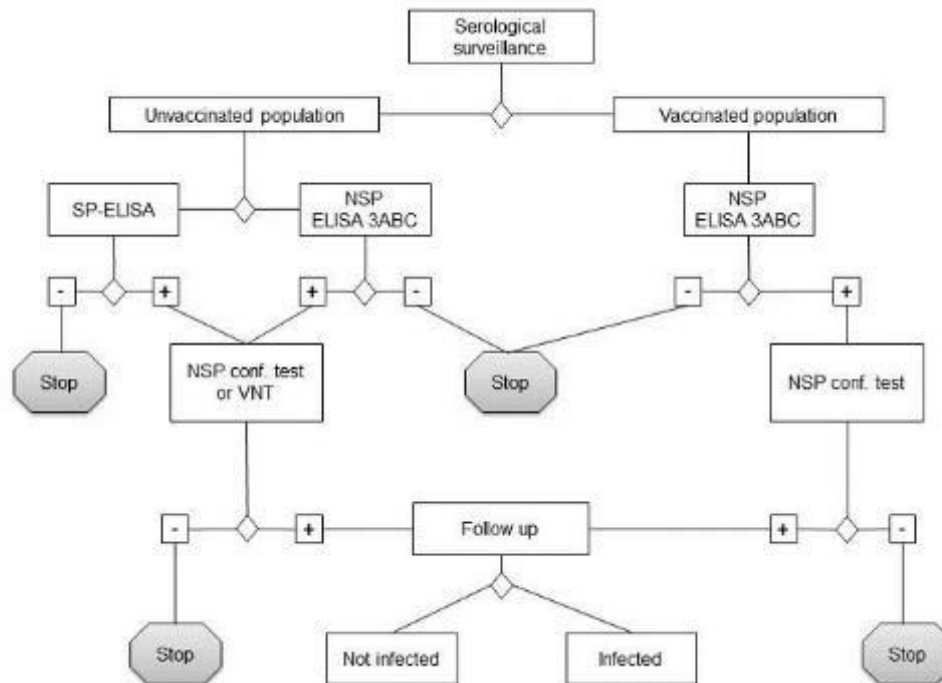
- Summary
- Part A : Introduction
- Part B: Diagnostic techniques
  - Identification of the agent
  - Serological tests
- Part C: Requirements for vaccines
  - Seed management
  - Methods of manufacture
  - In-process control
  - Final product batch tests
  - Requirements for registration of vaccine
  - Storage and monitoring of concentrated antigens
  - Emergency release of vaccines prepared from concentrated antigens
- Part D: Vaccine matching tests
  - Selection of field viruses for vaccine matching
  - Selection of vaccine strains to be matched
  - Vaccine matching test
- References



# Numerous links between the Code and the Manual

Code chapter's pre-requisite: *“Standards for diagnostic tests and vaccines are described in the Terrestrial Manual.”*

Laboratory tests for serological surveys to determine evidence of FMDV infection



## To conclude

- OIE standards for FMD: the *Terrestrial Code* and *Manual's* horizontal and specific chapters
- WTO reference standards
- Strong links between both
- For safe trade and disease control



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Protéger les animaux, préserver notre avenir



# Thank you for your attention

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