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Expert workshop on protecting humans from
domestic and wildlife rabies in the Middle East
Amman, Jordan 23 -25 June 2008

OIE international standards on Rabies: Movement of dogs, vaccination and vaccines



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Evolution of OIE approach to animal disease control policies

- Realised need to enable developing/in-transition countries to apply standards for disease control
- Change from limited international movement to fast and diverse global pathways/travel
- Need for new approach to disease risk mitigation
- Change from focus on only trade standards to standards and promotion of the capacity to control animal diseases and zoonosis worldwide



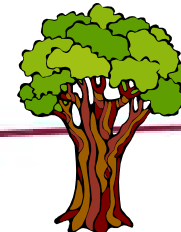
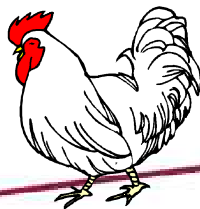
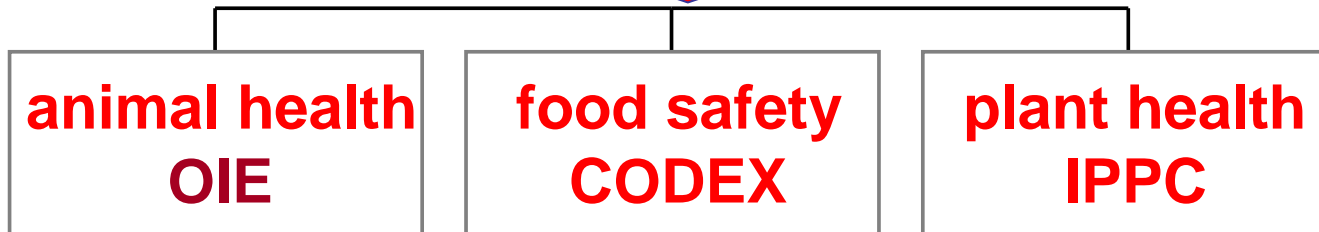
OIE Headquarters, Paris

The linkage between OIE Codes and Manuals, animal disease policy and the SPS Agreement

Codes and Manuals must be used in context with Codex and SPS Agreement



International standard setting organizations



Rationale for Disease Control Policies in the OIE Animal Terrestrial Health Code

- Main focus on animal health situation in **exporting country**
- Exporting & importing country in compliance with WTO obligations
- Latest **scientific information** is used
- Health measures are based on **risk assessment**
- An evaluation of **veterinary services** has been conducted
- Zoning/compartmentalization are applied where appropriate
- Claims for disease freedom/absence verified by sound **epidemiological surveillance**

OIE disease control and disease eradication policy

Generic aspects

- Use standardized **definitions** and concepts – promote harmonization and equivalence
- Surveillance – to know what is the status quo
- **Transparency in notification** (humans, domestic and wild animals)
- Application of **minimum standards** for diagnostic techniques, vaccines that meet OIE and/or WHO criteria
- Scientifically based criteria for disease control programs and (national) legislation
- Application of ethical principles in trade and animal disease control
- Zoning/compartmentalization where appropriate
- Import risk analysis
- Protect human health through control of disease/zoonosis in animals

OIE standards and rabies



Main considerations :

- In large parts of the world dogs are the main source of human infection -> focus on dogs & cats
- Endemic or sporadic rabies in wildlife or stray animals can easily spill over to domestic animals and humans
- Immunization is the method of choice for controlling or eliminating the disease
- International Standards for diagnosis of rabies are approved by OIE and WHO
- Provisions for minimum requirements for Veterinary Services

OIE Terrestrial Code and rabies

- Distinction and definition of „rabies free“ and „rabies infected“ countries
- Provisions for safe trade in animals for both categories (free and infected)
- Species specific provisions where appropriate and supported by scientific evidence
- Addressing trade in wildlife animals according captive or non captive

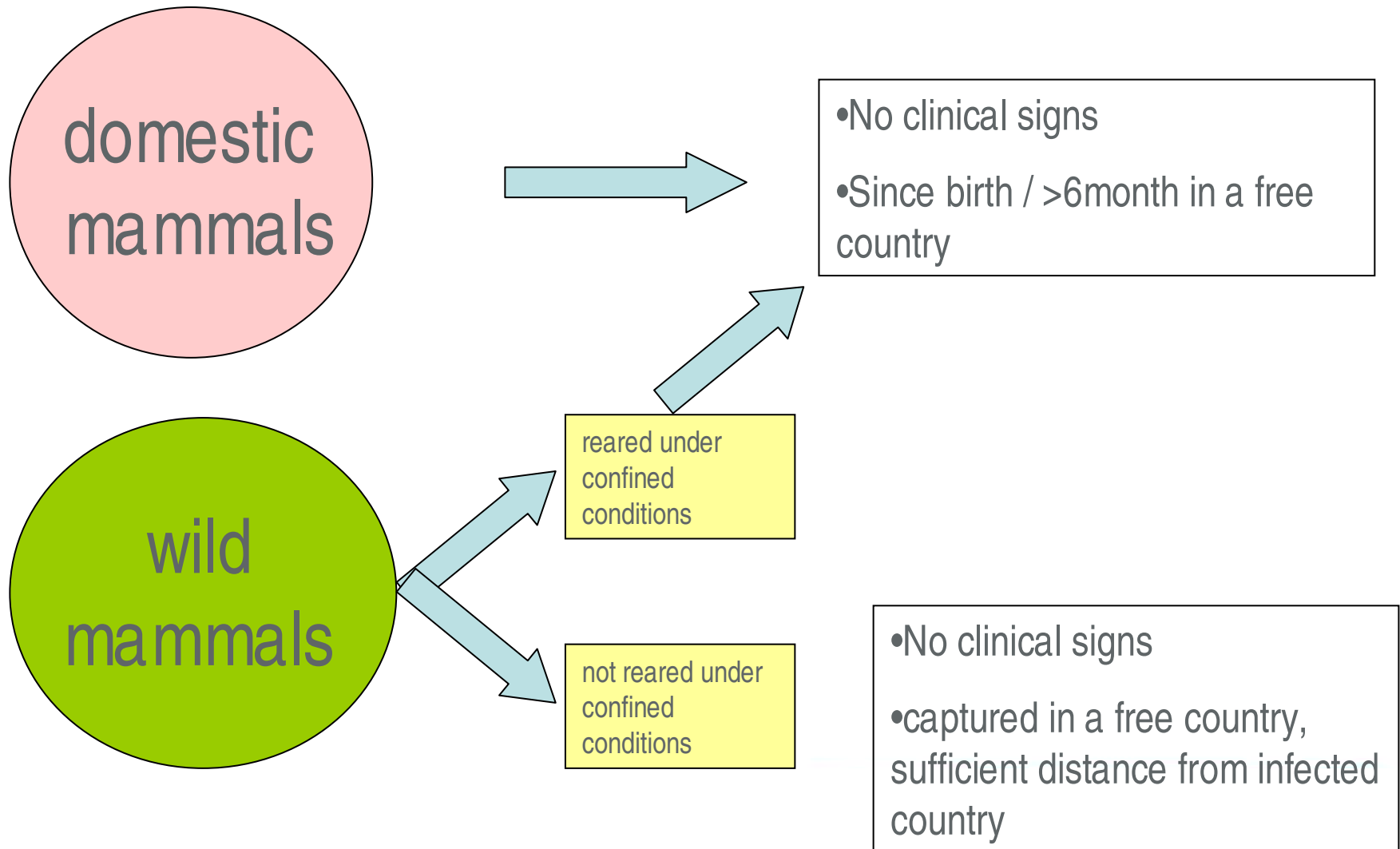


Provisions for rabies free countries

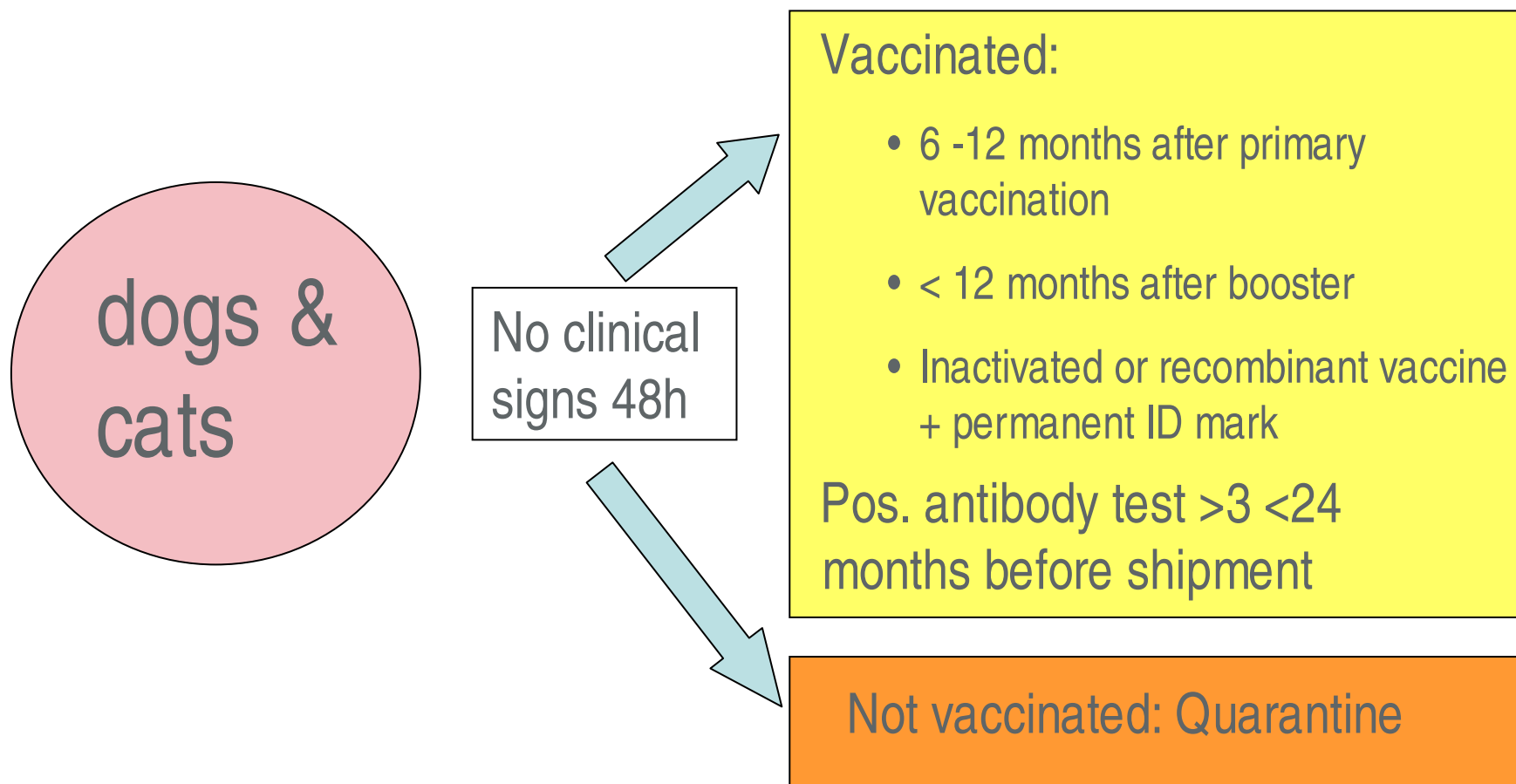
A country may be considered free from rabies when:

- the disease is **notifiable**;
- an effective system of disease **surveillance** is in operation;
- all **regulatory measures** for the prevention and control of rabies have been **implemented** including effective importation procedures;
- **No case of indigenously** acquired rabies infection has been confirmed in man or any animal species during the **past 2 years**; however, this status would not be affected by the isolation of an Australian or European Bat Lyssavirus;
- **no imported case** in carnivores has been confirmed outside a quarantine station for the past 6 months.

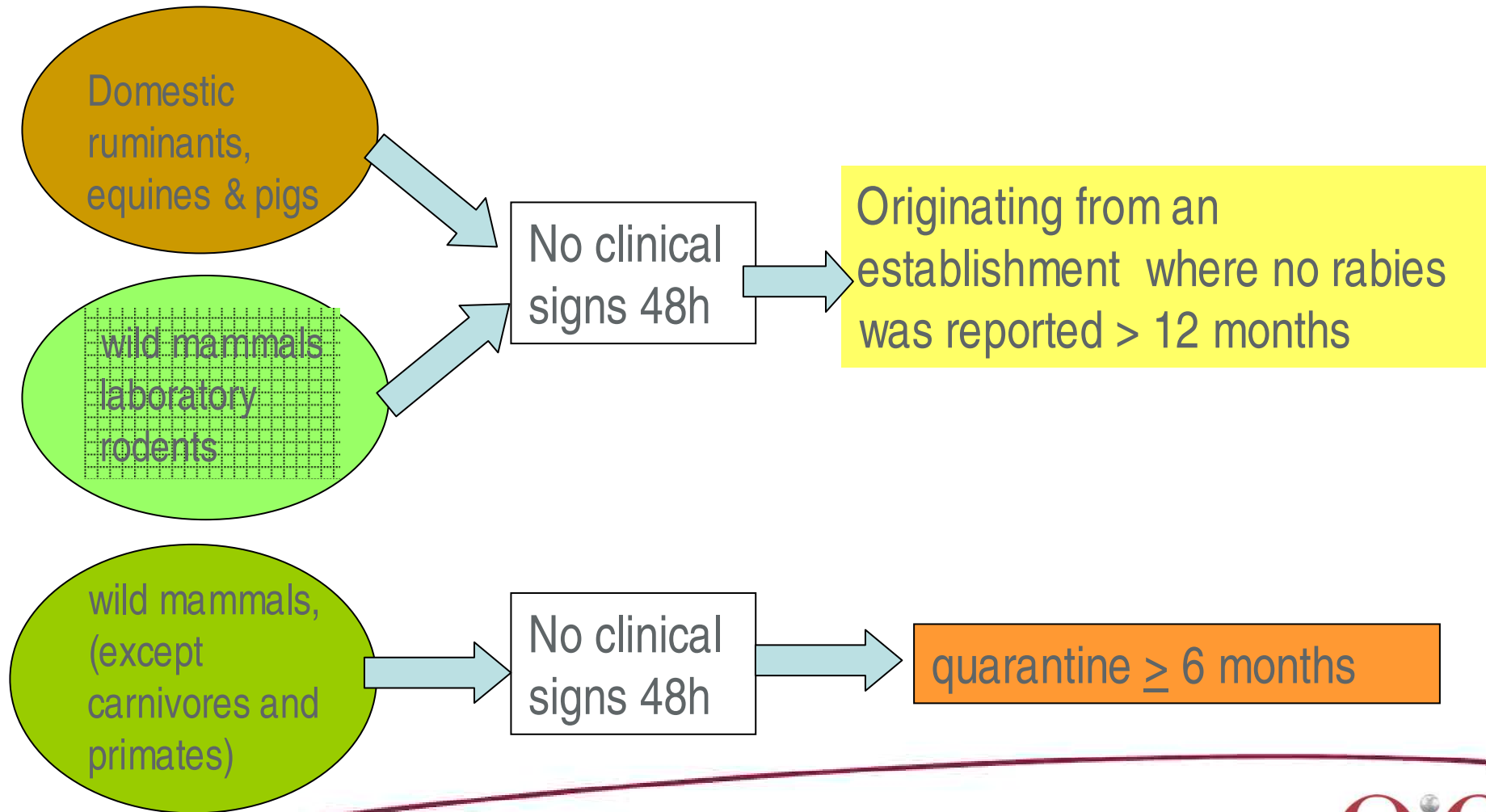
Provisions for trade with a Rabies free country



Provisions for trade with a Rabies infected country I



Provisions for trade with a Rabies infected country II



International trade of domestic carnivores

Role of diagnostic laboratories

should comply with the OIE **general provisions** of the Manual of Diagnostic Tests and Vaccines 2008, especially:

- Chapter 1.1.2 on biocontainment and biosafety regulations
- Chapter 1.1.3 on quality management in veterinary testing laboratories

use one of the techniques approved and described in the 6th edition of the OIE Manual of Diagnostic Tests and Vaccines :

- Virus Neutralisation tests: FAVN or RFFIT
- Indirect ELISA

Role of pet owners

- Compliance with vaccination schemes (as provided by the manufacturer)
- Legal animal movement

OIE recommended diagnostic tests

- Identification of the agent

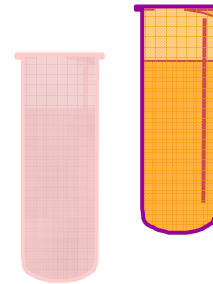
Epidemiological surveys, confirmation of rabies cases

- **FAT** (gold standard for diagnosis)
 - Problems if specimen not fresh
 - sensitivity may be reduced with related-rabies viruses
- Virus inoculation: Cell culture or mouse test
- PCR
- ELISA
- ~~Histology~~

- Serology

Determine response to vaccination

- **FAVN**
- **RFFIT**
- **Indirect ELISA**
 - esp. for individual samples of dogs & cats
 - no handling of live virus
 - Doubtful results need confirmation by VN test



Prescribed tests for international trade!

Rabies Vaccine and Vaccination

- **Parenteral administration**

- Target population: **Domestic animals**
- Recombinant, modified live and inactivated virus vaccines
- Primary vaccination \geq 3 months (e.g. for animal movement/trade), otherwise according the manufacturer's prescription
- Annual boosters
- Monitor vaccination coverage in the population

- **Oral Vaccination**

- Target population: **Stray or wild animals**
- Mainly administred as baits
- Efficacy and safety (target & non-target species)
- Modified live virus or recombinant vaccines (VRG and SAG2)
- Monitoring the impact of oral vaccination campaigns in the field?
- Currently, and contrary to international trades context, there is no harmonization of rabies serological controls to assess humoral response after oral vaccination campaigns



In summary...



application of the International Standards in general, also in the case of rabies as specified before, significantly contributes to:

An effective animal disease control policy which is directly related to the ability and capacity of a country to apply the policy

= good veterinary governance

Thank you for your attention!

Questions ?

