OIE Regional Vaccine Banks

Middle East & Eastern Europe Rabies Expert Bureau Meeting (MEEREB)
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Coordinator of the OIE World Animal Health and Welfare Fund
Rabies Vaccine banks for dog vaccination

• Countries embarking on eliminating rabies in dogs require easy access to quality-assured dog vaccines for planned campaigns and outbreak management

• Vaccinating at least 70% of dogs in endemic areas *breaks the cycle of transmission in dogs and to humans*, thereby preventing rabies in humans most efficiently
Rabies Regional Vaccine Bank

• Initial call for tender published in Sept. 2011
• Contracts signed in March 2012 and May 2012
• Multiple supplier approach
  • One supplier provides parenteral (injectable) rabies vaccines for dogs in 10ml vials
  • A second supplier provides parenteral (injectable) rabies vaccines for dogs in 1ml vials as well as oral vaccines for research projects in pilot countries
  • African countries added to list of eligible countries in Oct. 2014
• Current main contracts active until Dec. 2015
• New international call for tender scheduled
### OIE Deliveries as of 1 April 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>200,000</td>
<td>2014</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>200,000</td>
<td>2013</td>
</tr>
<tr>
<td>Bhutan</td>
<td>100,000</td>
<td>2013; 2014</td>
</tr>
<tr>
<td>Indonesia</td>
<td>200,000</td>
<td>2013</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>290,400</td>
<td>2012; 2013; 2014</td>
</tr>
<tr>
<td>Myanmar</td>
<td>200,000</td>
<td>2013</td>
</tr>
<tr>
<td>Nepal</td>
<td>200,000</td>
<td>2013</td>
</tr>
<tr>
<td>Philippines</td>
<td>1,120,000</td>
<td>2013; 2014; 2015</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>300,400</td>
<td>2013</td>
</tr>
<tr>
<td>Vietnam</td>
<td>872,000</td>
<td>2012; 2013; 2014</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>3,682,800</strong></td>
<td></td>
</tr>
</tbody>
</table>

- Vaccine deliveries for 2015 are currently being scheduled
### OIE Vaccine Bank: Funding and purchase

#### Multiple Donor Approach

<table>
<thead>
<tr>
<th>Donor</th>
<th>Setting up of the Vaccine Bank</th>
<th>Purchase of Vaccines</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>✓</td>
<td>✓</td>
<td>Asia</td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td>✓</td>
<td>South East Asia</td>
</tr>
<tr>
<td>France</td>
<td></td>
<td>✓</td>
<td>Africa</td>
</tr>
<tr>
<td>Singapore</td>
<td>✓</td>
<td></td>
<td>Asia</td>
</tr>
<tr>
<td>Swiss Tropical PH</td>
<td>✓</td>
<td></td>
<td>Mali</td>
</tr>
<tr>
<td>WHO</td>
<td>✓</td>
<td></td>
<td>Asia, Africa</td>
</tr>
<tr>
<td>Country</td>
<td>Number</td>
<td>Year</td>
<td>Direct Purchase / Donor</td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
<td>------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>Mali</td>
<td>8.000</td>
<td>2014</td>
<td>Swiss Tropical and Public Health Institute</td>
</tr>
<tr>
<td>Singapore</td>
<td>5.000</td>
<td>2014</td>
<td>Singapore Agri-Food and Veterinary Authority</td>
</tr>
<tr>
<td>Togo</td>
<td>10.000</td>
<td>2014</td>
<td>French Ministry of Foreign Affairs</td>
</tr>
<tr>
<td>South Africa</td>
<td>250.000</td>
<td>2014</td>
<td>WHO Global Procurement and Logistics</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.900.000</td>
<td>2015</td>
<td>WHO Global Procurement and Logistics</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3.173.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Vaccine deliveries for 2015 are currently being scheduled
OIE Vaccine Bank model: how does it work?

• OIE Delegates submit official request to the OIE Director General with support from OIE regional offices:
  • vaccine request form with number of doses and timeframe of delivery requested,
  • confirmation that appropriate cold chain is present
  • justification of request based on the disease situation in the country
• Requests are processed by the OIE Headquarters
• Flight details and shipping documents are finalised with vaccine suppliers and provided to the country
• Vaccines are delivered to the country
OIE Vaccine Bank model: how does it work?

- Countries provide updates and progress reports to the OIE, including information on:
  - Vaccination campaign period (dates)
  - Number of vaccines used
  - Number of animals vaccinated
  - Vaccination schedule implemented
  - Geographical area covered
  - Information on post-vaccination surveillance

HOW, WHERE and WHAT (was the outcome)
Benefits of OIE Vaccine Banks

1 – Quality-related benefits

• Vaccines supplied to countries are of high quality and comply with OIE international standards
• Vaccines are delivered with required flexibility and based on request/availability of the country
• Reduction in the risks associated with storing large quantities of formulated vaccine in sub-optimal conditions
• Virtual stock/ replenishment mechanism ensure that produced vaccines do not expire before use
Benefits of OIE Vaccine Banks

2 – Fluid logistics

• Virtual stocks, production on demand
• Timely dispatch of emergency stocks in line with field needs
• Possible delivery of relatively small or large quantity of vaccines
• Easy procurement and delivery systems: limit possible costs associated with the multiplication of local registration and vaccine purchases
• The burden of storage lies with the selected vaccine supplier(s), rather than with the purchasing countries or international organisations
Benefits of OIE Vaccine Banks

3 – Cost-related benefits

• Economies of scale - a cost reduction per vaccine unit
• Synergies and leverage effects (e.g. Togo - World Bank; Philippines - WHO)
• Financial mechanisms allowing direct purchase by countries

4 – Better coordination

• Harmonisation and coordination of regional control programmes; the implementation of global / regional control strategies
• Support for multi-party vaccination campaigns (PPPs & NGOs)
Rabies Vaccine Bank as of 1 April 2015

Number of doses ordered

Total Ordered
6 855 800 doses

Millions of doses

WHO

Direct Purchase

Donors (other than EU)

EU Funds

Start up

Donors (other than EU)
- Australia
- France

Direct Purchase (DP)
- Swiss TPH
- Singapore
- WHO

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Benefits and leverage effects

Global/ Regional Vaccine Banks allow for:

• High-quality vaccines complying with international standards
• Limitation of multiplication of procurement procedures
• Economies of scale
• Multiple suppliers
• Replenishment mechanisms/ shelf life
• Multi-donor approach
• Earmarking of donor funds by region/ country/ disease
PPR Regional Vaccine Bank (Africa)

- Initial Physical Stock: 3,5 M doses
- Ordered by OIE: 10 M doses
  - 2,5 M doses to Ghana
  - 6,8 M doses to Burkina Faso
  - 700 K doses to Mali
- Ordered by the World Bank: 4 M doses
  - 4 M doses to Togo

❖ Total: 14 million doses of PPR vaccines
Avian Influenza Vaccine Bank

Multi-donor approach* involving:

- EU Africa (2006-2007) 18 M doses
- Canada Worldwide (2007-2011) 40 M doses
- Canada (donation) 1,9 M doses
- UK (donation) (2007) 2,1 M doses

Deliveries to 8 countries including Egypt (45%) and Vietnam (43%)

Total: **62 million doses** of Avian Influenza vaccines
1/ Terrestrial Animal Health Code

**Control rabies in dogs**
- Notifiable in country ➔ Chapter 1.1.
- Effective surveillance ➔ Chapter 1.4.

**Recommendation for importation**
- Certification ➔ Chapter 5.11.

**Stray dog population control**
- Management stray dogs ➔ Chapter 7.7.

**Infection with rabies virus** ➔ Chapter 8.12.
General provisions

- Case definition: *Any animal infected with the Rabies virus (Lyssavirus genus)*
- Aim: mitigate the risk of rabies to human and animal health
- Rabies free country: notification, surveillance, prevention, no rabies cases
Stray dog population

Scope: Control & welfare

- Responsibilities: public and private
- Regulatory framework: vaccination, identification, dog movement, welfare, ownership, etc.
- Resources: human, financial, technical, etc.
- Control measures: education, reproductive control, capture, environmental, euthanasia, etc.
- Monitoring and evaluation dog population
Quality standards:

- Diagnostic techniques
  - Sampling and shipment
  - Test for the identification of the agent
  - Serological test

- Requirements for vaccines
  - Minimum standard scientific-based requirements
  - Supplemented by national and regional requirements
  - Parenteral vaccination (domestic)
  - Oral vaccines (wildlife)
Facts
Legal Frameworks, Policy and Standards

• Neglected and under-reported
• National legislation
• Veterinary governance
• Vaccination/dog population control
• National resources
• Sharing responsibilities
Rabies, the 100% preventable zoonotic NTD. Optimized supply & coordination = expedited achievement of ZERO deaths.
Thank you for your attention