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THE ROLE OF VETERINARY SERVICE FOR THE GLOBAL ENSURING OF THE SAFETY OF RAW MATERIALS AND FOOD PRODUCTS

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*The data on the work of the well-known international organization - the OIE - the International Epizootic Bureau are given. The structure of the OIE is shown, the main areas of work, programs for which the organization works and its member countries. It is shown, with what basic questions and problems the OIE works, what are the functions of this organization.***Keywords:** OIE, participating countries, functions, programs, line of work

*Приведены данные по работе известной международной организации – МЭБ – Международное эпизоотическое бюро. Показана структура МЭБ, основные направления работы, программы, по которым работает данная организация и входящие в нее страны. Показано, с какими основными вопросами и проблемами работает МЭБ, каковы функции данной организации.***Ключевые слова:** Международное эпизоотическое бюро, страны-участницы, функции, программы, направление работы

The World Organisation for Animal Health (OIE) is the intergovernmental organisation responsible to improve animal health and welfare throughout the world. The OIE has 181 Member Countries as of 2017, permanent relationships with over 70 other international and regional organisations as well as regional and sub-regional offices in Africa; the Americas; Asia, the Far East and Oceania; Europe; and, the Middle East. The OIE is the international reference for the development, elaboration and promotion of intergovernmental science based standards for animal health and zoonoses. In partnership with its Member Countries, the OIE supports and assists national animal health systems improve their governance mechanisms by strengthening their capabilities and aligning them with the intergovernmental standards that they have adopted to meet the health challenges of tomorrow. These programmes also aim at preserving human health through fight against zoonoses, as well as at tackling food safety issues and improvement of livelihoods of poorest households, while taking into consideration the role and social functions of the various stakeholders concerned.

The animal health situation in the world often reflects the level of economic and social development of countries. In developed and emerging countries, good governance and advances in veterinary medicine and genetics coupled with

improved breeding conditions have reduced the impact of animal diseases. In contrast, in low-income countries, particularly Least Developed Countries (LDC), animal diseases have continuously and increasingly caused economic losses, thereby negatively impacting the fight against rural poverty and generating widespread food insecurity; as well as putting human health at risk from zoonotic infection and indirectly at risk through the impact on food supply.

Mandated by its Member Countries and in collaboration with WHO and with FAO, the OIE has taken the lead in coordinating international and regional programmes for the global control of specific diseases of economic and social importance, such as peste des petits ruminants (PPR), canine Rabies and Foot and Mouth Disease (FMD), and in the fight against antimicrobial resistance (AMR).

National Veterinary Services provide the fundamental management system for animal health and welfare and veterinary public health in Member Countries. National Veterinary Services must have the capacity and the sustainability to ensure the delivery of their outputs including inspection and certification of animals and animal products, management of the animal health and welfare situation and the control of diseases at the animal-human-environment interface including trans-boundary diseases. This capacity and sustainability is linked to the availability of resources and the integrity of the management system including policies, procedures, staff, and documentation; the processes for auditing and evaluation of performance; and preparedness for response to emergencies and other critical situations. The outputs of this Objective are strengthened and well-structured Veterinary Services with verifiable systems of governance, performance reporting (including evaluation and auditing), and the improved application of OIE standards by Member Countries.

In this age of globalization, ensuring healthy, hazard-free food is a key issue for all countries. Since 2002, the OIE develops, adopts and publishes standards and guidelines on 'animal production food safety', with a focus on establishing linkages between the food production phase, the food processing phase and the distribution phase, often described as a 'from farm to fork' approach.

To ensure food safety of products of animal origin, action is needed at all stages of the food chain from production at the farm through to human consumption. Many food safety risks arise at the pre-slaughter or pre-processing stage, and these can be reduced or prevented using disease standards and good practices recommended by the World Organisation for Animal Health (OIE). Since 2002, a permanent Working Group of the OIE has gathered, among others, *Codex Alimentarius*, WHO1 and FAO2 representatives, and has been preparing science-based standards and guidelines on animal production food safety.

Misuse of antimicrobials in human and veterinary medicine can lead to the development of antimicrobial resistance and reduced treatment efficacy in both humans and animals. Maintaining antimicrobial agent efficacy is crucial to protect animal health and welfare and help ensure that animal production keeps pace with the growing global demand for high-quality protein.

The OIE has developed standards on the responsible and prudent use of antimicrobial agents in terrestrial and aquatic animals. The OIE also published a list of Antimicrobials of Veterinary importance. Both the standards and the list have been adopted by all OIE Member Countries. Several bacteria resistant to antimicrobials can be transmitted by food.

The OIE is one of the international standard-setting organisations recognized in the SPS Agreement. The Agreement recognizes the OIE as the reference international standard setting organisation for animal health, including zoonoses.

GLOBAL CONTEXT

Globalisation

- Unprecedented movements of commodities and people, used by pathogens to colonize all the planet
- Climate changes and human behaviour allow colonisation of new territories by vectors and pathogens

The importance of the zoonotic potential of animal pathogens

- 60% of human pathogens are zoonotic
- 75% of emerging diseases are zoonotic
- 80% of agents with potential bioterrorist use are zoonotic pathogens
- Disease control at the animal source is critical

WHAT IS THE OIE?

1. An intergovernmental organisation created in 1924 to prevent the spread of animal diseases throughout the world
2. 1924-Creation of the Office International des Epizooties (OIE)
3. 1945-Creation of the United Nations
4. 2003-**New preferred name:** World Organisation for Animal Health (OIE)
5. Headquarters in Paris (France)
6. Regional Representations
7. Sub-Regional Representations & Sub-Regional Offices
8. **Regional (RR) and Sub-Regional (SRR) Representations**
9. Under the direct authority of the Director General
10. Collaborate closely with Regional Commissions

THE OIE SIXTH STRATEGIC PLAN 2016-2020

OIE's Global vision

- *Economic prosperity, social and environmental welfare of populations -2020
- *Protecting animals
- *Preserving our future
- *Delivering timely, high quality information and services to allow the management of risks to terrestrial and aquatic animal health and welfare
- *minimise associated dangers to human health
- *protect the environment and biodiversity in a "One Health" approach

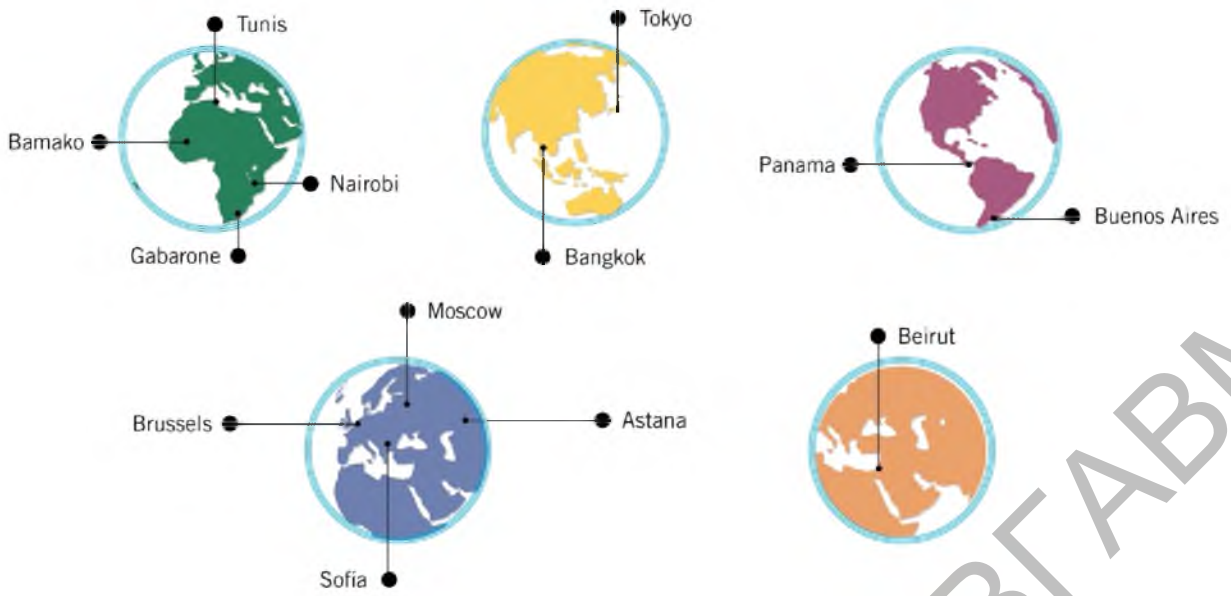


Figure 1 - REFERENCE LABORATORIES

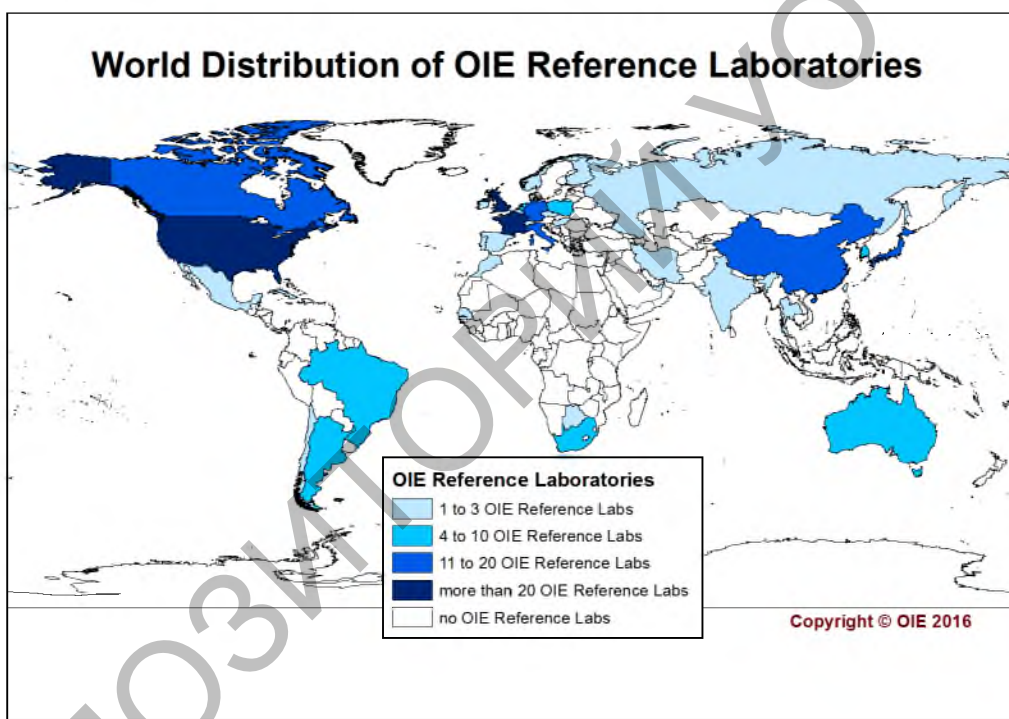


Figure 2 - EXPERT CENTRES FOR ANIMAL DISEASES

262 Reference Laboratories in 39 countries can diagnostic 119 diseases.

THE FOUR PILLARS OF THE OIE

Improving animal health and welfare worldwide

STANDARDS - for international trade of animals and animal products (*under the mandate given by the WTO*)

TRANSPARENCY- of the world animal disease situation (*including zoonoses*)

EXPERTISE - Collection and dissemination of veterinary scientific information (*animal disease prevention and control methods*)

SOLIDARITY - between countries to strengthen capacities worldwide (*Capacity building tools and programmes*)

TERRESTRIAL ANIMAL HEALTH CODE

- ✓ Role of Veterinary Services in Food Safety
- ✓ Control of biological hazards through ante and post – mortem meat inspection
- ✓ Control of hazards in animal feed
- ✓ Biosecurity in poultry production
- ✓ Control of Salmonella in poultry
- ✓ Controlling antimicrobial resistance

SOME CHAPTERS INCLUDE A LIST OF 'SAFE COMMODITIES' FOR HUMANS AND ANIMALS

Echinococcus, brucella, trichinella, taenia solium



FOOD-BORNE HAZARDS

*Biological hazards that must be controlled to ensure food safety are varied and in particular include bacteria such as Salmonella spp., Escherichia coli, Listeria monocytogenes, Campylobacter spp. and Mycobacterium tuberculosis complex.

*Numerous parasites, viruses and toxins are other important biological hazards.

*Chemical hazards include veterinary drug residues and chemical (PCP, dioxins) or environmental pollutants (heavy metals).



ROLE OF THE VETERINARY SERVICES

• The Veterinary Services help to reduce risks to animal health and public health by conducting checks on-farm and in places of processing, such as slaughterhouses, where they carry out ante-mortem and post-mortem inspections, to verify the health of the animals and the wholesomeness of their products, in accordance with OIE standards.

• In several countries, the Veterinary Services are responsible for food safety throughout the entire food chain (farm, slaughterhouse, transport, distribution retail and catering).

• The education and training of veterinarians, which includes both animal health (including zoonoses) and food hygiene components, makes them uniquely equipped to play a central role in ensuring food safety, especially the safety of foods of animal origin.

FOR MORE INFORMATION

- OIE's Animal Production Food safety portal.
- Scientific and Technical review: *Coordinating surveillance policies in animal health and food safety 'from farm to fork'*, Vol. 32 (2), August 2013.
- Handbook on Import Risk Analysis for Animals and Animals Products (Volume 1 & 2).
- 1st OIE International Conference on Animal Identification and Traceability 'From Farm to Fork' (2009) (Recommendations).
- OIE Global Conference on the Responsible and Prudent Use of Antimicrobial Agents for Animals (2013) (Recommendations).

OIE Terrestrial Code

- The role of the Veterinary Services in food safety (Chapter 6.1.).
- Control of biological hazards of animal health and public health importance through *ante-* and *post-mortem* meat inspection (Chapter 6.2.).

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NATIONAL FRAMEWORK FOR MALARIA ELIMINATION

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The article presents data on the problem of malaria in India, its distribution throughout the country, mortality and morbidity in this disease, its prevention and