



Antimicrobial resistance

Antimicrobial agents are medicines used to treat infections caused by bacteria in particular. They are essential drugs for both animal and human health, but in recent years some bacteria have demonstrated full or partial resistance to different antimicrobial agents. This phenomenon called antimicrobial resistance is a rising concern in both public and animal health.

Many activities in favour of animal health depend on the availability and appropriate use of good quality veterinary medicinal products, including antimicrobial agents, animal health being a key component of animal welfare, food security and food safety policies. The OIE considers that ensuring appropriate access to effective antimicrobial agents to treat animal diseases is vital, but stresses the necessity to control it through the intervention of well-trained veterinarians, whose ethics is guaranteed by a Veterinary Statutory Body as laid down in law.

OIE'S ACTIONS

Misuse of antimicrobial agents in human and veterinary medicine can hinder the effective treatment and recovery of illnesses in both humans and animals. It is crucial to preserve antimicrobial efficacy in order to ensure that animal production keeps pace with growing global demand for high-quality protein.

The OIE strongly advocates for a broad application of regulatory framework controlling in all Member Countries, production, import, distribution and the use of veterinary products, in particular antimicrobial agents. Actions of the OIE in promoting the responsible and prudent use of antimicrobials in veterinary medicine are:

- reinforcement of the standards related to the prudent use of antimicrobial agents and of good governance of Veterinary Services for better control production, registration, import, distribution and use of antimicrobials;
- better knowledge and monitoring of the quantities of antimicrobials used in animal production;
- harmonization of national antimicrobial resistance surveillance and monitoring programmes for animals, humans and in the environment, and implementation of international coordination and solidarity programmes elaborated for developing countries;
- implementation of permanent risk assessment measures;
- prevention of hazardous practices;
- condemning the marketing and use of fake products.

The OIE has developed standards on the responsible and prudent use of antimicrobial agents in terrestrial and aquatic animals. The Organisation also published a list of Antimicrobials of Veterinary Importance. Both the standards and the list have been adopted by vote by all OIE Member Countries.

EMPOWERING QUALIFIED VETERINARIANS

Antibiotics are not ordinary products and their sale and use cannot be free. There are no universal optimal systems for the delivery of antimicrobials at the farm. The best way for the delivery and treatment of animals is directly through a veterinarian, whose professional exercise is authorized and who will act as a specialist having received a long training for that purpose.

This profession, as well as medical doctors and pharmacists must be controlled by law in order to ensure ethic and minimise the weight of sole profit linked with the prescription and the sale of antibiotics. This is one of the key components of the good governance concept promoted by the OIE and the basis of the capacity building programmes provided to all our Members' Veterinary Services. Control of the ethics of veterinarians should be under the authority of a Veterinary Statutory Body built and working on the basis of the OIE standards.

The OIE has therefore undertaken a variety of initiatives to build the capacity of Veterinary Services spearheaded by its tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool). Specific programmes include support to the modernisation of veterinary legislation and support for VICH activities (VICH being the "International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products"), as well as training courses for the global network of national Focal Points for veterinary products, appointed by each of the 178 Members Countries of the OIE, with particular emphasis on antimicrobial resistance.

Moreover the OIE was the instigator of the first worldwide consultations aimed at developing a minimum university core curriculum for all veterinarians in the world. In 2012 the OIE published Recommendations on the Competencies of graduating veterinarians ('Day 1 competencies for graduates') to ensure the quality of public and private veterinarians at the entry-level. The use of antimicrobial agents is included in the minimum Competencies.



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OIE/ANSES/D. Acero-Montoya



OIE GLOBAL CONFERENCE ON THE PRUDENT USE OF ANTIMICROBIAL AGENTS FOR ANIMALS

(13-15 March 2012, Paris)

The OIE has worked actively for more than a decade on ensuring the quality, the efficacy and the safety of veterinary products, including antimicrobial agents, and developed a strategy for its activities in this area. The Organisation promotes the responsible and prudent use of antimicrobial agents in terrestrial and aquatic animals, as it is crucial to safeguard their therapeutic efficacy for both animals and humans. The objectives of the Conference were to:

- present an overview of the current global situation regarding antimicrobial use in animals and antimicrobial resistance;
- inform on initiatives taken by the OIE and other international organisations to promote prudent and responsible use of antimicrobials in animals at national, regional and international level;
- explore the opportunities to improve data collection in animal antimicrobial usage and antimicrobial resistance;
- promote good governance practices and encourage international cooperation;
- foster and strengthen cooperation with Veterinary Statutory Bodies, the veterinary profession and veterinary education establishments;
- present scientific findings on the alternatives that could be used in animal production replacing antimicrobial agents.

Alternatives to antibiotics (ATA) - Challenges and solutions in animal production

The OIE keeps up to date and has an interest in finding out about new research. The OIE hosted an international symposium on alternatives to antibiotics organised by the International Alliance for Biological Standardization (IABS) and the United States Department of Agriculture (USDA) from 25 to 28 September 2012 in Paris.

For additional information:

www.alternativestoantibiotics.org

APPLYING THE “ONE HEALTH” CONCEPT

The World Organisation for Animal Health works at the animal-human-ecosystems interface and fully endorses the ‘One Health’ concept. As humans and animals share the same bacteria and 60% of dangerous human pathogens are of animal origin, the clear priority is to strengthen and improve coordination between public and animal health sectors, involving environmental actors too when relevant.

At a High Level Technical Meeting held in Mexico City in 2011, experts agreed that antimicrobial resistance, alongside rabies and zoonotic influenza, would be recognized as one of the three priorities for control of health risks under the auspices of the WHO, the FAO and the OIE at the animal-human-ecosystems interface. This collaboration between these three organisations is now referred to as the “Tripartite Alliance”, based on a common note signed by the three General Directors.

COLLABORATIVE WORK

Given the amazing ability of living things to adapt to their environment, only a comprehensive approach involving all stakeholders is likely to succeed. The OIE works closely with all its Member Countries, as well as with international organisations such as the Codex Alimentarius Committee (CAC), FAO and WHO. These organisations are key partners in the field of recommendations for veterinarians and livestock producers, for example on risk analysis of residues of veterinary drugs in food products of animal origin and methods for the analysis of these products.

For more information

OIE *Terrestrial Animal Health Code*
www.oie.int/index.php?id=169&L=0&htmfile=chapitre_1.6.6.htm

OIE *Aquatic Animal Health Code*
www.oie.int/index.php?id=171&L=0&htmfile=chapitre_1.6.2.htm

OIE *Manual of diagnostic tests and vaccines for Terrestrial Animals*
www.oie.int/fileadmin/Home/eng/Our_scientific_expertise/docs/pdf/GUIDE_2.1_ANTIMICROBIAL.pdf

OIE list of antimicrobials of veterinary importance
www.oie.int/fileadmin/Home/eng/Our_scientific_expertise/docs/pdf/OIE_list_antimicrobials.pdf

OIE portal on antimicrobial resistance
www.oie.int/en/for-the-media/amr/

Technical information on antimicrobial agents and antimicrobial resistance
www.oie.int/en/our-scientific-expertise/veterinary-products/antimicrobials/