

Public-Private Partnerships (PPPs) to combat Antimicrobial Resistance (AMR)

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PPP Project Manager
Capacity Building Department

Todos somos parte de la solución para combatir
la RAM: la importancia de las asociaciones
público-privadas en las Américas

5 octubre de 2022 - 11.00 hs (GMT -3)



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Content

- A. Public-Private Partnerships in the veterinary domain
- B. Different types of PPPs
- C. PPPs to combat AMR
- D. Steps of successful implementation of PPPs

WOAH and PPP

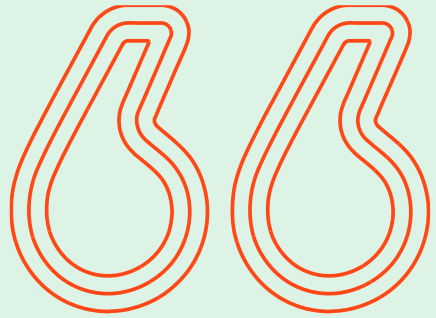
- **2017:**
 - Resolution #39 at WOAHA 85th General Session
- **2018:**
 - PPP brochure and **typology** released at 86th GS
 - Expert consultation, with 42 international public and private experts
 - PPP impact assessment on 3 case examples (Ethiopia, Indonesia, Paraguay)
- **2019:**
 - The WOAHA PPP Handbook of **guidelines** for PPPs, released at the 87th GS
 - E-learning modules: introductory course
 - 4 regional workshops in Africa and Asia to disseminate WOAHA guidelines
 - The WOAHA PPP initiative is integrated into the new PVS (Performance of Veterinary Services) Pathway as one of the targeted support activities
- **2020 onwards**
 - PPP 2.0 initiative to **build capacity** of relevant stakeholders and implement **PPP Targeted Support activities** in Members through the **Performance of Veterinary Services (PVS) Pathway**.

RESOLUTION No. 39

Public-Private Partnerships: expectations of private sector partners for international animal health and livestock sector development programmes and the implications for the OIE

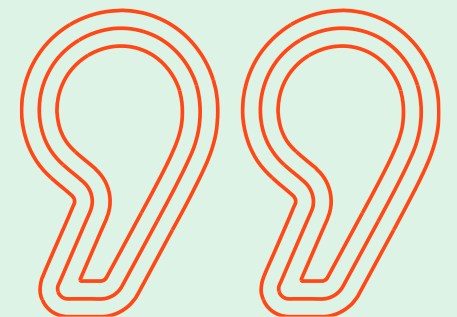
CONSIDERING

1. The critical role the animal health and livestock sectors play in contributing to the achievement of the United Nations Sustainable Development Goals (SDGs),
2. That the engagement of private sector entities, including corporations, small and medium enterprises (SMEs), private foundations and philanthropists, can accelerate progress towards the accomplishment of the SDGs,
3. That Public-Private Partnerships (PPPs) provide an optimal mix of the unique strengths of both the public and private sectors and can often accomplish much more than the most determined effort by any one operating alone,
4. That PPPs are a recognised mechanism for sourcing and engaging complementary resources, expertise and capabilities and offer substantial opportunities in meeting the SDGs as well as other national specific priorities,
5. That the private sector is keen to complement the efforts of national Veterinary Authorities, provided that there is a clear delegation of responsibilities, transparent governance, functional regulatory framework, consistent application of rules, regular review and clear exit arrangements,
6. That private sector partners require clear objectives and measurable impacts to be defined prior to engaging in PPPs and although these may differ from the public sector, the results of the PPP will be of mutual benefit and create a win-win situation,
7. That internationally agreed animal health and welfare standards continue to apply in all aspects of PPPs, and that the OIE *Terrestrial Animal Health Code* glossary definition of Veterinary Services includes both the governmental and non-governmental organisations that implement animal health and welfare measures, thus recognising private sector organisations, veterinarians and veterinary para-professionals as vital contributors to national Veterinary Services,
8. That PPP arrangements should and often do reflect the OIE Strategic Plan with an emphasis on diversity, inclusiveness, transparency and engagement, and also acknowledge the Tripartite approach,
9. That the OIE assesses the capacity of Veterinary Authorities to interact with interested stakeholders through the Performance of Veterinary Services (PVS) Pathway,
10. That the Bill & Melinda Gates Foundation, as a private partner, thus has specific objectives for its investments which must align with the Foundation's vision to help reduce inequity,
11. That, in October 2016, the OIE signed a three-year collaboration with the Bill & Melinda Gates Foundation entitled Public Private Progress to study the impact of PPPs in improving Veterinary Service delivery in Africa and Asia, and, as such, has started garnering positive experiences with PPPs at the global level,



Public-private partnership is a joint approach in which the public and private sectors agree responsibilities and share resources and risks to achieve common objectives that deliver benefits in a sustainable manner.

World Organisation for Animal Health





World Organisation for Animal Health (WOAH) Objective on Partnerships

To support Members to develop, *if and when relevant*,
sustainable Public-Private Partnerships (PPPs)
to strengthen Veterinary Services





PVS Pathway: PPP Targeted Support

Performance of Veterinary Services Pathway



Types of Public- Private Partnership



TRANSACTIONAL PPP

Definition Government procurement of specific animal health/sanitary services from private veterinary service providers	Private stakeholders Private veterinarians, Veterinary paraprofessionals, community-based animal health workers	Main initiative sector Public
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COLLABORATIVE PPP

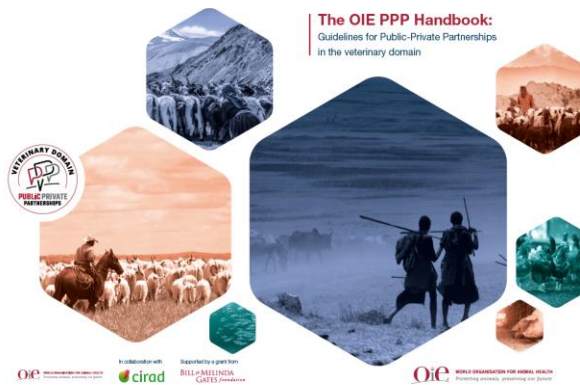
Definition Joint commitment between the public sector and end-beneficiaries to deliver mutually agreed policies/ outcomes	Private stakeholders End-beneficiaries, often producer organizations	Main initiative sector Public Private
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TRANSFORMATIVE PPP

Definition Establishment of sustainable capability to deliver otherwise unattainable major programmes	Private stakeholders National and multinational private sector companies (e.g. pharmaceutical or food industry, etc)	Main initiative sector Private
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Building partnership capacities

WOAH PPP Handbook



E-Learning courses



Public-Private Partnership Database

The World Organisation for Animal Health launches a database on public–private partnerships in the veterinary domain



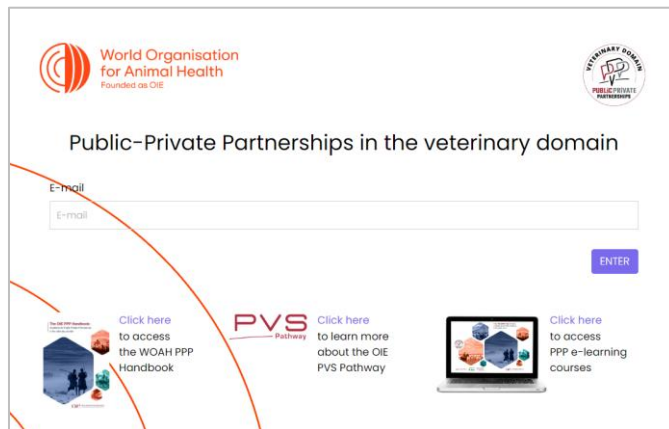
<http://www.oie.int/publicprivatepartnerships/OIEPPPHandbook>

<https://elearning-ppp.oie.int>

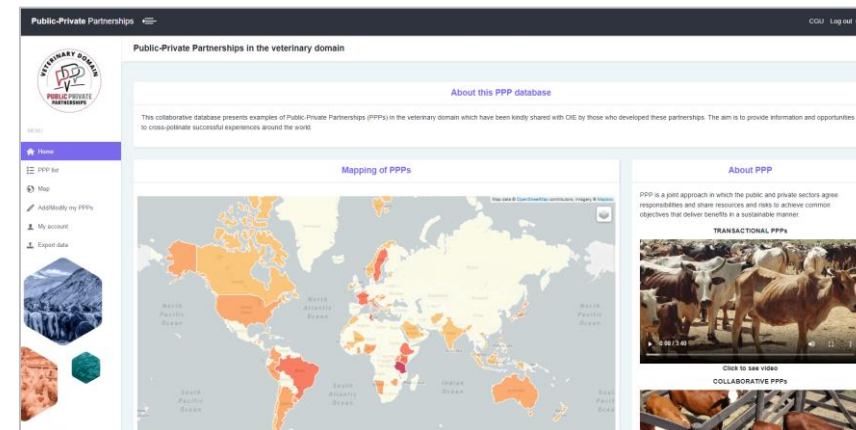
[WOAH PPP Database](#)

Examples PPP case targeting AMR

Step 1: www.woah-ppp-database.com



Step 2:
Access the WOAH PPP Database by entering your email.
If you wish to ad/modify your PPP story, please register first.



Region	Country	PPP title	PPP type	Animal(s)	Service type	Consultation
Asia and Pacific	Malaysia	National Antimicrobial Resistant Council of Malaysia			Communication, awareness campaigns Production/control of veterinary products (including AMR control)	
Europe	France	Ecoantibio			Production/control of veterinary products (including AMR control) Monitoring	
Europe	Belgium	Convention AMR (CONVENANT)			Coordination, Sampling	



Public-Private Partnership Database

100+ PPP Success
Stories in Veterinary
Services

(Online Open-access
OIE PPP Database)



Animal disease control and eradication

31 countries



Improve food safety and security

17 countries



Livestock productivity

27 countries



Improve quality of veterinary services

42 Countries



**Improve competencies of veterinary
professionals and paraprofessionals**

21 Countries



AMR Control

10 countries



**Improved livelihood and employment
(Vaccination)**

51 countries

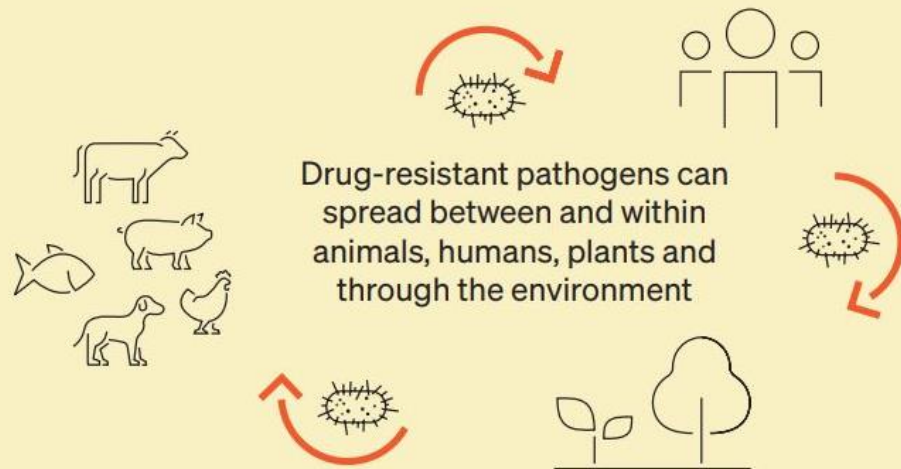


Market access

10 countries

Antimicrobial resistance (AMR): a global threat

Some infectious diseases are becoming harder to treat because usual treatments are losing their efficacy against numerous pathogens.



In one year,
1.27 million human deaths
were the direct
result of AMR

Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. The Lancet, 2022.

By using antimicrobials more prudently, and following a One Health approach, AMR can be curbed.

We must all be part of the solution

‘WE’

the Public and Private actors

- Ministry governing aquaculture, livestock trade, Health, Finance
- Veterinary Authority
- Farmers/ Producers/ Industries
- Companies/Pharmaceuticals/ Nutrition etc
- Aquatic health service providers- Veterinary professionals and paraprofessionals
- Food processor, retailers
- R&D institutions and Laboratory infrastructure in public and private sector
- International development organisations
- Others

**Public-Private Partnership
to combat AMR
A potential option**



How can WE (the public and private actors) contribute to combat Antimicrobial Resistance?

WE can improve awareness and understanding of antimicrobial resistance through **effective communication, education and training.**

Promoting Public **awareness** by all stakeholders

WE can strengthen the knowledge and evidence base through **surveillance and research**

Private sector should share the **antimicrobial use data** and support veterinary authority in strengthening **laboratory capacity** for efficient surveillance.

WE can reduce the incidence of infection through **effective sanitation, hygiene and infection prevention measures**

Strengthens **animal health practices** through implementation of the standards published in the **WOAH Terrestrial and Aquatic Animal Health Codes** to Minimize and Contain Antimicrobial Resistance.

WE can optimize the use of antimicrobial medicines in terrestrial and aquatic animal health

The research community in both the public and private sectors, including the pharmaceutical industry, should invest in the **development of effective and low-cost tools** for diagnosis of infectious diseases and **antimicrobial susceptibility testing** for use in human and animal health at points of care and dispensing (pharmacies).*

WE can collaborate to develop **new medicines, diagnostic tools, vaccines and other interventions**

Strengthening **existing and creating new public-private partnerships** for encouraging research and development of new antimicrobial agents and diagnostics; piloting of innovative ideas for financing research and development and for the adoption of new market models to encourage investment and ensure access to new antimicrobial products.*

Ecoantibio, France



The plan involves:

- all categories of livestock farmer;
- veterinarians and pharmacists;
- scientists and risk assessors (ANSES);
- the pharmaceutical industry;
- the official authorities;
- the general public - i.e. animal owners.

What is expected...
... of livestock farming sectors?
- Adherence to preventive measures;

ÉCOANTIBIO, a collective success

During the Plan's five years (2012-2016), **livestock exposure to antibiotics declined by 37%**, while exposure to critically important antibiotics fell by 75% for fluoroquinolones and 81% for last-generation cephalosporins between 2013 and 2016.



How is the Ministry of Agriculture and Food involved?

The Plan is being driven by the Ministry:

- > by raising the awareness of all concerned;
- > by encouraging initiatives by professionals (development of research, changes in husbandry methods, etc.);
- > by making changes to the regulations governing the marketing and prescription of antibiotics.

In France, the exposure of livestock to antibiotics is below the EU average. A general trend towards a decline in resistance has been observed for most antibiotics and livestock farming sectors.

The majority of the planned programmes have been set in train:

- > **communication campaigns:** "Antibiotics are not automatic for us either" targeting pet owners, "Fed, housed, vaccinated" aimed at livestock farmers;
- > **basic and continuous training modules** for veterinarians and farmers;
- > **applied research** with funding of €7m over the period;
- > **events:** regional and national symposia, international conferences, interviews, press articles, steering and monitoring meetings, and more.



Designed by the French Directorate General for Food, October 2017. Photo: Thinkstock. Layout: Information and Communication Delegation.

Targets Task Force (TTF) United Kingdom

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DOSSIER

The voluntary response to antimicrobial resistance by the United Kingdom

KEYWORDS

#antibiotic, #antimicrobial resistance (AMR), #public-private partnership, #Responsible Use of Medicines in Agriculture Alliance (RUMA), #United Kingdom.

AUTHORS

Chris Lloyd, Responsible Use of Medicines in Agriculture Alliance (RUMA), United Kingdom.

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The TTF first convened in December 2016, composed of a specialist veterinarian and a leading farmer for each of the agricultural sectors, covering beef, dairy, eggs, fish, gamebirds, pigs, poultry meat and sheep. The associated government agencies - the Veterinary Medicines Directorate and Food Standards Agency - took part in the group as observers and provided input on data and methodology.

In November 2017, after a year of intensive effort and partnership with stakeholder organisations, the TTF published a series of sector targets designed to reduce, refine or replace antibiotics without affecting the animal health and welfare of farmed animals across UK agriculture [2].

The common theme across all sectors is the partnership between veterinarians and producers

The targets reflect the different start points and challenges for each sector, although they all committed to specific targets. The next steps explain how the targets will be delivered. The common theme across all sectors is the partnership between veterinarians and producers as they adopt a proactive approach to disease prevention, but, when needed, prescribe and use antibiotics responsibly. The targets come to fruition in 2020.

The United Kingdom (UK) Government has established AMR as a key priority [1]. Its Population Correction Unit (PCU) by 2018 published in May 2016, the Responsible Use of Medicines in Agriculture Alliance (RUMA) convened a Targets Task Force (TTF), bringing together representatives from all agricultural sectors. The TTF developed sector-specific targets, which were published in November 2017.



In November 2018, RUMA published a progress report [3] for each sector with a second in October 2019 [4] reporting the following highlights:

- UK sales of antibiotics for food-producing animals fell 53% since 2014: overall use in 2018 was 29.5 mg/kg, one of the lowest quantities in the EU and below the government target of 50 mg/kg
- Sales of highest priority critically important antibiotics (HP-CIA) fell 68% between 2014 and 2018
- Only 30% of the UK's antibiotics are now estimated to be used to treat disease in farm animals.

<http://dx.doi.org/10.20506/bull.2019.3.3047>

The role of public-private partnerships in the dairy sector

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PERSPECTIVES

The role of public-private partnerships in the dairy sector

KEYWORDS

#animal welfare, #antimicrobial resistance (AMR), #International Dairy Federation (IDF), #public-private partnership, #World Organisation for Animal Health (OIE), #zoonosis.

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In the International Dairy Federation's (IDF) FactSheet 0031/2017/05, the role of public-private partnerships in the dairy sector is highlighted. The IDF promotes prudent and responsible use of antimicrobial agents within the global dairy industry to ensure that they continue to be effective and useful for curing diseases in animals. Use of antimicrobials is only part of an animal health management programme that aims to limit disease in animals and improve animal welfare. Early detection of disease allows early intervention and this minimises the need to use antimicrobials. Improved infection prevention and control measures limit disease spread and progressively reduce the usage of antimicrobial agents. The dairy sector will continue to evaluate potential strategies to decrease antimicrobial agents' usage as they may arise.

www.oiebulletin.com



Introduction

This document describes what antimicrobial resistance (AMR) is, outlines dairy sector guidance on prudent use of antimicrobials and defines the global dairy position on AMR. These initiatives complement the many animal health, animal welfare and food safety practices that the dairy sector has in place to deliver safe and secure dairy products to global consumers.

What is AMR?

Antimicrobials are medicines used to treat infections, particularly those caused by bacteria, to maintain human and animal health. Some bacteria have developed full or partial resistance to various antimicrobial agents. Resistance occurs naturally in bacteria through spontaneous mutation or natural selection, but can be accelerated due to incorrect use of antibiotics in human medicine, animal medicine, and plant medicine. This phenomenon is known as AMR.

AMR is important, because it limits the range of antimicrobial agents that can be used to treat infections effectively. This can mean an increase in the prevalence and severity of disease in humans and animals, and impacts animal welfare, human health, food safety and food security. It may result in additional costs associated with treating infections due to the requirement to use newer, higher cost or multiple antimicrobials.

Global dairy position

One of the roles of the International Dairy Federation is to encourage good animal health and welfare to minimize the need for antimicrobial use. The IDF promotes prudent and responsible use of antimicrobial agents within the global dairy industry to ensure that they continue to be effective and useful for curing diseases in animals. Use of antimicrobials is only part of an animal health management programme that aims to limit disease in animals and improve animal welfare. Early detection of disease allows early intervention and this minimises the need to use antimicrobials. Improved infection prevention and control measures limit disease spread and progressively reduce the usage of antimicrobial agents. The dairy sector will continue to evaluate potential strategies to decrease antimicrobial agents' usage as they may arise.

Management of AMR

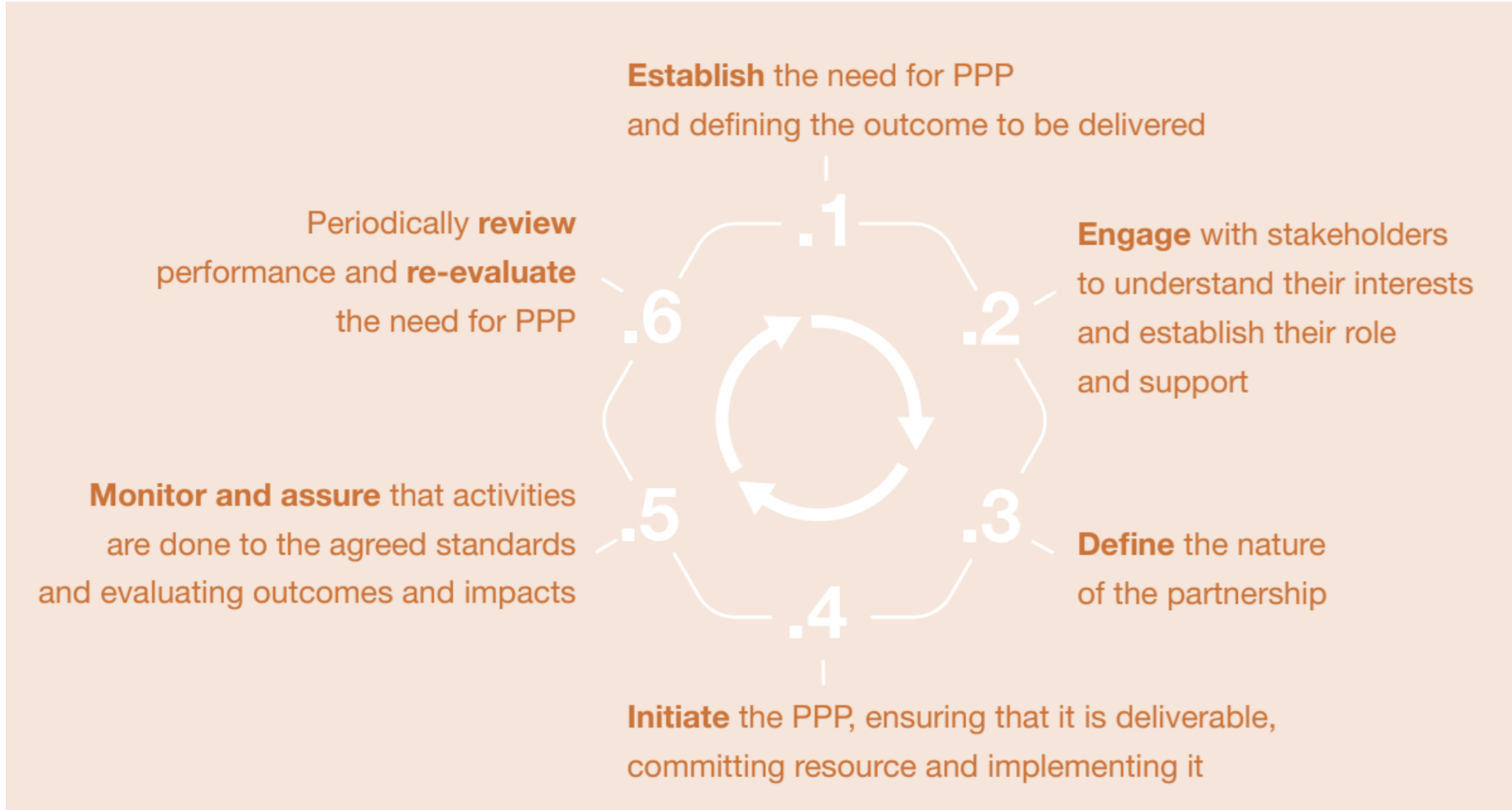
AMR is not constrained by geographic or human/animal borders. Resistant bacteria arising either in humans, animals or the environment may spread from one to the other, and from one country to another. Limiting the development of AMR requires the implementation of global strategies by public health, veterinary and environmental authorities in all countries of the world. At a national level, with respect to animal health services, these include:



Stakeholders



Key activities for Successful PPP (may run sequentially or in parallel)





The Way ahead



*Potential
Possibilities* 
PPPs to combat AMR

Thank you

Share your PPP experiences in the veterinary domain
Contact us ppp@woah.org

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Ecoantibio, France



The **2017-2021 Ecoantibio Plan** promotes prudent, calculated use of antibiotics. Over time, it aims to reduce the exposure of livestock to antibiotics. It provides for communication and training programmes, access to alternatives to antibiotics and improved prevention of animal diseases. Following the globally recognised success of the first Ecoantibio Plan 2012-2016 (a reduction of 37% over five years), the objective now is to consolidate these results and continue the efforts under way.

Reducing antibiotic use: we are all concerned

The combat against antimicrobial resistance is a major public health challenge worldwide. Loss of effectiveness for antibiotics impacts the health of people, the health of animals and the health of ecosystems, the health of all these forming an indivisible whole. That is why resistance is being fought with a holistic "One Health" approach.

The Plan's four core focuses

- > Development of **measures to prevent infectious disease and facilitate the use of alternative treatments.**
- > Communication and training on the **core issues for combating antimicrobial resistance, on rational antibiotic prescription** and on other ways of **controlling infectious disease.**
- > Provision of **tools for assessing and monitoring antibiotic use**, along with **tools for responsible antibiotic prescription and administration.**
- > Ensuring **satisfactory implementation of the rules for proper use** at national level and **encouraging their adoption across the EU and internationally.**

The plan involves:

- ➊ all categories of livestock farmer;
- ➋ veterinarians and pharmacists;
- ➌ scientists and risk assessors (ANSES);
- ➍ the pharmaceutical industry;
- ➎ the official authorities;
- ➏ the general public - i.e. all animal owners.



How is the Ministry of Agriculture and Food involved?

- The Plan is being driven by the Ministry:
- > by raising the awareness of all concerned;
 - > by encouraging initiatives by professionals (development of research, changes in husbandry methods, etc.);
 - > by making changes to the regulations governing the marketing and prescription of antibiotics.

What is expected... of livestock farming sectors?

- Adherence to preventive measures;
- Following training courses on the proper use of antibiotics and biosafety;
- Improved husbandry methods (hygiene, upkeep of farm buildings, monitoring sanitary status).

... of veterinarians?

- Improved prescription practice for reduced use of antibiotics;
- Limitations on on-farm prescription of critically important antimicrobials for which it is imperative to conserve efficacy for human health;
- Provision of advice to farmers to improve livestock conditions and stop disease occurring.

... of scientists?

- Extension of our knowledge in immunology to enable development of vaccines against bacterial diseases;
- Research into alternative treatment methods and the mechanisms underlying resistance;
- Methods for the assessment of the risks of antimicrobial resistance.

... of pharmaceutical companies?

- Development of new antibiotics;
- Development of alternatives such as vaccines to avoid recourse to antibiotics.

ÉCOANTIBIO, a collective success

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- > **basic and continuous training modules** for veterinarians and farmers,
- > **applied research** with funding of €7m over the period,
- > **events:** regional and national symposia, international conferences, interviews, press articles, steering and monitoring meetings, and more.

Alongside all these incentive and voluntary measures, legislation and regulations have been put in place: a ban on price discounts, rebates and cashbacks on antimicrobial sales, controls on the prescription and dispensing of critically important antibiotics, publication of a guide to good practice for antibiotic use in veterinary medicine and inclusion of this issue in the code of veterinary ethics.

To find out more, go to the dossier at: www.agriculture.gouv.fr/eoantibio



Designed by the French Directorate General for Food, October 2017. Photo: Thinkstock. Layout: Information and Communication Delegation.



World Organisation for Animal Health

Organisation mondiale de la santé animale

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The United Kingdom (UK) Government Review on Antimicrobial Resistance (AMR) by Lord O'Neill established AMR as a key priority [1]. It set a target for antibiotic use in agriculture of 50 mg/kg Population Correction Unit (PCU) by 2018. In response to the O'Neill Review final report published in May 2016, the Responsible Use of Medicines in Agriculture Alliance (RUMA) convened a Targets Task Force (TTF), bringing together representatives of the farmed livestock sectors. The TTF developed sector-specific targets to reduce antibiotic use in UK livestock production, which were published in November 2017.

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The targets reflect the different start points and challenges for each sector, although they all committed to specific targets. The next steps explain how the targets will be delivered. The common theme across all sectors is the partnership between veterinarians and producers as they adopt a proactive approach to disease prevention, but, when needed, prescribe and use antibiotics responsibly. The targets come to fruition in 2020.



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The role of public-private partnerships in the dairy sector



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In the [International Dairy Federation \(IDF\)](http://www.internationaldairyfederation.org), we believe that healthy and productive dairy animals contribute to a safe, sufficient and nutritious food supply. Diseases in dairy animals can decrease productivity and also result in food waste, due to discarded milk. Sustainable milk production is achieved through good management of animal care. Poor animal health may endanger the fulfilment of the United Nation's Sustainable Development Goals. Collaboration

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Protecting animals, promoting our future

Guidance on Antimicrobial Resistance from the Dairy Sector



Guidance on Antimicrobial Resistance from the Dairy Sector

Introduction

This document describes what antimicrobial resistance (AMR) is, outlines dairy sector guidance on prudent use of antimicrobials and defines the global dairy position on AMR. These initiatives complement the many animal health, animal welfare and food safety practices that the dairy sector has in place to deliver safe and secure dairy products to global consumers.

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AMR is important, because it limits the range of antimicrobial agents that can be used to treat infections effectively. This can mean an increase in the prevalence and severity of disease in humans and animals, and impacts animal welfare, human health, food safety and food security. It may result in additional costs associated with treating infections due to the requirement to use newer, higher cost or multiple antimicrobials.

Guide to Prudent use of Antimicrobial Agents in Dairy Production




IDF Guide to Prudent Use of Antimicrobial Agents in Dairy Production

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