

Food and Agriculture Organization of the United Nations

FAO Action Plan on AMR in food and agriculture

Antimicrobial resistance (AMR) is a threat to human and animal health and refers to the ability of microorganisms to defy the medicines prescribed. For instance when antibiotics are used improperly, such as an incorrect dose, insufficient duration or wrong frequency, resistance is heightened. The misuse of antimicrobials affects their efficacy, and increasingly more infections and diseases become untreatable. Many gains made in modern medicine throughout the 20th century will be lost, making AMR a global public and animal health issue that requires concerted action. AMR and the use of antimicrobials (AMU) affect food safety and security, people's livelihoods, as well as economic and agricultural development.

What we do

FAO plays a key role in supporting governments, producers, traders and other stakeholders to adopt measures towards the judicious use of antimicrobials and prevent the development of AMR.

Through its **multidisciplinary** expertise, i.e. food and feed safety, terrestrial and aquatic animal health, welfare and production, publich health, plant health and production, land and water management, and legal and regulatory frameworks, FAO **contributes to international efforts addressing AMR.**

It promotes a holistic **"food chain" approach** by working closely with farmers, veterinarians, specialists in animal production, and food and feed safety professionals to support best practices along the food chain to prevent diseases.

FAO also **supports the food and agricultural sectors in countries** to develop their National Action Plans (NAPs) on AMR with:

 in-country baseline assessments of AMU, regulatory frameworks, thorough sector reviews, laboratory data and other information and on-site consultations;

- participatory multisectoral stakeholder processes;
- establishment of interagency working groups on AMR, to better integrate the health and agriculture sectors;
- technical and operational support on the development of NAPs on AMR: needs assessment, prioritization, resource indicators and responsibilities;
- technical support on the implementation of specific activities under the NAPs.



Routine and preventive vaccination prevents animal disease outbreaks



Background

Antimicrobial drugs play a critical role in the treatment of diseases, and their use is essential to protect both human and animal health. However, antimicrobials are often misused for treatment and prevention of diseases in the livestock sector, aquaculture and crop production. There is a potential risk of emergence and spread of antimicrobial resistance because antimicrobials can remain in and be transmitted through food, water and waste. AMR can occur and spread across continents in a few hours and can affect the safety of food. The risk is particularly high in countries where legislation, surveillance and monitoring systems are weak or inadequate.

Antimicrobial resistance can be tackled by working closely with veterinarians, farmers, feed and food producers and food safety professionals to support best animal health and crop production practices, which underpin the prudent use of antimicrobials. FAO applies the **'One Health'** approach, which is a collaborative, cross-sectoral, multidisciplinary mechanism to reduce threats to the animals, humans, ecosystems and their interactions.





Field surveillance and ensuring food safety are important aspects of the AMR action plan

FAO tools and resources on AMR

Progressive Management Pathway on antimicrobial use and resistance. An overarching platform to support countries in regular self-assessment of progress on the NAPs that provides access to relevant existing and newly developed tools and materials to guide governance processes and technical implementation of activities;



Laboratory Mapping Tool. For self or external evaluation of laboratory capacity on AMR related testing (diagnostics and surveillance);

Good Practices. Guidance on good practices and alternatives to the use of antimicrobials for specific food-producing sectors;

Specific Training. Delivered by FAO specialists at national or regional level;

Codex Texts on AMR. The standards, guidelines and codes of practice of *Codex Alimentarius* contribute to the safety, quality and fairness of international food trade. Are an important tools that governments can use for the containment of AMR, as are those of the OIE.

Partners

World Health Organization (WHO) and the World Organisation for Animal Health (OIE) and other key partners through the food safety guidelines of the Codex Alimentarius.

CONTACT US

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MORE INFORMATION

http://www.fao.org/antimicrobial-resistance