Antimicrobial agents, including antibiotics, have saved millions of lives, substantially reduced the burden of diseases in people and animals, improved quality of life, contributed to improved food production and safety, and helped increase life expectancy.

The emergence and spread of antimicrobial resistance (AMR) in several microorganisms is complicating the management of many infectious diseases. AMR is a major threat to human development and the fight against infectious diseases. It endangers animal health and welfare, as well as food production. AMR also adversely affects the functioning of human, animal and plant health systems and economies.

Developing countries, with a greater burden of infectious disease and limited resources, will be the most adversely affected by AMR. AMR requires a collective and practical response. Global Action Plan to guide countries in developing and implementing national action plans was endorsed by WHO, FAO and OIE in 2015.

For more information on the implementation of the Global Action Plan:
- FAO website: www.fao.org/antimicrobial-resistance
- OIE website: www.oie.int/antimicrobial-resistance
- WHO website: www.who.int/antimicrobial-resistance
Antimicrobial resistance can affect us all!

Take action now to protect human, animal, plant & environmental health.

Prevention

Expert advice

Source

Use

Awareness & Education

Food safety

Human health

Animal health

Plant health

Food production

Environment

Legislation

Research

Awareness & Education

Surveillance & Monitoring

National authorities

Guidelines for best practices:

1. **Implement legislation** that is based on the standards of the Codex Alimentarius.
2. **Source food only from suppliers complying with regulations** and using Good Hygiene Practices and HACCP**.
3. **Keep clean, separate raw and cooked, cook thoroughly, start with clean water and safe raw ingredients.**
4. **Consumers have the power** - support distributors and producers that follow good food safety guidelines and responsible use of antimicrobials.
5. **Ensure antimicrobials are only used when necessary and under medical supervision.**
6. **Avoid buying antibiotics from unregulated sources** - they may be of poor quality and ineffective.
7. **When using antibiotics** - follow professional advice and never share medicines or use leftover drugs to treat a different illness.
8. **Tell your friends, family and colleagues about the appropriate use of antibiotics.**

**Antimicrobial use** must be monitored and reviewed by competent authorities and be consistent with local resistance levels.

**Antimicrobial resistance** can lead to increased costs for healthcare systems, reduced animal productivity, higher food prices, and environmental contamination.

**Infections** caused by resistant bacteria are more severe, require longer treatment, and are less likely to respond to antibiotics.

**Antimicrobial resistance** is a threat to human, animal, and plant health, pushing us towards the risk of diseases and deaths.

**Antimicrobials** should only be used by authorised distributors.

**Manufactured** according to OIE international standards and sold only by authorised distributors.

**Antimicrobials** should be used responsibly and in accordance with professional instructions and respect withdrawal periods.

**Ensure** antimicrobials are only used with prescription diagnosis and under supervision of an authorised professional.

**Use quality antimicrobials** manufactured in accordance with international standards.

**Use antimicrobials prudently**, in accordance with professional instructions and respect label instructions, especially dosage and withdrawal periods.

Food producers should keep their knowledge up to date from reliable and trusted sources.

**Adopt good hygiene practices** throughout the food chain.

**Implement** legislation that is based on the standards of the Codex Alimentarius.

**Source food** only from suppliers complying with regulations and using Good Hygiene Practices and HACCP**.

**Keep clean, separate raw and cooked, cook thoroughly, start with clean water and safe raw ingredients.**

**Consumers** have the power - support distributors and producers that follow good food safety guidelines and responsible use of antimicrobials.

**Ensure antimicrobials** are used on prescription after diagnostic and under supervision by a veterinarian.

**Use only high quality antimicrobials** manufactured according to OIE international standards and sold only by authorised distributors.

**Handle antimicrobials** prudently and responsibly by respecting the dosage directions and professional advice.

**Veterinarians** should keep their knowledge up to date and raise awareness about antimicrobial resistance.

Adopt good agricultural practices and integrated pest management (IPM) to reduce the risk of disease and need for antimicrobials.

**Professionals** are trained to recognize plant diseases and prescribe the best treatments.

**Always source Plant Protection Products (PPP)** through authorised producers and distributors.

**Use PPP appropriately**: Fungal diseases do not respond to antibiotics.

**Inform yourself about appropriate use** of antimicrobials - you could reduce crop losses and save money and lives.

**Adopt good waste management practices** to prevent run-off of antimicrobial residues from pharmaceutical companies, hospitals, crop production, animal and human waste.

**Don’t cut corners on waste disposal.** Respect regulations and follow guidelines on waste management.

**Use only approved sources of antibiotics** and avoid unregulated sources.

**Treat waste water** before release into the environment, follow guidelines for disposal, treatment and spreading of manure, and dispose of antibiotics according to guidelines.

**Learn ways on how you can protect the environment from waste your operations produce.**

*Terrestrial and aquatic

**HAZARD ANALYSIS AND CRITICAL CONTROL POINTS**
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