Why tackle foodborne antimicrobial resistance?

Resistance to antibacterial drugs has become a worldwide problem for both human and animal health with the potential for it to create an unwanted post-antibiotic era. An over- or misuse of antibiotics in both human and non-human contributes to the issue, which is enhanced by transmission through increasing international movement of people, animals and food.

In addition to the veterinary drug use for treatment of animal diseases, antibacterial drugs are used in animal husbandry for disease prevention and, in half of the countries in the world, as growth promoters, involving mass administration.

In some countries, up to 70% of antibiotics go to animals raised on industrial farms that are not sick, to offset the effects of crowding and poor sanitation. This practice promotes the development of drug-resistant bacteria that can spread to humans.

Urgent action is needed to avoid inappropriate use and to reduce antibiotic usage not only in humans but also in animal husbandry and aquaculture.

What is WHO doing?

Integrated surveillance of antimicrobial resistance in foodborne bacteria is the coordinated sampling and testing of bacteria from food animals, foods, environmental sources and clinically ill humans, the subsequent evaluation of AMR trends throughout the food production, processing and supply chain using harmonized methods. To detect the emergence and spread of resistant bacteria that may cause foodborne diseases, WHO has recommended that countries develop antimicrobial surveillance programmes to integrate data from bacterial isolates originating from humans, food-producing animals and retail meats.

Since the establishment of the WHO Advisory Group on Integrated Surveillance of Antimicrobial Resistance (WHO-AGISAR) in 2008, the group has supported WHO’s effort to minimize the public health impact of AMR associated with the use of antimicrobial agents in all food-producing animals.

WHO also works closely in tripartite collaboration with Food and Agriculture Organization of the UN (FAO), and World organisation for Animal Health (OIE) in order to enhance global coordination and to promote intersectoral collaboration between animal and human health sectors, and foods.
Activities

WHO Advisory Group on Integrated Surveillance of Antimicrobial Resistance (AGISAR) assist in its efforts to prevent and control foodborne AMR, with the following tasks:

- Contain AMR from the food chain
- Build capacities related to integrated surveillance of AMR through development of training modules for Member States as well as provision of support to set up national programs on integrated surveillance of AMR
- Update the WHO list of Critically Important AMR for human medicine
- Implement FAO/OIE/WHO tripartite and Codex activities on AMR
- Design pilot projects to conduct integrated surveillance of AMR and AMR usage

Key Achievements

- WHO Critically Important Antimicrobials for Human Medicine developed
- Capacity building on antimicrobial resistance monitoring in foodborne and enteric pathogens (GFN).
- Publication of Codex Guidelines on Risk Analysis of Foodborne Antimicrobial Resistance
- Publication of WHO – AGISAR Guidance on Integrated Surveillance of Antimicrobial Resistance
- Pilot projects on Integrated surveillance of AMR implemented in all WHO regions

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