Why antimicrobial resistance concerns you

Imagine a world where infections and diseases in animals, humans and plants cannot be treated. This worst-case scenario could become a reality as some microbes develop resistance to the drugs we use to fight them. Antimicrobial resistance, or AMR, has become one of the most pressing health issues of our time.

What is it?
Antimicrobial resistance (AMR) is when microbes grow resistant to the drugs that are supposed to combat them. These drugs are called antimicrobials. You may be familiar with antibiotics. They belong to the family of antimicrobials.

Antimicrobials rank among humanity’s most spectacular achievements. Before they were discovered, infections could lead to death, even those due to minor cuts. Today, antimicrobials help animals and humans live longer and healthier lives. Rampant AMR threatens these achievements: animals and humans are becoming helpless, once again, in the face of infection.

Almost 5 million human deaths were linked to antimicrobial resistance in 2019 (1) which is 3 times more than total deaths associated to diabetes or lung cancer (2)

What is a microbe?
Microbes are tiny living things, so small that we cannot see them. The most common types of microbes are bacteria, viruses, fungi and microscopic parasites. Microbes live in water, soil, the air… even in the human body and in animals. While some are essential to the health of living things, others make humans, animals and plants sick.

How do microbes grow resistant?
One of the main drivers of AMR is misuse and overuse of antimicrobials. This means that when we handle these drugs too carelessly, they lose their efficacy as a consequence. Although AMR is a natural phenomenon, the way we are using antimicrobials has accelerated the process to the point that it now threatens global health and our livelihoods.

Why is AMR a threat?
Imagine your life being put at risk by a cystitis or a routine surgery such as hip replacement. This could become a reality if antimicrobials stop working due to antimicrobial resistance. It does not only affect human health, but also animal and plant health, and thus human livelihoods and food security. Today, 1.3 billion people rely on livestock for their living, and over 20 million people depend on aquaculture. What would happen if entire herds were decimated due to illnesses that can no longer be cured because they are caused by microbes that have grown resistant?

Why is it a ‘One Health’ challenge?
Antimicrobials can spill into the soil and waterways, triggering the emergence of resistant microbes in the environment, which can in turn infect humans and animals. Resistant microbes can also spread from animals into the environment through manure, or from humans into the environment through clinical waste and sewage water. The excessive or irresponsible use of antimicrobials in one sector impacts all other sectors. This is why we speak of AMR as a ‘One Health’ challenge.

(2) Institute for Health Metrics and Evaluation (IHME) - www.healthdata.org
Solutions exist and you have a role to play

What you can do

Be mindful of your animals’ health and welfare daily.

Vaccinate your animals, or advocate for vaccination. Prevention is better than cure!

Never give antibiotics to your animals without a veterinary prescription.

Respect the prescribed dosage, frequency of administration, length of treatment and withdrawal period when giving antibiotics to your animals.

Learn about the origin of the animal products you consume.

Demand products from animals that are raised responsibly.

Learn about the links between animal, human, plant and environmental health.

Ask your representatives to address this urgent and serious challenge.

Advocate to make AMR a universally recognised urgent issue.

Discover our resources to learn more about antimicrobial resistance.

We are fighting AMR

Because AMR is a global threat, it calls for a global, coordinated response. The World Organisation for Animal Health (WOAH) is uniquely positioned to help lead the global fight against AMR on the animal health front. Whether it is by closely working with national Veterinary and Aquatic Animal Health Services, collecting and analysing data on antimicrobial use in animals, or advocating for improved practices, we are acting to steer the world towards a healthier and more sustainable future.

Our action against AMR is based on four pillars:

Support good governance and capacity building

Encourage implementation of international standards

Strengthen knowledge through surveillance and research

Improve AMR awareness and understanding

Browse our portal on AMR to find out more

World Organisation for Animal Health
Founded as OIE
www.woah.org

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