AMR: a one-health crisis that needs action now

Antibiotic resistance is one of the key challenges facing animal health and human health. Journal vet **Tommy Heffernan** explains how it affects you

The One Health concept is based on the fact that people and animals share the same environment, so human health, animal health and environmental health are all interdependent. One of the biggest challenges to One Health is antimicrobial resistance. You may have recently been treated with an antibiotic, or treated a sick animal on your farm with an antibiotic. What if that antibiotic, and the next one chosen by your doctor or vet, failed to work and the infection got more serious? We all need antibiotics to work, but due to the development of Antimicrobial Resistance (AMR), this is not always guaranteed

ONE HEALTH

IRISH FARMERS JOURNAL

An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture, Food and the Marine

A joint awareness campaign by the Irish Farmers Journal and the Department of Agriculture, Food and the Marine

When we talk about AMR, we are usually talking about antibiotic resistance. This is where bacteria are no longer killed by antibiotics. So AMR means that an antibiotic medicine no longer cures the disease either in people or animals.

As a result of us all sharing the same environment, diseases are also shared and spread between people and animals. The antibiotics that are used to treat bacterial diseases in animals are also used to cure disease in people.

So, if antibiotics stop working, what does that mean for your family and community? Simple infections such as sore throats and skin infections have the potential to kill, and routine surgeries and key treatments such as chemotherapy become high-risk.

We often take our health for granted, but we have really started taking antibiotics for granted. They are a precious resource, and we need to change how we use them, or they won't continue to protect our own health and that of our animals.

Farmers' livelihoods depend on healthy animals that are productive and profitable. Think of the last animal you treated that was saved because of antibiotics.

There are billions of bacteria all around us in our bodies, in our animals and in our environment. These bacteria have been around since before the dinosaurs and their mission is to survive.

Bacterial infections can destroy our farming businesses, and severely affect food production and food supplies. Food contaminated with resistant bacteria can endanger people and our whole supply chain. We are all in this together – our farm animals, farmers and the public.

Understanding

This campaign is about helping people to understand why all of us must be involved in slowing down the development and spread of antibiotic resistance by reducing the amount of antibiotics we use.

Over the coming weeks through our articles, and supporting videos, we will explain what antibiotic resistance is, and why it can affect you and your farm. Antibiotics save lives. We all have a role to play to keep them working for future generations. The solution to this One Health challenge is for us all to work together.

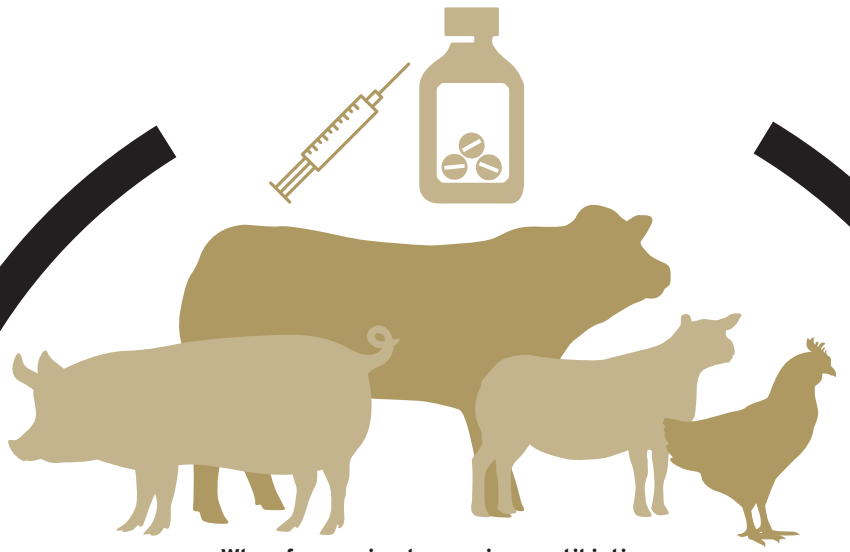
10m

Scientists estimate that if AMR continues to spread at current levels, by 2050 10 million people may die from AMR related infections, more than the death toll due to cancer

VIDEO ONLINE
watch the video on ifj.ie/video

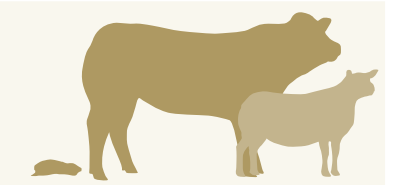
THE DEVELOPMENT AND SPREAD OF ANTIMICROBIAL RESISTANCE IN FARMING

BACTERIAL INFECTIONS CAN DESTROY OUR FARMING BUSINESSES, AND SEVERELY AFFECT FOOD PRODUCTION AND FOOD SUPPLIES

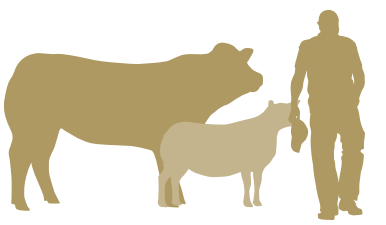


When farm animals are given antibiotics, some bacteria may become resistant to those antibiotics.

Resistant bacteria may be excreted in animal manure and urine.



Human contact with farm animals and animal manure then poses a risk.



This manure is spread on fields growing food crops.

Animal manure which may contain some resistant bacteria is spread mechanically.

\ One Health logo courtesy of Teagasc