

## HOW CAN YOU HELP PREVENT ANTIMICROBIAL RESISTANCE?

**Dr. Kristin Moses**

The superbugs formed by antimicrobial resistance do not discriminate; therefore everyone needs to do their part to fight against antimicrobial resistance. This goes beyond the human health sector to include the animal health sector, agriculture, food safety, and economic development. As part of the general populace do your part by:

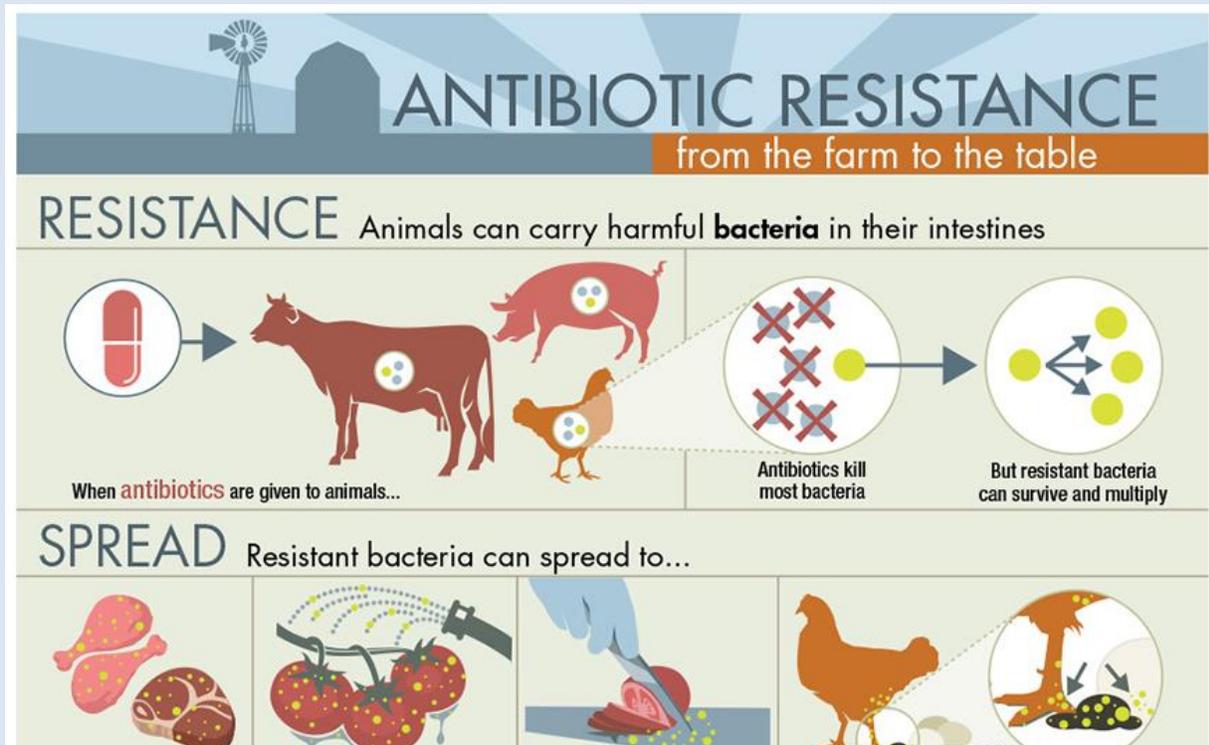


- Only using antibiotics for personal use when prescribed by a medical doctor or for animal use when prescribed by a veterinarian.
- Always completing the antibiotic course, even if you feel better or the animal appears better.
- Never sharing antibiotics with others or using leftover prescriptions.
- Never using human prescriptions on your animal – not all human medications are safe to use on animals or are used at the same dose as for humans.

Practicing good sanitation and hygiene along with other infection preventing practices can also have a major impact on reducing antimicrobial resistance by simply reducing the development and spread of infections and the need to use antibiotics in the first place. This includes hand washing, food and water safety, as well as prevention of infections through unprotected sex or drug injection.

The inappropriate and unregulated use of antimicrobials in agriculture is another major contributor to the development of antimicrobial resistance. Antibiotics are

commonly used in livestock to prevent infections, stop infections from spreading in a herd, or as a growth stimulator.



These antibiotics are commonly administered through feed and water due to the high costs of individual animal dosing and therefore expose a larger number of animals, and bacteria, for extended periods of time, at sub-therapeutic or lower doses. This increases the rate at which antibiotic-resistant bacteria develop, which can spread from animal to humans through consumption of improperly packaged, stored or prepared animal food products; through close contact with superbug infected animals; or through environmental contamination from antibiotic wastewater, where antibiotic-resistant bacteria develop and pass on their antibiotic-resistant genes to other environmental bacteria.

Unregulated use of antibiotics in agriculture also means antibiotic residues in meat, milk and eggs. This means we expose ourselves to low doses of antibiotics when we consume these animal products, and over time, we develop our very own antibiotic-resistant bacteria.



Farmers can reduce the need to use antibiotics by adopting sustainable husbandry practices, including the use of vaccines, that in turn will reduce the rate of infection in their livestock and the need to treat with antibiotics.