



# Animal Health and Welfare: Antibiotics

We are committed to the systematic development of sustainable business, both in strategy and actions. Responsibility of our operations applies to the entire supply chain from feed and genetics of animals all the way to the consumer.

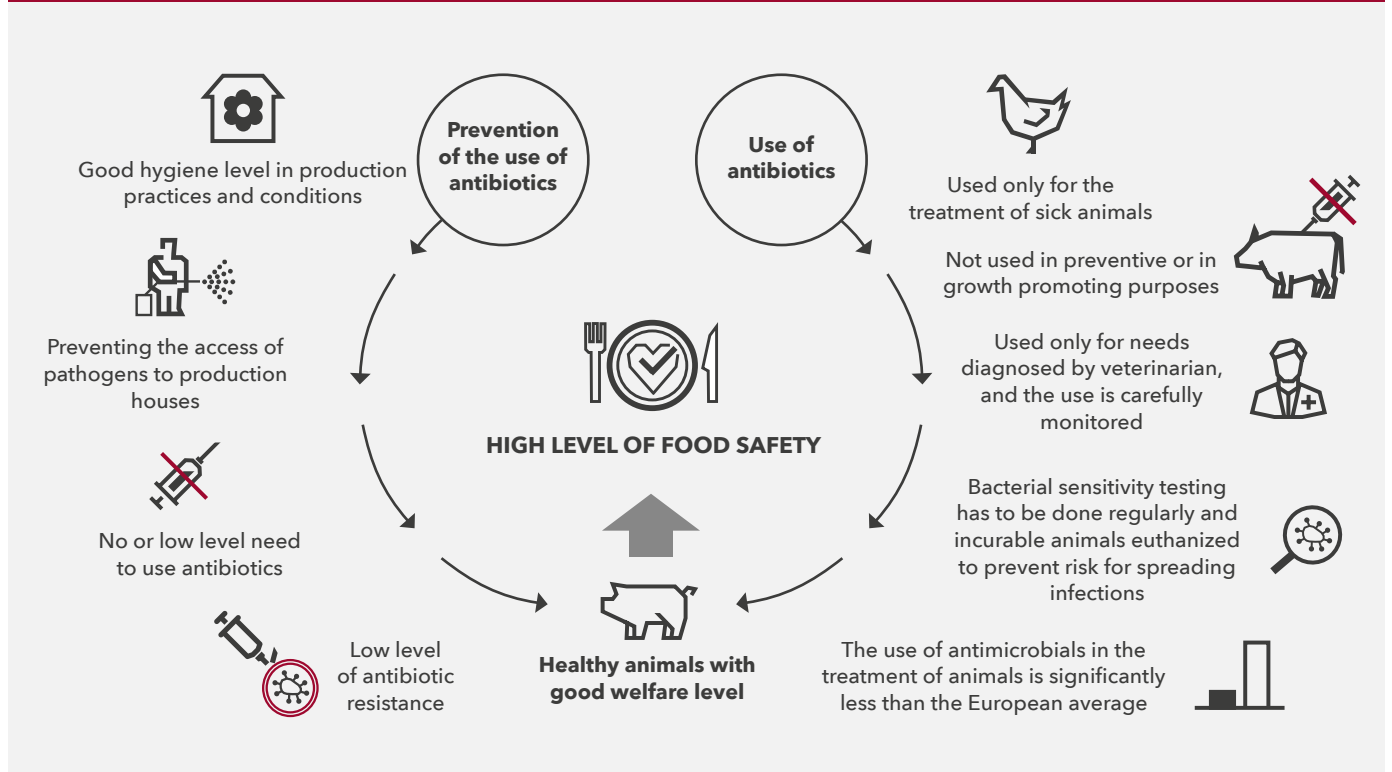
## Healthy production animals at the heart of our business

The uncontrolled use of antibiotics, both in human and animal medicine, has caused antibiotic resistance to develop into a worldwide problem: the antibiotics becoming inefficient and the antibiotic-resistant infections increasing.

The most effective way to keep the use of antibiotics at minimum level is to prevent animals from getting infectious diseases and ensuring good animal care. Actions done at farm level affect directly the level of medications required. With the correct actions and preventive measures, we are able to keep the level of medication at minimum, have healthy production animals and guarantee top-class food safety for the consumers.

▶ **Full traceability - result of our own or contract production**
\* **GOOD ANIMAL CARE AND HIGH ANIMAL WELFARE**
\* **HIGH FARM BIOSECURITY**
\* **HIGH HYGIENE LEVEL**

## THE USE OF ANTIBIOTICS



**We do not use antibiotics in preventive or growth promoting purposes. EU study\* on the sales of antimicrobials indicates the low level of antimicrobials used HKScan countries. However, we cannot danger the welfare of animals: it is essential that sick animals get treated.**

Pia Nybäck, Executive Vice President, Animal Sourcing and Producer Services at HKScan

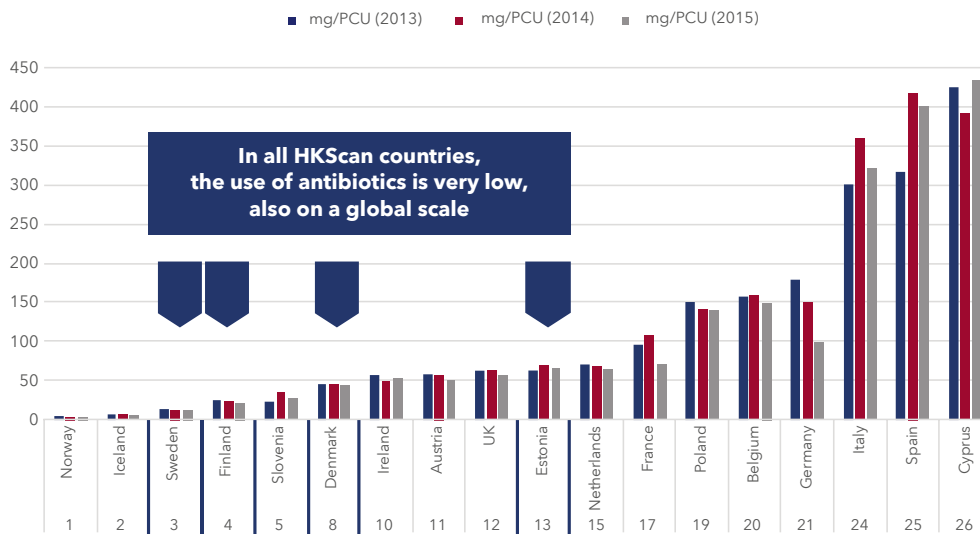
(\*European Medicines Agency, Sales of veterinary antimicrobial agents in European countries, 2017.)



### Sales of veterinary antibiotics at low level in HKScan countries

We are proud of the good status we have at HKScan regarding the low amount of animal diseases in contract production and in our own primary production. Nevertheless, good animal care and control of animal diseases is part of everyday work in preventing all outbreaks.

### Sales of all antimicrobials for food-producing animals (30 EU/EEA countries in 2015)



Source: The European Medicines Agency (EMA) 2017

## KEY TOPICS FROM A TO Z

### Antibiotics and antimicrobials

Antibiotic is a medicine that inhibits the growth of or destroys microorganisms, and is used for the treatment of infectious diseases caused by bacteria. An antimicrobial is any substance of natural, semisynthetic or synthetic origin that kills or inhibits the growth of microorganisms but causes little or no damage to the host. All antibiotics are antimicrobials, but not all antimicrobials are antibiotics.

### Antibiotic and antimicrobial resistance

Antibiotic resistance means that microbes are not treatable with antimicrobial medications. The uncontrolled use of antibiotics, e.g. when used as growth promoter in animal production, has resulted in the development of antibiotic resistance and in the increase of antibiotic-resistant infections in humans and animals. Antibiotic resistance refers specifically to the resistance to antibiotics that occurs in common bacteria that cause infections. Antimicrobial resistance is a broader term, encompassing resistance to drugs to treat infections caused by other microbes as well, such as parasites, viruses and fungi. Antimicrobial resistance is one of the main threats to modern medicine.

### Biosecurity

Biosecurity sets the framework for the animal health and food safety at farms, and aims at preventing the entry and spread of diseases and disease-carrying pests.

### MRSA

*(Methicillin-resistant Staphylococcus aureus)*

MRSA is a bacteria resistant to beta-lactam antibiotics, such as penicillin. It does not affect healthy individuals, but can cause infections, e.g., on broken skin areas and wounds. MRSA bacteria can be transmitted between humans and animals, however, its ability to transmit to humans is low. The transmission requires skin to skin contact. Good production and manufacturing hygiene is the best way to prevent infection. MRSA is destroyed by heating.

### ESBL

*(Extended Spectrum Beta Lactamase)*

ESBL is an enzyme produced by some intestinal or mucous membrane bacteria (especially Escherichia coli and Klebsiella). These enzymes can break down the most commonly used antibiotics, making the bacteria more difficult to treat. Escherichia coli and Klebsiella can cause diseases, such as mastitis and urinary tract infections. ESBL bacteria spread mainly by contact and via hands. Good production and manufacturing hygiene is the best way to prevent infection. EBSL is destroyed by heating.

### Zoonosis

Zoonosis means an infectious disease that can be transmitted between species from animals to humans, or from humans to animals. Typical zoonotic diseases are, e.g., Salmonella and Campylobacter.