

# NordCAW seminar “Antibiotic resistance, animal welfare and system sustainability” in Uppsala 2020

The aim of this seminar is to highlight antimicrobial resistance, animal welfare and sustainable production. There is increasing demand from consumers to reduce the use of antibiotics for sustainable production systems. Improved husbandry systems, increased animal welfare and responsible and efficient use of antibiotic by veterinarians and farmers, as well as disease prevention, will mitigate negative effects on animal and public health, as well as the environment (One Health/One Welfare).

## Contents

### Animal health and welfare means human health and welfare

#### The effects of antimicrobial resistance on public health

- Current use of antibiotics in Europe and subsequent risks.
- Extended spectrum beta-lactamase (ESBL) and chickens, spread in populations and between countries.
- The spread of Methicillin-resistant Staphylococcus aureus (MRSA) from pigs to humans.

#### Legal aspects, strategies and implementation

- Different medicine policies in Europe. Veterinary legislation on medication (ban of CIAs for animal use) – what are the implications for the NordCAW members and EU.
- Lack of legislation – How well do the NordCAW countries cover areas not covered by the EU legislation, like the dairy sector. All NordCAW-countries present their national legislation and implementation of EU-legislation regarding animal protection.

#### The connection between animal welfare, antibiotic use and antimicrobial resistance

- Raising of pigs: Pig holding systems and its implication on the use of antibiotics, the use of antibiotics (eg. tail-docking, weaning of pigs, ban on zinc oxide, sows and MMA in connection with use of crates and to less straw during farrowing).
- Raising of chickens – correlation between animal welfare, use of antibiotics and resistant zoonotic diseases. (foot pad dermatitis and campylobacteriosis).
- Dairy cows (udder health and foot health).

#### Good examples

- Handling of MRSA pigs in Norway, NO vs DK.
- “Antibiotikafri oppfödning”, raising pigs without antibiotics in Denmark, implications on animal welfare.
- Naracin free broiler production?
- The Swedish model, cooperation between stakeholders and central authorities.