disarm
Disseminating Innovative Solutions for Antibiotic Resistance Management

DISARM has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 817591

Managing Sick Animals

Like humans, animals sometimes get sick and need treatment. Reducing the incidence of disease and minimising the spread of infection to other animals is key to improving overall animal health and reducing the need for antibiotic treatments.

Limiting Disease Spread

Reducing the likelihood and ability of disease to spread is critical in maintaining the health of farm animals. Managing groups where they are of a similar size and age can help reduce stress between individual animals. Keeping animals in a consistent environment that avoids stressors, such as mixing, overstocking etc., is helpful in supporting animals' immune systems. Stress is known to lower the immune system of animals and make them prone to picking up infections from the environment.

When animals do occasionally become sick, having a separate area way from the rest of the group i.e. quarantine pens/sheds is recommended. Allocating specific quarantine-only equipment, clothes, or even personnel that stays with the quarantine area is also good practice. This means that any sick animal is prevented from spreading the virus or bacteria from excretions or direct contact with otherwise healthy animals. By limiting contact between sick and healthy animals, the spread of infection is minimised and the number of animals that would need treatment is reduced. The practice of isolating sick animals and preventing the spread of disease is essentially internal biosecurity and there are many examples in the pig and poultry sectors of strict biosecurity measures that other sectors could learn from.

Diagnostics

Diagnostics is the science and practice of identifying the cause of a disease or illness. Veterinarians can diagnose disease in farm animals and there are a range of tools and tests available to help them make an informed decision over treatment and management of disease. This requires taking samples such as bloods, swabs, postmortem tissue samples, or even observing clinical signs and behaviour. Various laboratory tests are performed on the samples taken, depending on the pathogen that is suspected to be present. Often, diagnostics are used to rule out the likelihood of a disease as much as identifying the causal pathogen.

The result of a diagnostic test can lead to more responsible treatment decisions as the causative pathogen can be treated in a targeted, effective manner. For example, if a virus is detected, antibiotics will not work and are an inappropriate treatment.

Culture and sensitivity testing on bacterial disease is recommended as it informs antibiotic treatment and ensures the right product is used for the right disease. Diagnostic tests can also identify certain animals that may be harbouring disease and inform management decisions, such as culling PIs in a BVD eradication programme.

Treating Disease

After diagnosing the issue and preventing the spread of infection through your animals, there may be different treatment options available, such as anti-inflammatory pain relief. Antibiotics should only be used when strictly necessary and as little as possible. Knowing the weights of animals to be treated, following the correct dosing regime, and reporting poor treatment outcomes to veterinarians are key principles to responsibly using antibiotics. Consult a veterinarian to ensure antibiotic treatments are only used when required and visit our section on targeted use of antibiotics.