

Summary

Both African swine fever (ASF) and avian influenza are widespread diseases, currently present in many countries across several continents. Both diseases cause substantial economic damage, including both direct and indirect losses. These diseases have been present for years in Hungary, including Szabolcs-Szatmár-Bereg County.

Their manifestation can be accompanied by various symptoms. In the case of avian influenza, how the disease presents can greatly depend on the species affected.

Combatting these diseases is a complex task. The primary objective is to prevent the pathogens from entering susceptible populations. Numerous measures are available to enhance biosecurity.

Properly designed farms greatly influence disease protection, and numerous regulations are in place for this purpose. In disease-free periods, large-scale animal farming operations are primarily the focus of these measures. However, during epidemic periods, small-scale farms also require special attention and must comply with many specific, previously unapplied biosecurity measures.

Other measures can also protect our livestock, such as creating a farm-adapted disease control plan, ensuring it reflects the specific characteristics of the farm. Proper disposal of animal by-products also serves to protect livestock. Considering past epidemiological experiences, the prohibition of feeding food waste is crucial in preventing ASF. Proper veterinary care for the animal population is also essential for prevention. Like most diseases, the movement of live animals plays a significant role in the spread of both ASF and Avian Influenza, thus necessitating vigilant monitoring of animal movements.

In the case of both diseases, susceptible animals include wildlife. This poses unique challenges in protective measures. Regarding ASF, several measures pertain to wild boar. Based on experiences in various countries, the density of the wild boar population is a critical factor in the spread of infection, necessitating its control through means such as diagnostic culling. Additionally, effective protocols for searching and handling found wild boar carcasses are crucial.

In the case of African swine fever (ASF), particular attention must be paid to preventing contact between wild boar and domestic pigs in infected areas. This is facilitated by proper fencing, which prevents such contact. The prohibition of green feeding serves this purpose, as does the regulated use of bedding and feed, and the application of hunting hygiene. In combating avian influenza, it is crucial to prevent contact between poultry stocks and wild birds, both direct and indirect (through feed and bedding), especially during the migration period of wild birds.

The application of the "all-in/all-out" method can significantly enhance biosecurity, particularly in waterfowl (duck) populations, where this is not the usual practice. Monitoring programmes, where examinations of both domestic and wild animals are conducted according to a predefined plan, play a decisive role in prevention by enabling early detection of diseases.

The key to defence is the response to suspicions of disease. It is vital to examine the affected stock as soon as possible, including clinical and post-mortem examinations. Proper sampling and associated laboratory tests are also crucial. Restrictive measures need to be implemented as soon as a disease suspicion arises, to prevent any potentially present pathogens from spreading further. Epidemiological investigation should start immediately.

Upon confirmation of the disease, all measures prescribed by law for such cases must be implemented. For domestic animal species, this involves establishing protection and surveillance zones with respective restrictive measures. For both diseases, the law specifies a minimum radius of 3 km for protection zones and 10 km for surveillance zones. Alongside broader restrictive measures, epidemiological interventions are necessary on farms affected by the outbreak (culling of affected stocks, disinfection).

Special measures are required if ASF is confirmed in wild boar. In this case, a larger infected area must be designated, within which numerous measures are implemented to protect the stocks.

Effective prevention and control of these diseases can only be achieved through close cooperation among all stakeholders. If everyone fulfils their role, there is a chance of successful defence. This applies to veterinary authorities, farmers, those with hunting rights, and veterinarians.