Background: avian influenza

Avian Influenza (AI) is “a highly contagious viral disease that affects both domestic and wild birds.” The most severe strains of AI are known as highly pathogenic avian influenza (HPAI) and are caused by viruses with H5 or H7 surface proteins. In the first two months of 2021, over 9 million bird deaths due to HPAI were reported in Africa, Asia and Europe. Outbreaks of HPAI in domestic birds have been reported in 99 countries. It has been documented that HPAI can cross species.²

HPAI affects productivity and sustainability in the poultry industry through direct losses due to the impact on animal health and welfare. Indirect losses, where surrounding birds have to be culled and disposed of to control an outbreak, are considerable.

Presence of the virus also significantly raises the risk of human influenza cases. Some strains of HPAI are zoonotic, meaning they can infect humans, and cause disease. These infections are primarily acquired through prolonged, direct contact with infected poultry or contaminated environments. Controlling the disease in animal sources is critical to reducing the risk to humans.

How can this be addressed?

The surveillance and control of animal pathogens such as HPAI are important to prevent animal and human disease outbreaks such as COVID-19 and influenza.

Improving understanding of zoonotic diseases through training and education, will help us to prevent and control animal and human infectious diseases.

A One Health approach,³ in which veterinarians, physicians, environmental scientists, ecologists and others work together to develop new tools to detect, report, prevent and control outbreaks is critical.

Why is HPAI such a problem?

Diseases of animal origin that are transmissible to humans, such as HPAI, pose worldwide risks to public health and economies that must be prevented and controlled.

Avoid contact with wild birds or poultry, even if they appear healthy, as well as surfaces contaminated with bird feces, saliva, or respiratory secretions.

It is important to ensure adequate biosecurity plans are in place and appropriate personnel protective equipment is worn at all farms with avian species.

References

[1] OIE: Avian Influenza

Other references

OIE: One Health
OIE: Avian Influenza Weekly Update Number 815
WHO Coronavirus disease (COVID-19) advice for the public
WHO: Fact Sheet on Zoonosis
Johns Hopkins Coronavirus resource center
