

Wildlife Management and Vector Control: During Livestock/Poultry Disease Outbreaks



During a livestock or poultry disease emergency, wildlife or arthropod vectors may contribute to the spread of disease to other animals or locations. Response efforts to prevent or contain these potential sources will need to be addressed.

Wildlife-Livestock Interface

➤ Impact

- Disease spread and animal health
- Livestock trade implications

➤ Wildlife

- Any free ranging native mammals or birds
- Feral domestic animals
- Can be infected and ill
- Can be infected and not ill, but spread disease ("reservoir")

➤ Arthropod Vector

- An insect or arachnid that transfers disease agent between animals by bite or body part
- E.g., mosquitoes, ticks, biting midges, flies

Assessment

➤ Determine wildlife/arthropod vectors involved

- Species present
- Infected or carrier
- Potential spread of disease agent
- Level of interaction

➤ Determine risk to livestock or poultry

➤ Animal movement into and out of Control Area can pose challenges

Disease Surveillance

➤ Determine absence, presence, potential spread

➤ Diagnostic sampling

- Live capture, observation, carcass collection

Wildlife Management

➤ Measures to minimize spread to domestic livestock

- Removal and relocation/dispersal
- Habitat alteration
- Natural or artificial barriers

➤ Wildlife able to evade and disperse

➤ Consider impacts on ecosystem/environment

Vector Control

➤ Understand life cycle

- Life stages vary in habitat and ability to transmit disease

➤ Minimize contact with vector

- Keep animals away from vector habitat
- Shelter during peak vector times

➤ Source reduction

- Habitat reduction or elimination
- Parasitic or predatory insects

➤ Control adults

- Chemical control as a supplemental measure

➤ Controlling the egg and larval stages is usually more efficient than controlling adults

Safety

➤ Handling and restraint of wildlife by trained, experienced personnel

➤ Precautions with vector control chemicals

➤ Zoonotic disease risks

➤ Personal Protective Equipment

Additional Resources

FAD PRoP/NAHEMS Guidelines: Wildlife Management and Vector Control for an FAD Response in Domestic Livestock
<http://www.aphis.usda.gov/fadprep>

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