

# TURKEY FARMERS OF CANADA RESEARCH PRIORITIES 2023

#### 1. Flock Health

a. Investigate risk factors for highly pathogenic avian influenza (HPAI) spread and develop outbreak control measures including biosecurity practices and other on-farm procedures.

b. Development of an efficacious HPAI vaccine for turkeys and potential novel delivery methods that would improve vaccine delivery efficiency

with considerations of possible surveillance requirements.

c. Develop flock management practices, vaccinations, dietary/water strategies, and infeed or water additives that reduce the need for preventive antimicrobial use.

d. Strategies (e.g., vaccinations, medications, management practices) to

prevent or treat Histomoniasis (Blackhead).

e. Development of prevention and control strategies for reovirus, including improvements in diagnostics and vaccine strains and pain management techniques.

f. Development of efficacious vaccines, including emerging technologies (e.g., aptamers) against pathogens such as HPAI, E. Coli, necrotic

enteritis and reovirus.

# 2. Food Safety and Quality

a. On-farm control strategies for pathogen levels in meat.

## 3. Turkey Welfare

- a. Management practices that can eliminate physical alterations.
- b. Evaluate methods for humane on-farm euthanasia for routine situations and during mass depopulation.
- c. Assess the effect of transportation on turkeys and evaluate measures to reduce bird stress.

## 4. Production Sustainability

- a. Assess production methods to reduce environmental emissions/contaminants.
- b. Manure management (economic value, common practices).
- c. Nutrient management (nitrogen).
- d. Barn construction (net zero, etc.).

e. Alternative/renewable energy sources.

- f. Novel feed ingredients (efficiency, animal health, growth, nutrient excretion, etc.).
- g. Data to improve environment sustainability (e.g., economic analysis, predictive analytics, benchmarking).