Overview of Minnesota's turkey industry

Prepared for Minnesota NRCS state technical committee

May 6, 2025

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Agenda

Production overview

Industry & Association overview

Notable issues

MN TURKEY
GROWERS ASSOCIATION

Production cycle

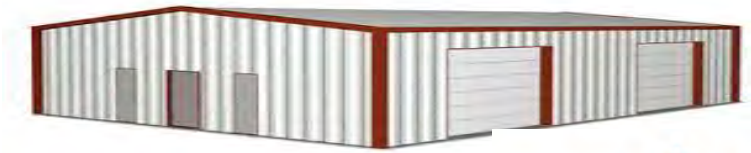
TURKEY BREEDER PHASE

MEAT TURKEYS

Hatching eggs sold

Hatching eggs to hatchery

Breeder Lay



Parent Stock poults

Tom Stud Barn

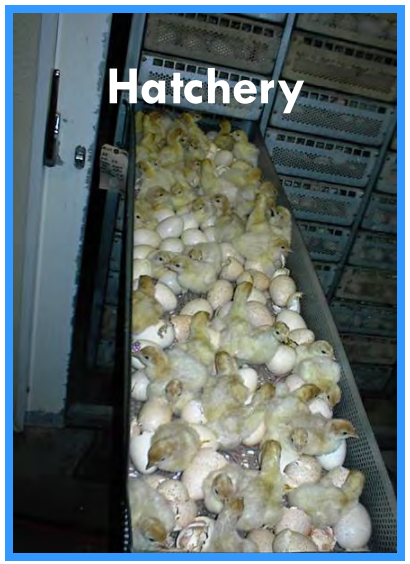
Fill every 8-9 weeks

Move at 30 weeks

Breeder Holding or Grow/Store

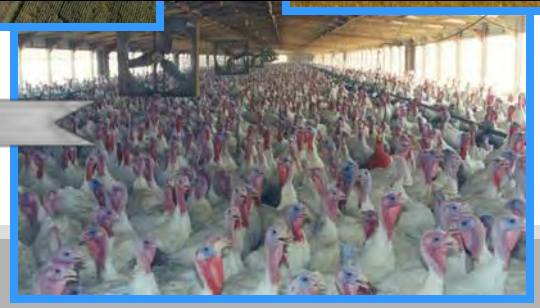
Move at 6-7 weeks

Breeder Brood Barn



MN TURKEY
GROWERS ASSOCIATION

Move at 6 weeks



Hatchery

A turkey egg incubates for 25 days and then typically takes the poult 3 days to completely hatch out of the egg.

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Brood Barns

- Poults are separated by sex
- Kept in pens first 10 days
- More than double their body weight in the 1st week

Brood Barn

Hens: Day 0-35

Toms: Day 0-42

Finish Barn

Hens: 35 d.-Market

- Light Hens ~ 90 d.
- Heavy Hens ~ 112-120 d.

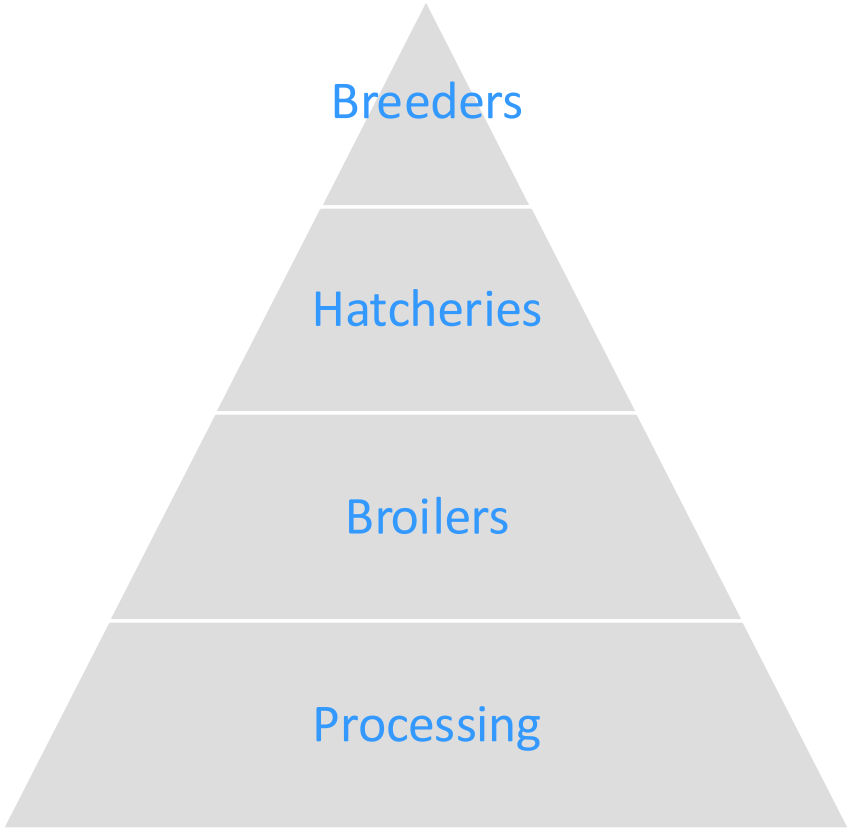
Toms: 42 d.-Market

Further processed toms 136-144 d.

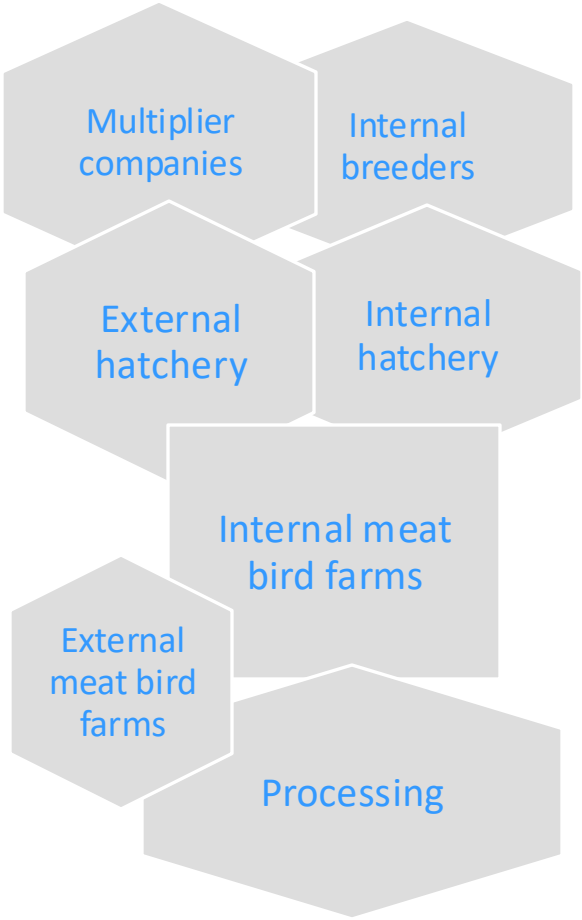
Broiler vs Turkey Industry

MN TURKEY GROWERS ASSOCIATION

VERTICAL INTEGRATION

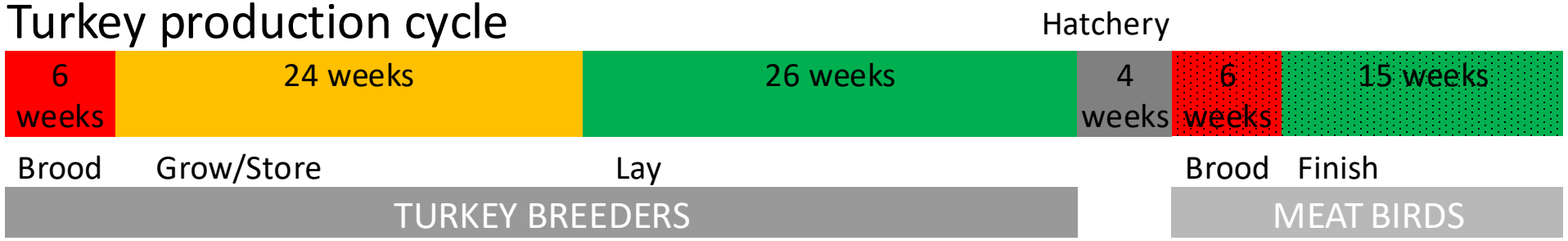


LIMITED INTEGRATION

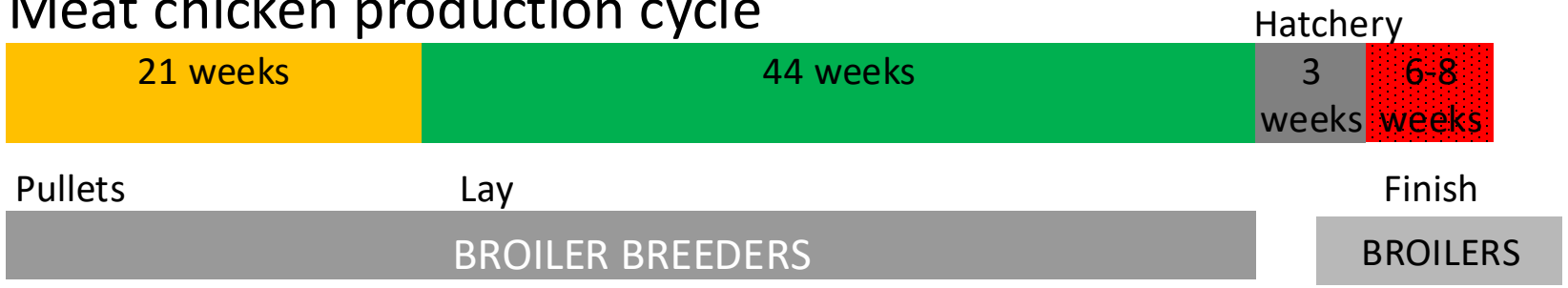


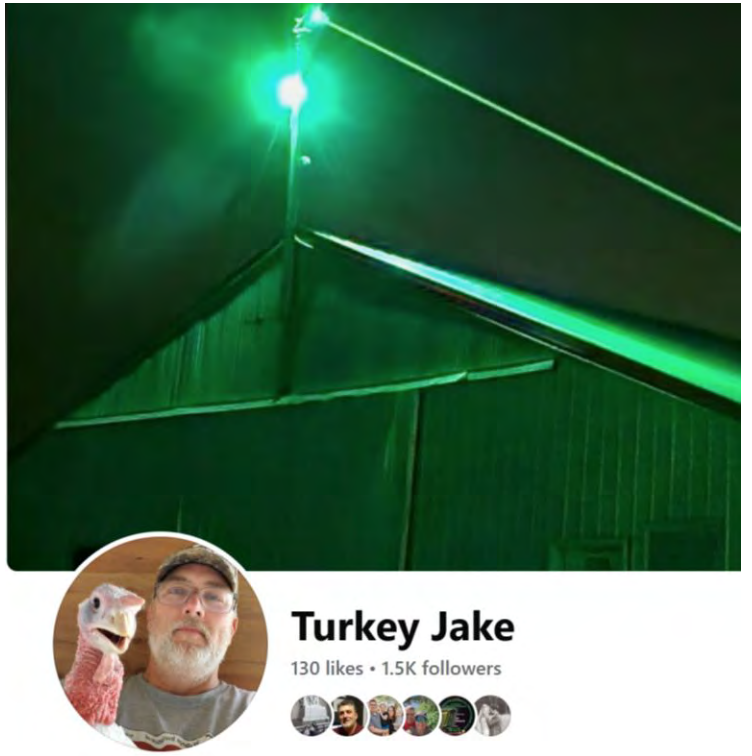
Turkey vs Broiler Production Cycle

Turkey production cycle



Meat chicken production cycle





MN TURKEY
GROWERS ASSOCIATION

Who to Watch!

Association Overview

MINNESOTA TURKEY GROWERS ASSOCIATION

MINNESOTA TURKEY RESEARCH AND PROMOTION COUNCIL

MN TURKEY
RESEARCH PROMOTION COUNCIL

MN TURKEY
GROWERS ASSOCIATION

Minnesota Turkey

Minnesota Turkey Growers Association

Non-Profit Organization

What we do:

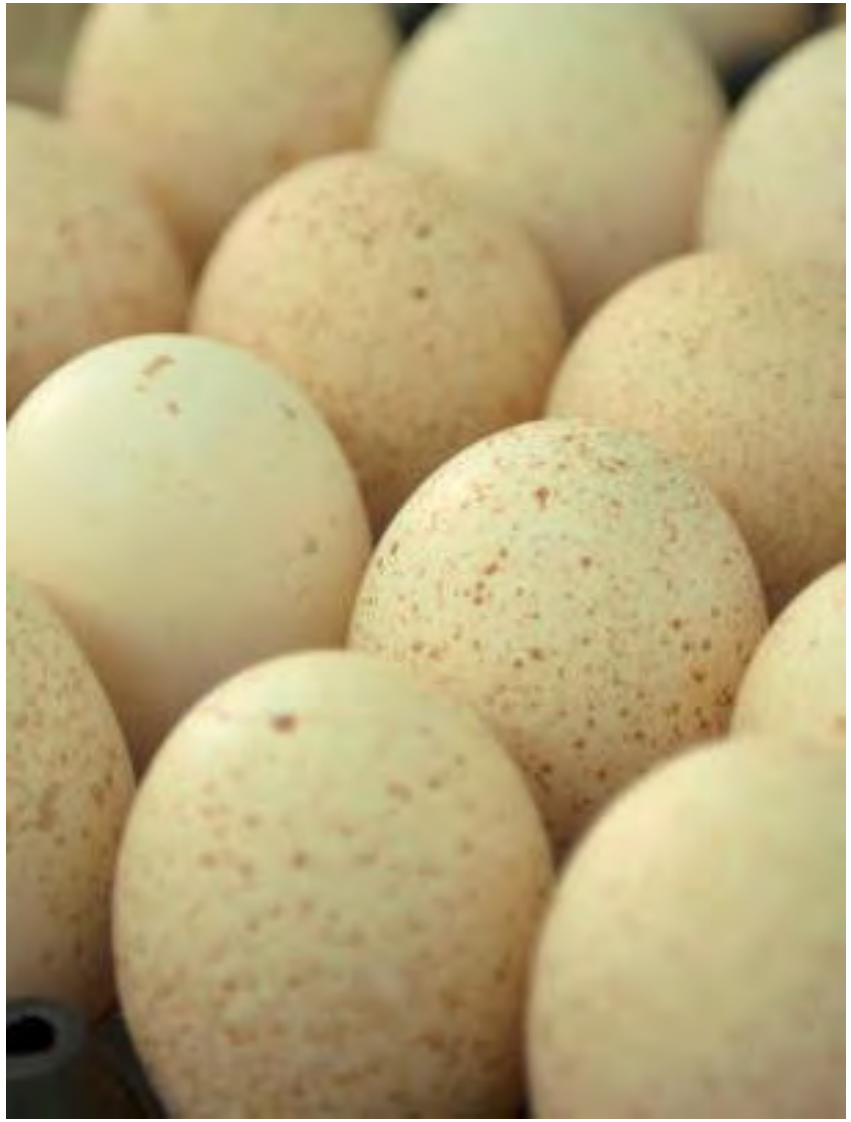
- Advocate
  - Public
  - St. Paul
  - D.C.
- Plan Educational Events
- Workforce Development
  - UMN Poultry Health Certificate
- Emergency Response

Minnesota Turkey Research and Promotion Council

- Checkoff
  - First and Oldest!
- Research
  - Over $1 million invested in turkey health research in 2024
- Promotion
  - Over 1.5 Million People in 2024
  - Reach people where they are:
    - State Fair
    - TV and Radio
    - Athletic Events
    - KCBS BBQ

Minnesota's Turkey Industry

- #1 in Turkey Production
  - Pounds raised
  - Three major processors
    - Two grower owned
- 400 Farmers, 600 Farms
  - 65% independent family farms
- 40 Million Turkeys Raised Annually
  - 90% Leave the State
  - 15% Exported
- 35,000 Jobs
  - Industry Average Wage and Benefits: $75,600
- Economic Impact
  - 3.5 Billion in Wages, 12.3 Billion Economic Impact



Minnesota's Turkey Industry

- #1 in TURKEY Eggs too!
  - Minnesota produces around **450–500 million** turkey eggs annually.
- Second largest hatchery in the WORLD is in Willmar, MN
  - Two primary hatcheries – both in Willmar

MN TURKEY
GROWERS ASSOCIATION

Notable Issues

AMPV

ABX

HIGHLY PATHOGENIC AVIAN INFLUENZA

Avian Metapneumovirus (aMPV)

The Great Mimicker

Looks and acts like HPAI

Rapid Spread

100% of MN Flocks infected in 90 days in spring 2024

- Flock morbidity rates reach 100%
- Flock mortality rates range from 10-80%
- Egg production drops below 10% of usual levels

Larger impact than HPAI

900+ flocks since April 2024

Repeatedly impacts clusters of growers

No resource recovery

Antibiotic use

This is an emotional issue as much as it is a scientific one

- Flocks are monitored for antibiotic residues at processing by USDA
- Not treating sick flocks is an animal welfare issue

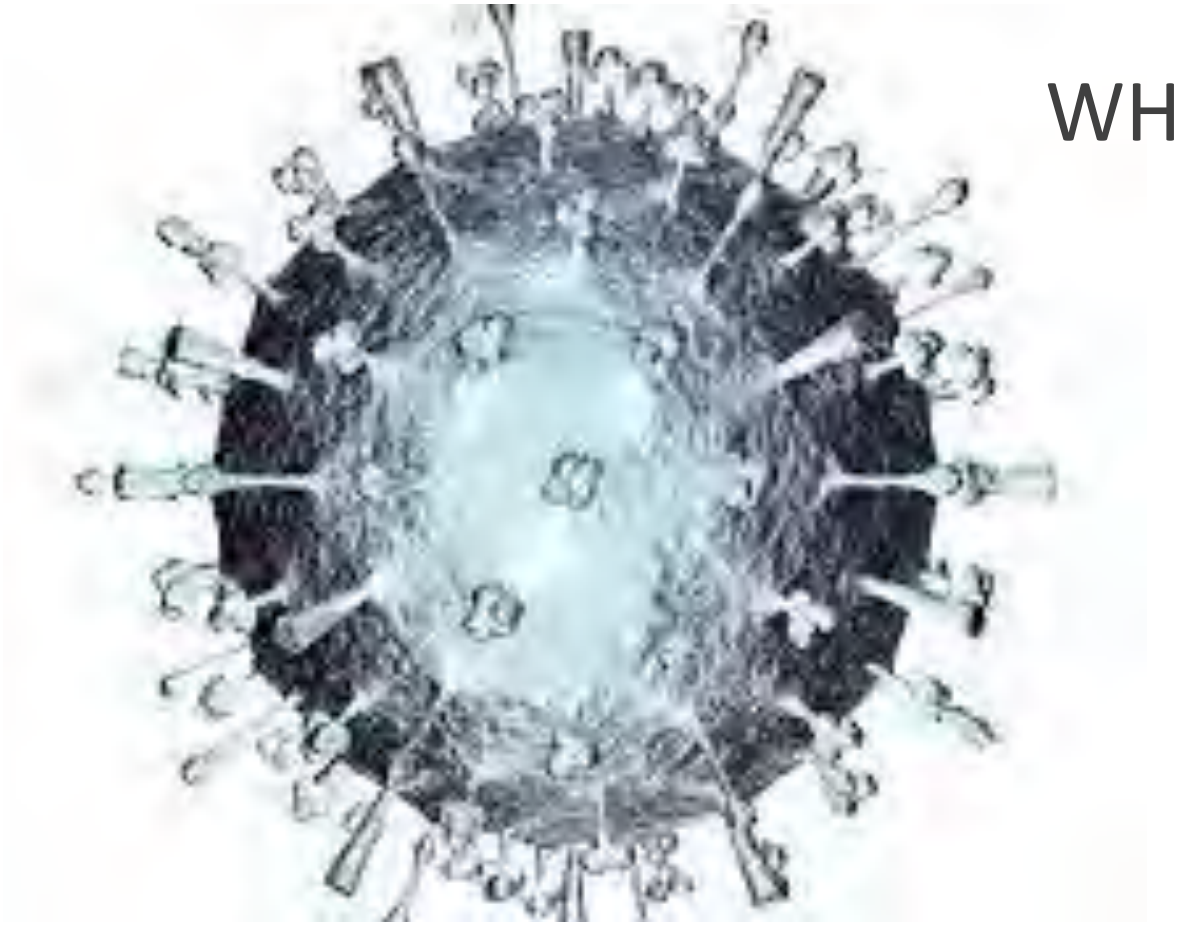
We are thinking differently about what a “treatment” is

- It might be an antibiotic
- It could be running a vaccine, probiotic, aspirin, or other non-antibiotic product
- It should be providing supportive care-- warming up the barn and increasing the ventilation
- Most likely its going to be a combination of many of these things

Highly Pathogenic Avian Influenza

- Current outbreak virus is VERY widespread in wild birds
- Current outbreak virus is VERY widespread geographically
- Current outbreak virus is VERY widespread in poultry populations
- Current virus also has infected mammals, but they have been dead end hosts
- U.S. outbreak is ongoing with a slight pause this summer

What is Highly Pathogenic Avian Influenza WHAT DOES IT ALL MEAN?



- HPAI vs H5N1
  - HPAI – Poultry
  - H5N1 – all other species
- Classified into subtypes based on surface proteins
  - These proteins are the H's and N's (H5 N1, H3 N2)
  - Current Strain H5 N1
- Causes disease in commercial and wild bird species…. and now a whole host of mammals (23 species and counting).

MN HPAI Genotypes – Livestock/Poultr

Spring/Summer 2024

Clay 02:
B3.6

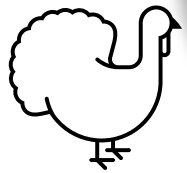
Cattle B3.13

Dodge 03:
C2.1

Stevens 01:
B3.6

Fall 2024

Martin 01/02:
A3



Meeker 16:
D1.3

?

Meeker 17:
D1.3

Meeker 18:
D1.3

Highly Pathogenic Avian Influenza

A Guide To Help You Understand the Response Process

Detect

You see unusual signs of illness or sudden deaths in your flock. You report it to your private or State veterinarian. Samples are taken and tested. You find out your flock is positive for HPAI.

Quarantine

USDA and State personnel come to your farm. We assign you a case manager, who will be your main point of contact onsite, answer your questions, and guide you through the needed paperwork. We will also place your operation under quarantine, meaning only authorized workers are allowed in and out, and movement restrictions for poultry, poultry products, and equipment go into effect. We contact neighboring poultry farms and start testing their birds to see if they've been affected, too.

Appraise

We work with you to create a flock inventory. This lists how many birds you have, what species they are, their age, and other key details that will help us give you 100 percent of fair market value for your birds.

Depopulate

Infected flocks are depopulated as quickly as possible—ideally within 24 hours of the first HPAI detection—to get rid of the virus.

Compensate

You receive your first indemnity payment early on in the response process. We also pay you a standard amount for virus elimination activities (cleanup work).

Manage Disposal

USDA will help you dispose of the dead birds safely. Disposal methods include composting, burial, incineration, rendering, or landfilling. The options you'll have depend on several things: what type of farm you have, the specific conditions there, State and local laws, and what you prefer.

Eliminate Virus

The next step is to wipe out all traces of the virus at your property. To kill the virus, thoroughly clean and disinfect the barn, equipment, and all affected areas of your farm. You can do this work yourself or hire contractors to handle it.

Test

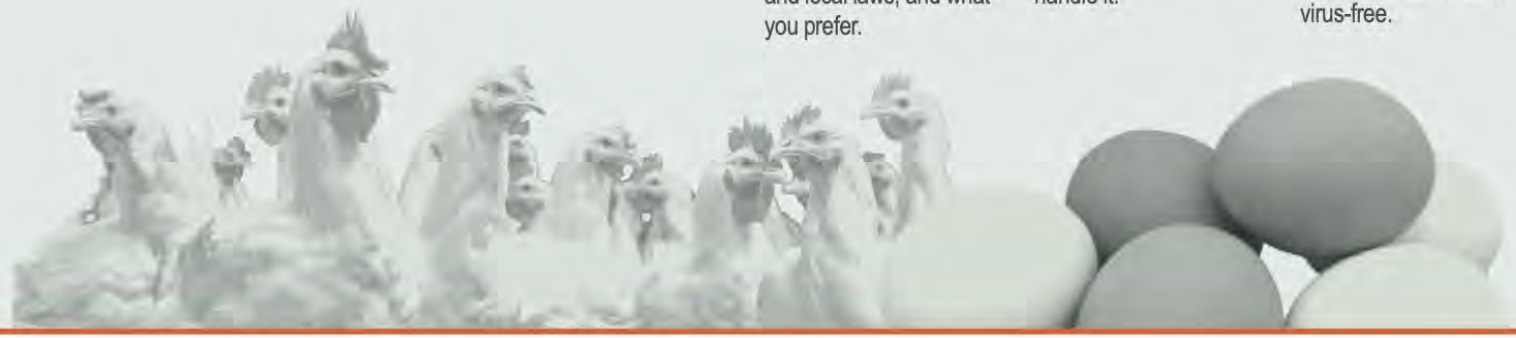
As soon as you're ready, let your case manager know you're finished with cleanup. Your site must then stay empty for at least 21 days. During this time, we'll return to collect and test environmental samples. We need to confirm that your property is completely virus-free.

Restock

Once USDA and the State both approve, you can restock your facilities and start production again. State officials will release your farm from quarantine after all required testing and waiting periods are done.

Maintain Biosecurity

After restocking, you'll need to continue maintaining the highes biosecurity standards to keep the virus from coming back. For biosecurity tips, go to www.aphis.usda.gov/-publications and download the factshee "Prevent Avian Influenza at Your Farm."



How Long Does the Process Take?

Ideally, this entire process could be completed in as soon as 60–120 days. However, the timeframe varies depending on many things (for example, flock size, depopulation and disposal methods used, test results, farm's location). We're committed to restoring production as fast as we can while also protecting poultry health.

Questions?

Talk with your case manager or the State or Federal officials responding to the disease event in your area.

For general information and contacts, visit:

www.usda.gov/avian_influenza.html

www.aphis.usda.gov/fadprep

Why do we Depopulate? (USDA mandated “Stamp Out” order)

HPAI Spreads Rapidly

- HPAI is highly contagious among poultry, spreading through direct contact, contaminated equipment, and even airborne transmission in close quarters.
- A single infected flock can quickly transmit the virus to neighboring farms.

High Mortality Rate

- Infected poultry often die quickly, with mortality rates reaching **90–100% within days**.
- Depopulation prevents unnecessary suffering and stops further transmission.

Preventing Economic and Trade Disruptions

- If outbreaks spread, entire poultry sectors can face severe losses, including reduced egg and meat production.
- Many countries **ban poultry imports** from affected regions, causing major economic damage to producers.

Protecting Other Animals & Humans

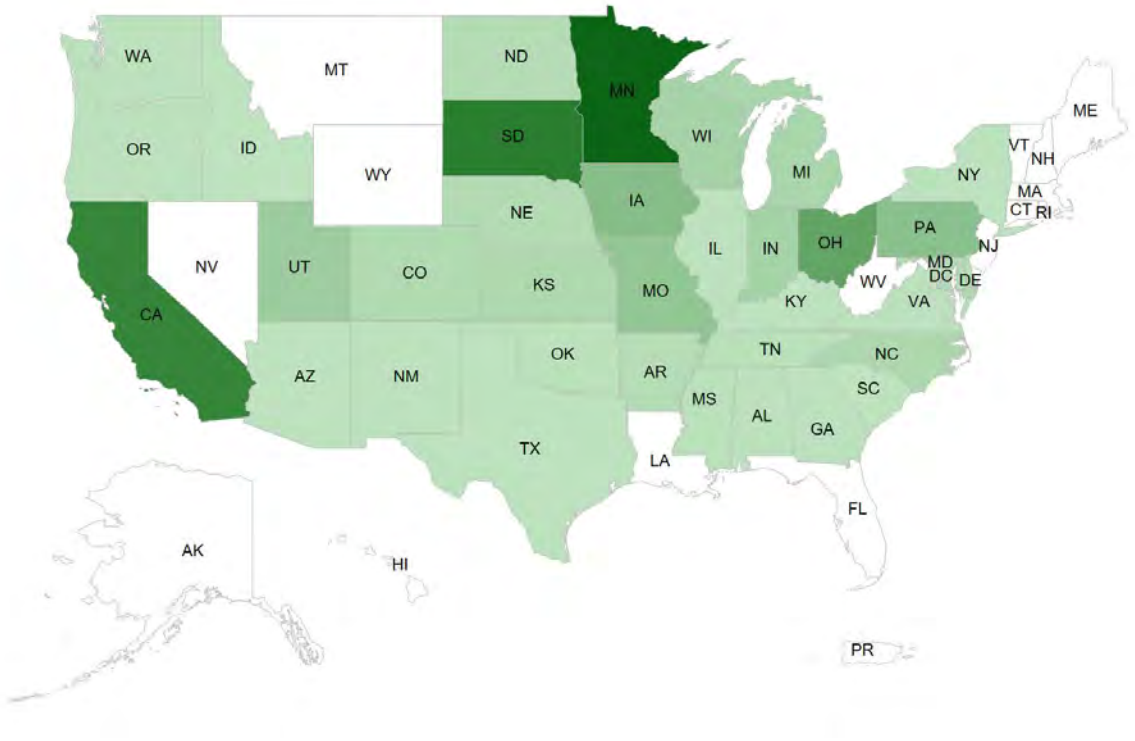
- While rare, some HPAI strains can infect humans or other species, making containment crucial.
- Depopulation helps reduce risks of the virus mutating into a form that could impact human health.

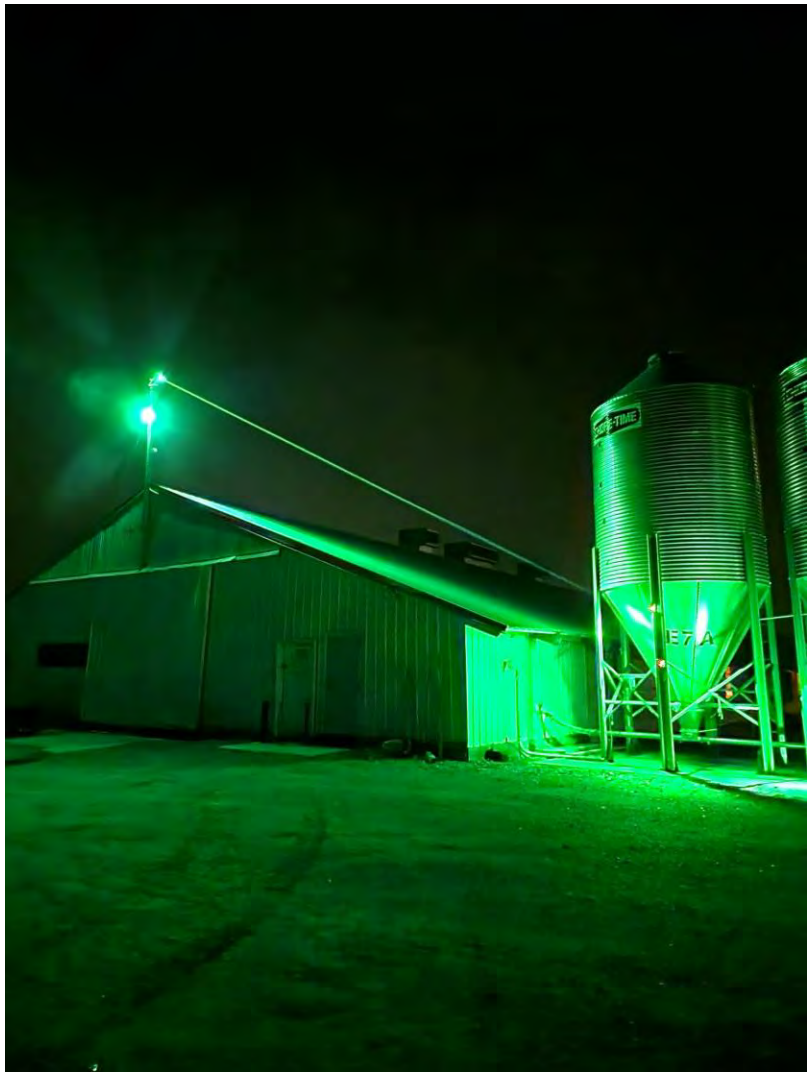
Current Disease Outbreak

Highly Pathogenic Avian Influenza (HPAI)

Current outbreak began March 2022

- In Minnesota:
  - There have been **141** affected commercial flocks, **44** affected backyard flocks, and a total of **9,119,989** birds affected in this outbreak.





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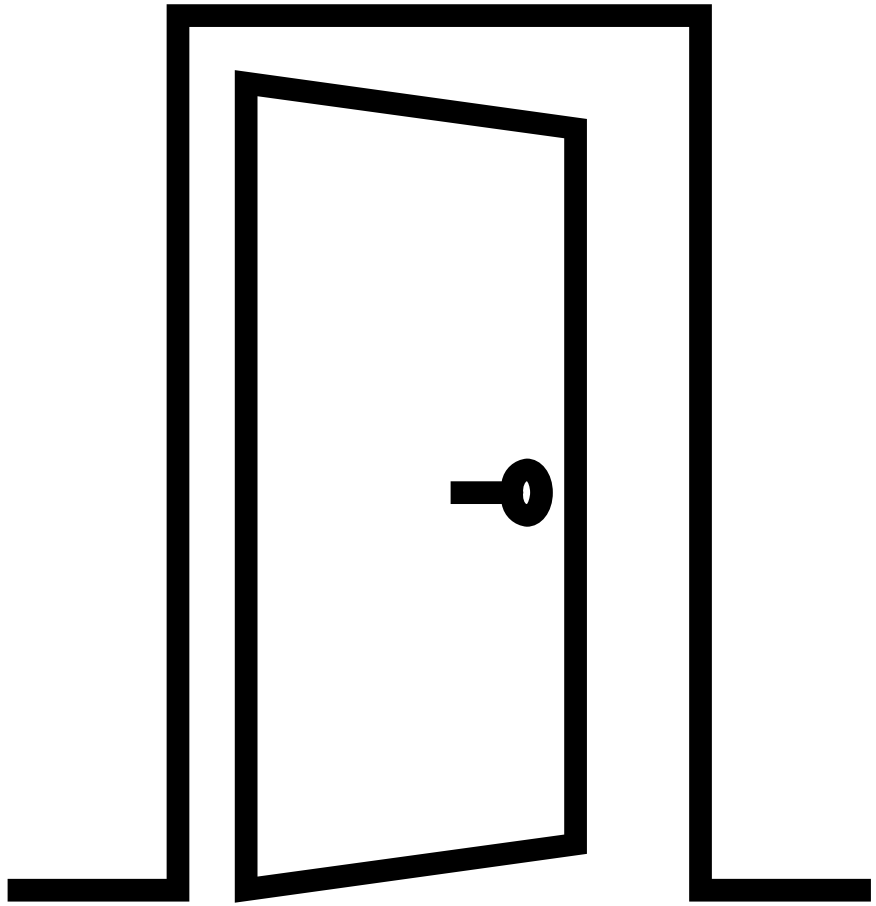
Innovation

Biosecurity alone cannot prevent HPAI



HPAI vaccination

Many countries have experienced ongoing outbreaks with this current virus

Widespread nature of the virus in wild bird populations the U.S. and E.U. form a [potential] common ground in which to have dialog around the role of vaccine as a tool in virus management

Very, very early in the conversation with lots of unanswered questions, but the previously locked, deadbolted and chained door has *maybe* been cracked open

Questions?