

Ontario Ministry of Agriculture, Food and Rural Affairs

Learnings from Highly Pathogenic Avian Influenza 2022

Big Bug Day Nov 23rd 2022

Al Dam- Provincial Poultry Specialist OMAFRA



Al Dam's Contact Info

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Avian Influenza- What Is It?

Avian influenza (AI), often called "bird flu," is caused by the Type "A" influenza virus. This virus can affect several species of food-producing birds (chickens, turkeys, quails, guinea fowl, etc.), as well as pet and wild birds.

Avian influenza viruses can be broadly classified into 2 types, based on the severity of the illness caused in birds:

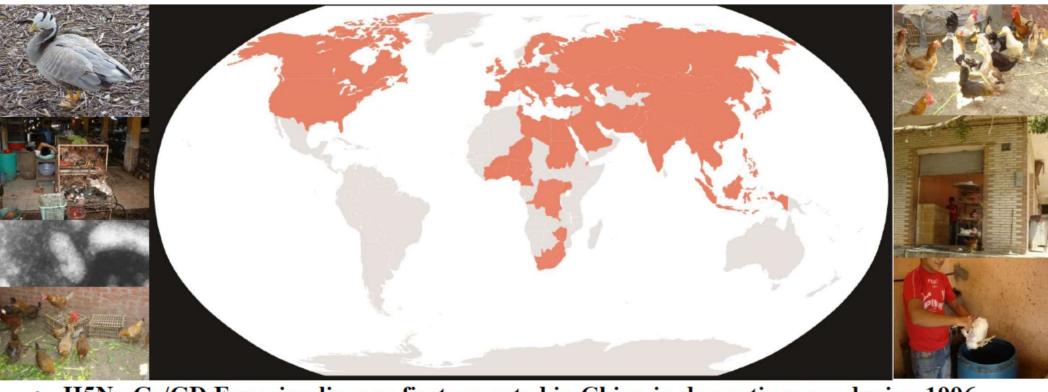
- low pathogenic avian influenza (LPAI)
- highly pathogenic avian influenza (HPAI)

Most avian influenza viruses are low pathogenic. These typically cause little or no signs of illness in infected birds.

However, highly pathogenic viruses can cause severe illness and death in birds.

We are dealing with an H5N1 HPAI Eurasian Strain of Avian Influenza





- H5Nx Gs/GD Eurasian lineage first reported in China in domestic geese during 1996
- Largest & longest since 1920-30, >500 million poultry died/culled
- Affected more poultry than the other 43 HPAI Disease Events combined
- >84 countries in poultry, wild birds or humans (Endemic in 6 & recurring in 10-12 countries)
- Focused on Northern Hemisphere across Asia, Europe, Africa and North America





Clinical Signs

Chickens:

- Severe early illness 1-2d post exposure: ruffled fathers, severe lethargy
- Day 3: Cyanotic/necrotic combs and wattles, hemorrhages on legs, periorbital edema, lethargy

As a second seco



Turkeys:

- Not apparent until close to death
- Severe lethargy, huddling, ruffled feathers
- Trouble walking, neurological signs



Preliminary Data from ARS/APHIS Study: Mary J. Pantin-Jackwood, Erica Spackman, Christina Leyson, Sungsu Youk, Scott Lee, Mia K. Torchetti, Julianna B. Lenoch, Darrell Kapczynski, David L. Suarez, and David E. Swayne

HPAI Also Infects:

Also impacted Commercial Ducks- More on this later Gamebirds

Wild birds- Ducks, Geese, Swans, Colonial Nesters

Including Scavengers- Raptors like Hawks, Eagles, Owls and Turkey Vultures and Corvids like Crows and Ravens

Including Scavenger Mammals- Skunks, foxes, raccoons, a Bear in PQ and Seals

Much Easier disease to destroy than ASF!



HPAI Who are the Government Players?

Federal: CFIA, ECCC (CWS), AAFC (Trade)???

Provincial: OMAFRA, MECP, NDMNRF, MoH, PHU's,

SolGen (PAWS) MoL ???

Municipalities, local police forces

35



HPAI Who are the Domestic Players?

4 Supply Managed (SM) Feather Boards

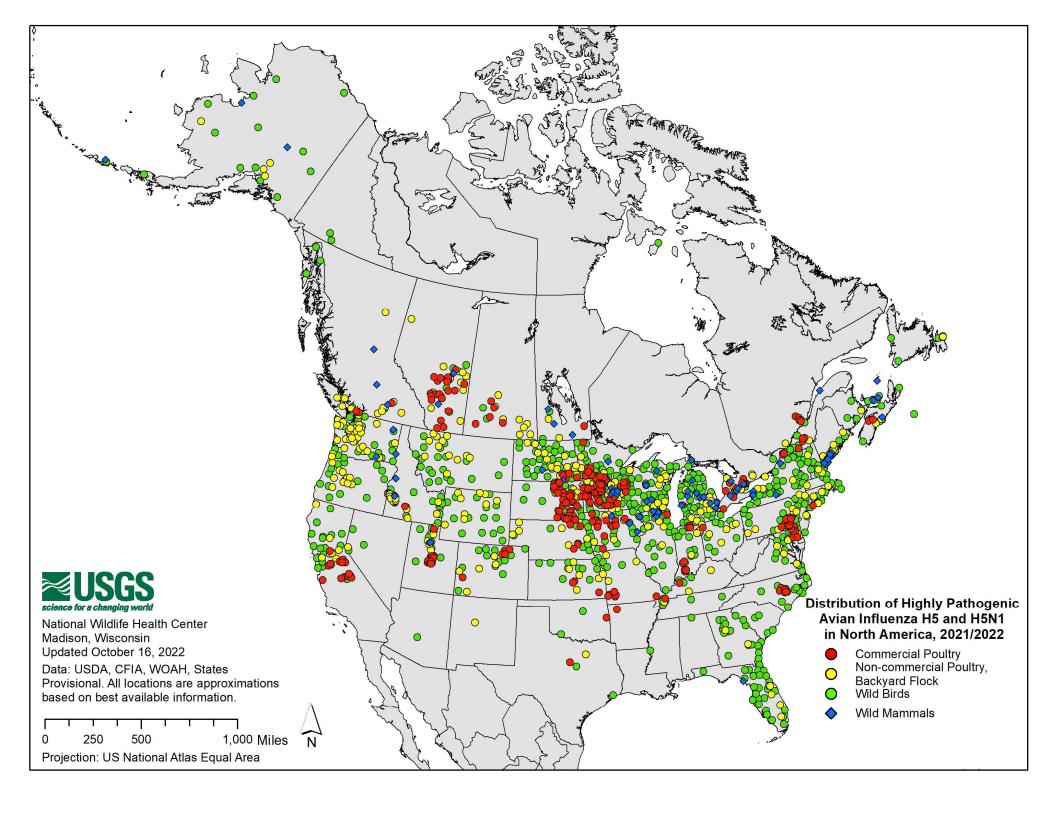
Feather Board Command Centre (SM Boards)

Non-Supply Managed Poultry- (Waterfowl, Gamebirds, Squab)

Small flock- Family Food program, exhibition (show Poultry), Pet Birds, etc. (est around 25,000)

Wild Bird- wild life rehabbers, zoos, birds raised with aviculture permits.





We started out with:

Chick Shortages
COVID Issues in PQ and ON
HPAI H5N1 in Newfoundland...
Heavy Snowfall Events
And that was only January...





VETERINARY ADVISORY

Animal Health and Welfare Branch/ Office of the Chief Veterinarian Ministry of Agriculture, Food and Rural Affairs

February 4th, 2022

Avian Influenza Disease Update

On February 3, 2022, highly pathogenic avian influenza (HPAI) subtype H5N1 Eurasian strain was confirmed by the Canadian Food Inspection Agency (CFIA) in a commercial turkey farm in Nova Scotia.

On February 1, 2022, the CFIA also confirmed the presence of HPAI, subtype H5N1, in a backyard flock in central Nova Scotia.

On January 9, 2022, and December 20, 2021, the CFIA confirmed the presence of HPAI, subtype H5N1, in two small flocks located on the Avalon Peninsula on the island portion of Newfoundland and Labrador.



February was:

More chick shortages

HPAI H5N1 in Newfoundland and Nova Scotia...

Reporting on HPAI positives in the USA

HPAI Preparedness

More winter weather...





And then there was March:

More COVID Issues

Reporting on HPAI positives in the USA

HPAI Preparedness- Webinars with Poultry Industry Council mid-March

Red Tailed Hawk in New Hamburg Positive for HPAI...

Less than a week later at End of March- IP1 near Elora

Let the Games Begin...



April, May, June, July:

More IP's From IP1 (March 27) to IP26 (May 17)

Commercial and Small Flock

Wildlife Submissions

Destruction, Disposal, C&D

Gas Shortages

Concern with Organic Production...

Comms, Comms, Comms

Mental Health and Wellness Issues with farmers and staff



What's the Process?

Sick Bird Call Comes in:

Testing

Confirmation- (also comes with Export Implications)

Quarantine (and Traceback)

Zoning (and Permitting, 3-10km zone AND Zones on Premise-Hot-Warm-Cold)

Destruction- Options? (Paid by CFIA)

Disposal- On Farm Composting- Deads, **Manure**, Feed, Eggs (Paid by CFIA)

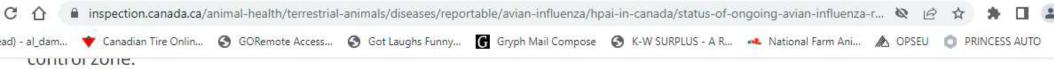
Primary Disinfection- could take Weeks (CFIA does not Pay)

Disinfection-

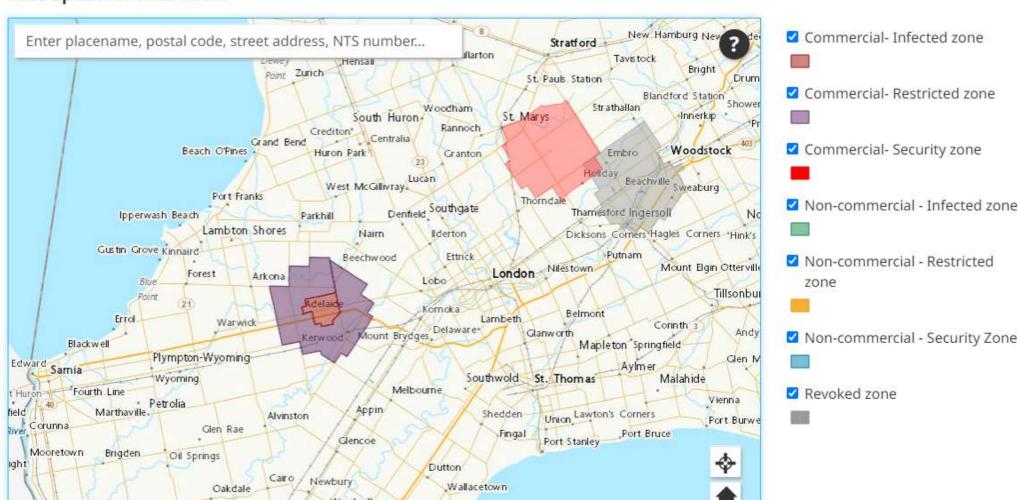
28 Day Surveillance before IP is revoked



Zoning Map



Last updated: 2022-11-22



Not sure what happened in August:

I took the whole month off...

Needed to take some AL time, not Al time

Because I knew that Fall Migration was around the corner...



Q



Home > Rural and north

Animal health update from the Office of the Chief Veterinarian: Avian influenza – commercial poultry

Update and information regarding heightened biosecurity awareness for poultry industry participants. (Issued August 18, 2022)

On this page

- 1. Overview
- 2. Current situation
- 3. Clinical signs

- 4. Biosecurity
- 5. Prevention
- 6. Additional information

Overview



October, November:

IP27 (Sept 27) to IP39 (Nov 21) and counting...

Mostly Small Flock... Why?

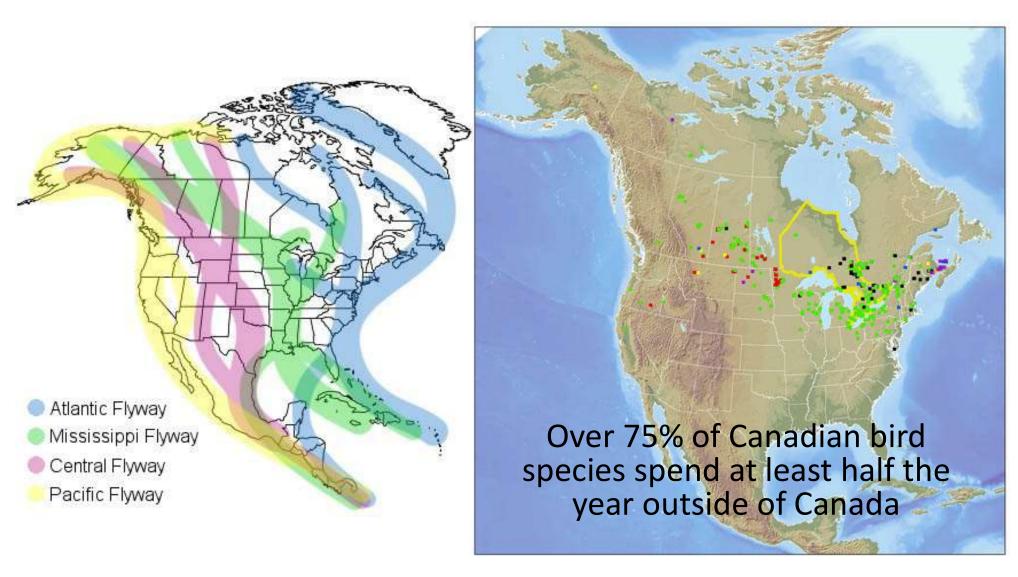
Last 2 were commercial Turkeys

Western Canada is really challenged and PQ now too

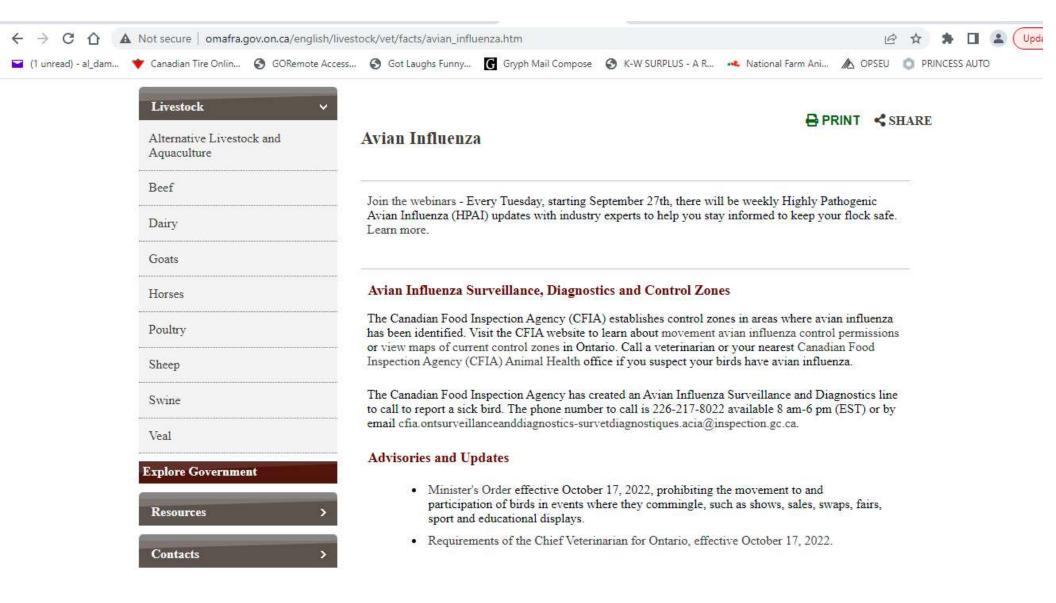
Still seeing wild bird positives, but slowing down...



BIRDS MOVE ALL OVER

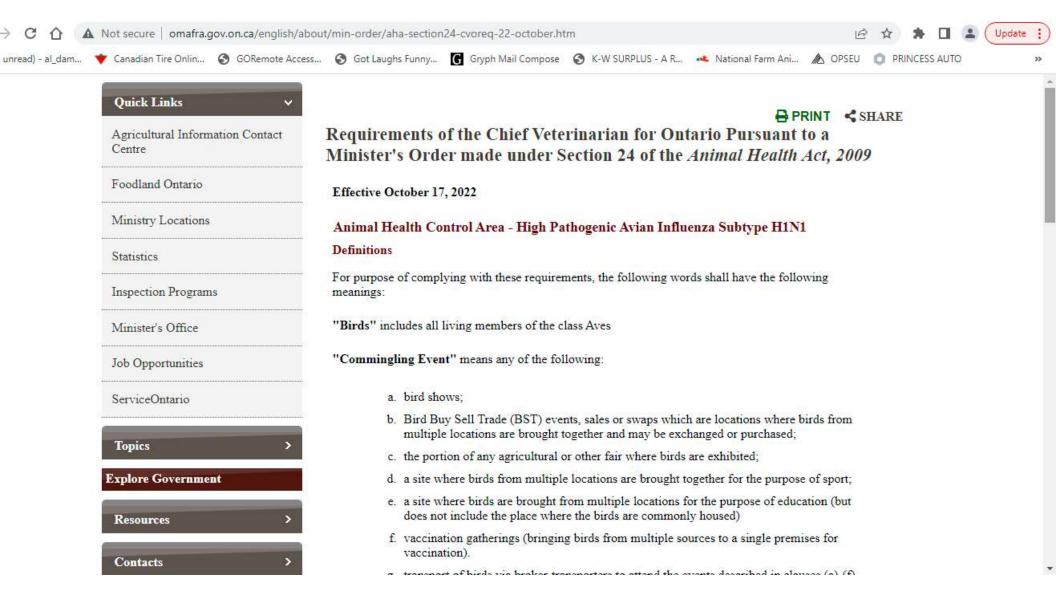


Ontario.ca/avianinfluenza





Minister's Order



Minister's Order

Requirement to Comply with Order

Pursuant to section 24 of the *Animal Health Act*, 2009, all persons in the AHCA or affected by the order shall comply with the Order and the requirements of the Chief Veterinarian for Ontario and, if requested to do so, shall provide proof of such compliance.

- Restriction on transportation and movement and precautionary and biosecurity measures in the animal health control area
 - A. No person shall run, host, or hold a commingling event while the Minister's Order is in effect.
 - B. No Person shall move birds to a commingling event while the Minister's Order is in effect.

These requirements are in effect as of the date set out above and shall continue in effect until November 21, 2022.

The previous requirements issued under s.24 of the *Animal Health Act, 2009* with an effective date of September 23, 2022 are hereby revoked.

In the event of a conflict between this Order and an order made by the Canadian Food Inspection Agency ("CFIA") under the *Health of Animals Act* (Canada), the order made by the CFIA governs.

Original signed by

Chief Veterinarian for Ontario

Signed this 17th day of October, 2022.



From Robert Lerch, Acting Director, Ministry of Health- Get the Flu Shot!

Ontario 😚

Ministry of Health

Office of Chief Medical Officer of Health, Public Health

Health Protection and Surveillance Policy and Programs Branch

Box 12

Toronto, ON M7A 1N3

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Ministère de la Santé

Bureau du médecin hygiéniste en chef, santé publique

Direction des politiques et des programmes de protection de la santé et de surveillance

Boîte à lettres 12 Toronto, ON M7A 1N3 Tél.: 416 314-5487 Téléc.: 416 327-7438

September 20, 2022

Dear Poultry Industry Stakeholder:

I am writing to recommend that you and your family get vaccinated against influenza ("flu") this year. The recent outbreaks of avian flu and the on-going COVID-19 pandemic make it even more critical that you and your family are protected against flu.





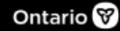
Clean Your Hands

Respiratory illnesses like the flu spread easily between people and animals.

Read Carefully

- Do you have a **NEW** cough or one that has become **WORSE**?
- Are you SHORT of BREATH?
- Are you feeling FEVERISH?

If the answer to **ANY** of these questions is **YES**, please contact local facility management at **before** proceeding further.





Biosecurity Measures this Fall- Winter-Spring:

- Report Sickness to your veterinarian and self quarantine until diagnosis confirmed
- Wild Bird Exclusion
- Pick up spilled Feed
- Rodent Control- (Rats live outside the barn and come into feed.)
- Keep Birds inside till after Spring Migration (Mid June?)
- Deadstock Management!
- Proper Biosecurity SOP's and use of PPE
- OMAFRA will continue to reach out to small flock holders and non-quota poultry production
- Industry Updates
- If you see dead wild birds contact CWHC
 OMAFRA Update



If You Find Dead Birds on Your Farm:

Claire Jardine Jane Parmley Brian Stevens Lenny Shirose



CWHC phone #: 1-866-673-4781

http://www.cwhc-rcsf.ca

Cluster of 3 small birds or one large one



Why the Interest in Wild Birds?

Reservoirs

Natural reservoirs of low-pathogenicity strains:

- Waterfowl (ducks, geese, swans)
- Shorebirds (waders and gulls)

Movers

- LPAI Wild bird migrations play a role
- HPAI We are seeing mortality in Wildlife!

Spread between wild birds

- Water (fecal-oral)
- Predation
- Incidental

















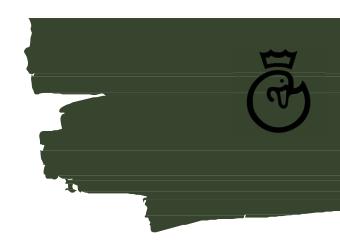


King Cole Ducks - Sales Video - YouTube

A FARM TO FORK STORY

WHAT TO EXPECT TODAY

INFECTION & IMPACT
Dr. Kelly Fisher - Farm Veterinarian



1 TAKES FROM OUR WAR ROOM

Laura Kelly - Field Technician

O 5 COMMUNICATION IS KEY Patti Thompson VP, Sales & Marketing

BIOSECURITY MEASURES

Jackie Fisher - Director, Farm Excellence

O6 COURAGE IN CRISIS

Debbi Conzelmann - CEO

THE POWER OF PEOPLE
Robin Kelly - Director, Hatchery Operations

7 QUESTIONS FOR US
The Entire Female Flock

ABOUT THE DISEASE

Dr. Kelly Fisher - Farm Veterinarian

- Unique to this year, the strain is very pathogenic to wild and commercial ducks
- Al is spread easily on fomites (such as boots, clothing, hair, equipment, etc) therefore all non-essential traffic to farms was stopped
- AI was an emotional toll on us all...
 - The veterinarian oath dictates that we "promote animal health and welfare, and prevent and relieve animal suffering.
- Gas Shortage

- Canada needs to be prepared with supply and with a secondary mass depopulation method
- Implement the most heightened biosecurity measures to help reduce the introduction and spread of AI



TAKES FROM OUR WAR ROOM



Laura Kelly - Field Technician / Live Production Coordinator

- We were one of the largest and most complex outbreaks of waterfowl to hit Ontario and Canada
- CFIA Case Manager model was vital
- Cyberagra allowed me to see real-time information which was crucial in this crisis

- Use tools at your fingertips WhatsApp
 - The emergency response team gave REAL-TIME
- updates Efficiency is NOT always the best practice



BEHIND THE SCENES OF BIOSECURITY

Jackie Fisher - Director of Farm Excellence

- CFIA zones aimed to minimize traffic, whether it was vehicle or people movements
 - Cold, warm & hot zones
- 750,000 Sq ft barns restored
- Heightened biosecurity is the new normal
- 6 months- 24/7 to recover

- Critical messages must be clear and repeated... over and over
- Flexible and adaptable managers and staff crucial to success



THE POWER OF PEOPLE

Robin Kelly - Director of Hatchery Operations

- From 185 full-time staff to a big question mark of how many people we could keep employed as we managed through the crisis
- COMMUNICATION WAS CRUCIAL
- All teams needed to be flexible and nimble
- Staff wore many hats
 - Witnessed many people showcase other skills
- Thank you is NEVER enough

- Consistent check-ins are crucial in a crisis
- Be a good (active) listener



CUSTOMERS & COMMUNICATION

Patti Thompson - VP of Sales & Marketing

- Consumers & community were impacted immediately
- We spent 20 years building an export business that was shut down overnight because the province was "infected"
- 85% Canadian Duck supply was lost
- Communication & tone were hard to balance
- Poultry politics not a fun game to play

- No news is NOT good news-communicate!
- Know people who can help before you need help



A BRAVE BUSINESS APPROACH

Debbi Conzelmann - Chief Executive Officer

- Business Continuity Plan
- Emergency Response
 Plan
- Financial Resilience
- Cashflow Management
- Strength in Partnerships

OVERALL TAKEAWAYS

- RISK ASSESSMENT build a crisis plan
- COMMUNICATION

All stakeholders from staff and consumers to bankers and suppliers need very strong and clear communication

• **TEAMWORK** is the foundation for success in good times, bad times, and every day.















QUESTIONS FOR OUR FEMALE FLOCK?

DEBBI CONZELMANN
PATTI THOMPSON
JACKIE FISHER
ROBIN KELLY
DR. KELLY FISHER
LAURA KELLY





Stay Safe! Questions?

