

# Oh no, I think my birds are sick...

## Managing Poultry Disease on your Farm

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# Infectious Disease is a numbers game...

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Infected birds act as “*incubators*”, reproducing 100,000s of particles of infectious viruses and bacteria until they are either:

A. die/are culled or

B. treated/develop immunity → shedding stops

## **THEREFORE**

The sooner a diagnosis is made and the appropriate treatment (if available) is initiated, there is less environmental contamination by the infectious agent → spread is reduced → fewer birds sick

# The tools we rely on...

□ *Lots of LUCK!*

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□ ***BIOSECURITY MEASURES***

- Keeps infectious agents OUT (*isolation*)
- Reduces CHALLENGE (*sanitation*)
- Aids CONTAINMENT if introduced (*quarantine*)

□ ***OPTIMIZING BIRD HEALTH***

- Reduces stress, promotes immunity

□ ***SKILLED DIAGNOSTICS***

- Field Experience/Intuition
- Formal (*vets & vet labs*)
- Timely & Appropriate Treatment



# DISEASE MANAGEMENT BASICS

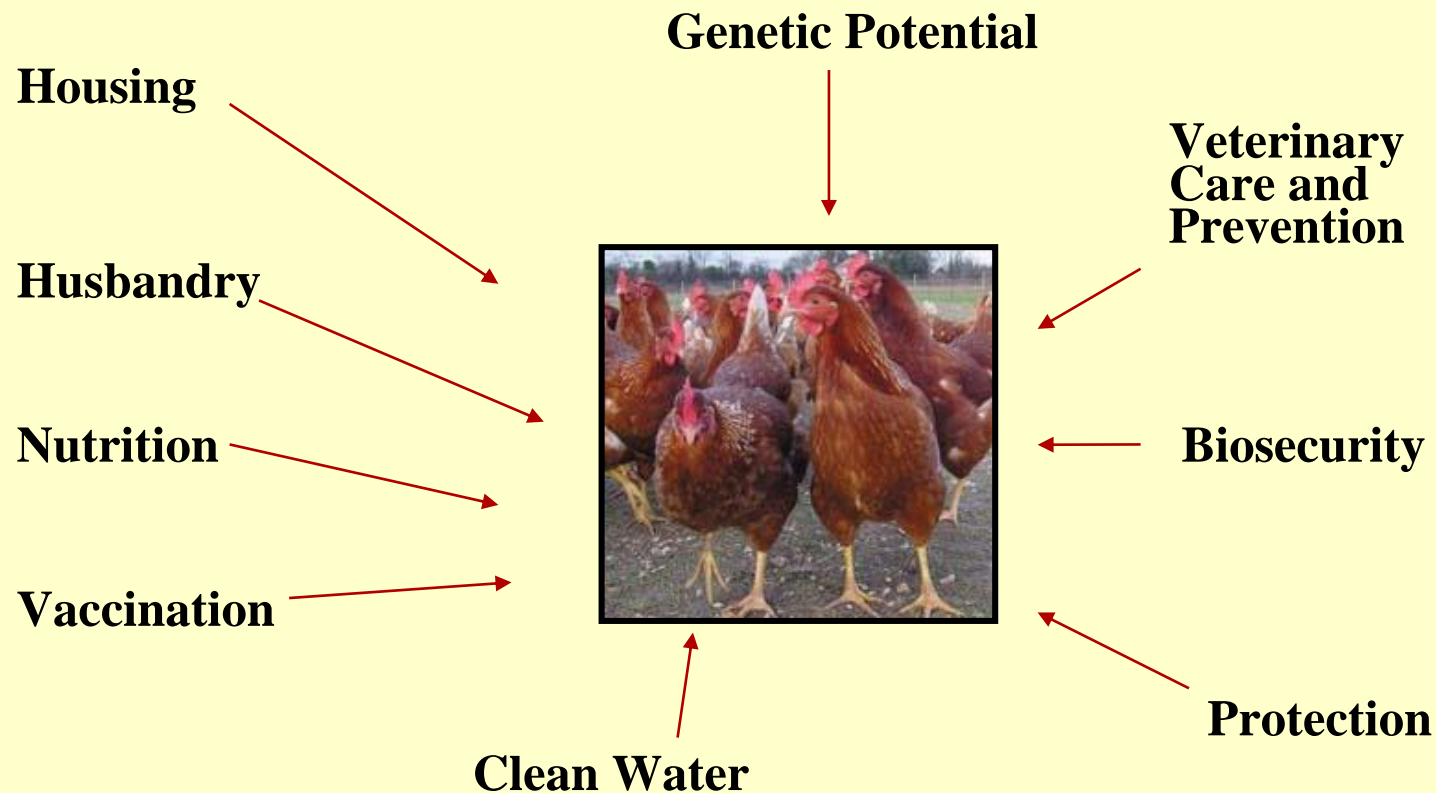
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- Know your birds
- Keep good records
- Seek a prompt disease diagnosis SEE YOUR VET
- Self-quarantine
- Isolate affected birds (TLC, treat, cull)
- Appropriate treatment
- Cleaning & Disinfection
- Disease prevention & monitoring
- Buy healthy replacement birds



# What contributes to the health of poultry?

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# The FLAWS of good management

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A management assessment checklist



# What are the FLAWS?

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- F      Feed
- L      Light
- L      Litter
- A      Air
- W      Water
- S      Space
- S      Sanitation
- S      Security

# Getting Started

What things do you need to think about?

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- ❑ What type of bird
- ❑ Housing
- ❑ Acquiring your birds
- ❑ Feeding
- ❑ Dead birds
- ❑ Manure management
- ❑ Processing





# Getting Started:

## What type of bird do you want?

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- ❑ Chicken, turkey, duck
- ❑ Show or production
- ❑ Meat or eggs
- ❑ Hatching eggs or table eggs
- ❑ Personal use or farm gate sales
- ❑ Chicks or point-of-lay pullets



# Where will you get your birds?

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- Ideally an *accredited hatchery*
  - Quality control programs
  - Salmonella monitored
  - Breeder flock health programs, including vaccination
  - Accountability
- If acquiring chicks or birds from other fanciers, make sure you ask about health records; many diseases are spread through trading of birds

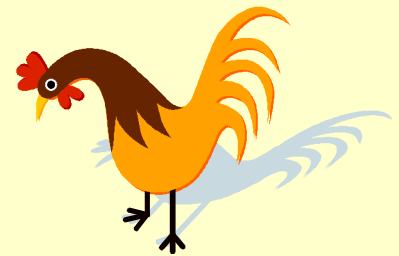
# Self-Quarantine:

What to do if you suspect an infectious disease in your flock...

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- Upon the *suspicion* of an infectious disease in a poultry flock, an owner can do certain things to limit the spread of disease between birds, and most importantly, the spread of disease off the farm into neighbouring flocks.



# Self-Quarantine: when to act

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There has been an *unexplained*:

- increase in mortality,
- onset of clinical signs of disease
  - Abnormal behaviour
  - Respiratory distress
  - Wet droppings, etc.
- sudden change in production parameters such as
  - feed/water consumption
  - egg production/shell quality, etc.



# Self-Quarantine: *GET AN ANSWER*

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*Seek help from your poultry health advisor*

## Describe the problem

- What do you see?
- When did it start?
- Are things getting worse or resolving over time?
- *Have there been birds recently introduced?*
- Offer your suspicions.
- Be able to provide copies of production and mortality records.

*Start a diagnostic investigation*

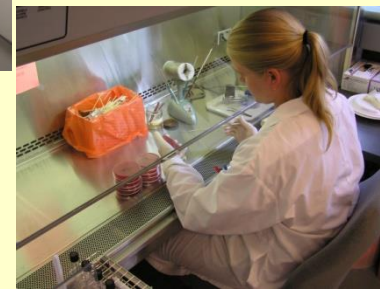
## Call your VET

- Call ahead to discuss
- Provide samples as required
  - Sick birds
    - May have to sacrifice
  - Necropsy samples
  - Flock blood samples
  - Digital pictures

# ANIMAL HEALTH CENTRE (AHC)

BC Ministry of Agriculture: Plant & Animal Health Branch

1767 Angus Campbell Rd  
Abbotsford, BC V3G 2M3  
1-800-661-9903



# The Animal Health Centre (BC Vet Lab)

- The Animal Health Centre (AHC) is part of the **BC Ministry of Agriculture, Plant & Animal Health Branch**
- An effective passive surveillance tool for early detection of infectious diseases in poultry
  - Locally imbedded in the Fraser Valley where the majority of commercial poultry are located
  - Accept small flock submissions from all over the province
  - Subsidized small flock submissions
  - Dedicated poultry pathology/virology expertise
- Accredited
  - AAVLD
  - CAHLN AI-network lab
    - CFIA will respond to an AHC detection
- CL-3 FAD lab



# Testing Procedure

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- Necropsy (aka Gross Examination)
  - Examination of organs and tissues, looking for signs of specific diseases (or non-specific changes)
  - Selection of tissues for ancillary testing
- Ancillary testing
  - Bacteriology
  - Parasitology
  - PCR
    - Test for DNA of different organisms
    - Each test specific to one organism, or group of organisms
    - E.g., Influenza, Newcastle disease, Mycoplasma gallisepticum, ILT, infectious coryza



# Self-Quarantine: *WHILE YOU WAIT*

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## *Follow the advice of your veterinarian.*

- Base initial treatment of the flock on the disease suspected (treat exposed birds to prevent, affected birds to cure).
- Restrict access to farm and *suspend all unnecessary traffic.*
- Hold back product sales.

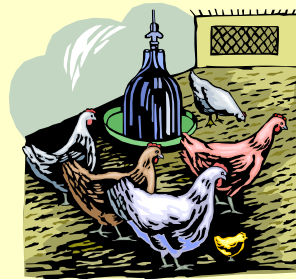
## *Immediately adopt enhanced biosecurity.*

- Attend unaffected birds first.
- Follow strict personal biosecurity procedures for between barns/flocks and for leaving the farm e.g. non-farm clothing, footwear and vehicle
- Postpone movements of birds on or off the farm.
- Dispose of dead/culled birds in an approved method. **Treat as infectious material.**

# Self-Quarantine: *WHEN A DIAGNOSIS IS CONFIRMED*

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- ❑ Modify or initiate flock treatment as directed by your veterinarian.
- ❑ Enhanced on-farm biosecurity procedures should be followed for **at least 10-14 days** following the end of treatment or the resolution of clinical signs.
- ❑ Continue to monitor for disease reoccurrence in the same or subsequent flocks:
  - ❑ watch for clinical signs
  - ❑ submit follow-up samples
- ❑ Consider all-in/all-out management style if possible.



# Self-Quarantine = lock down

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## **STEP 1. GET AN ANSWER**

- *diagnostics*

## **STEP 2. WHILE YOU WAIT**

- *inform key players*
- *monitor & best guess treat*
- *enhanced biosecurity*
- *suspend product sales & visitors*
- *postpone bird movement on/off*

## **STEP 3. WHEN A DIAGNOSIS IS CONFIRMED**

- *manage flock within the context of the disease; modify treatment*
- *continued enhanced biosecurity*

## **STEP 4. GETTING BACK TO NORMAL**

- *C & D*
- *monitor for disease reoccurrence*
- *Submit follow-up samples*

# Questions?

