

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

Managing Poultry Disease on your Farm



Infectious Disease is a numbers game...

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!*

□ ***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

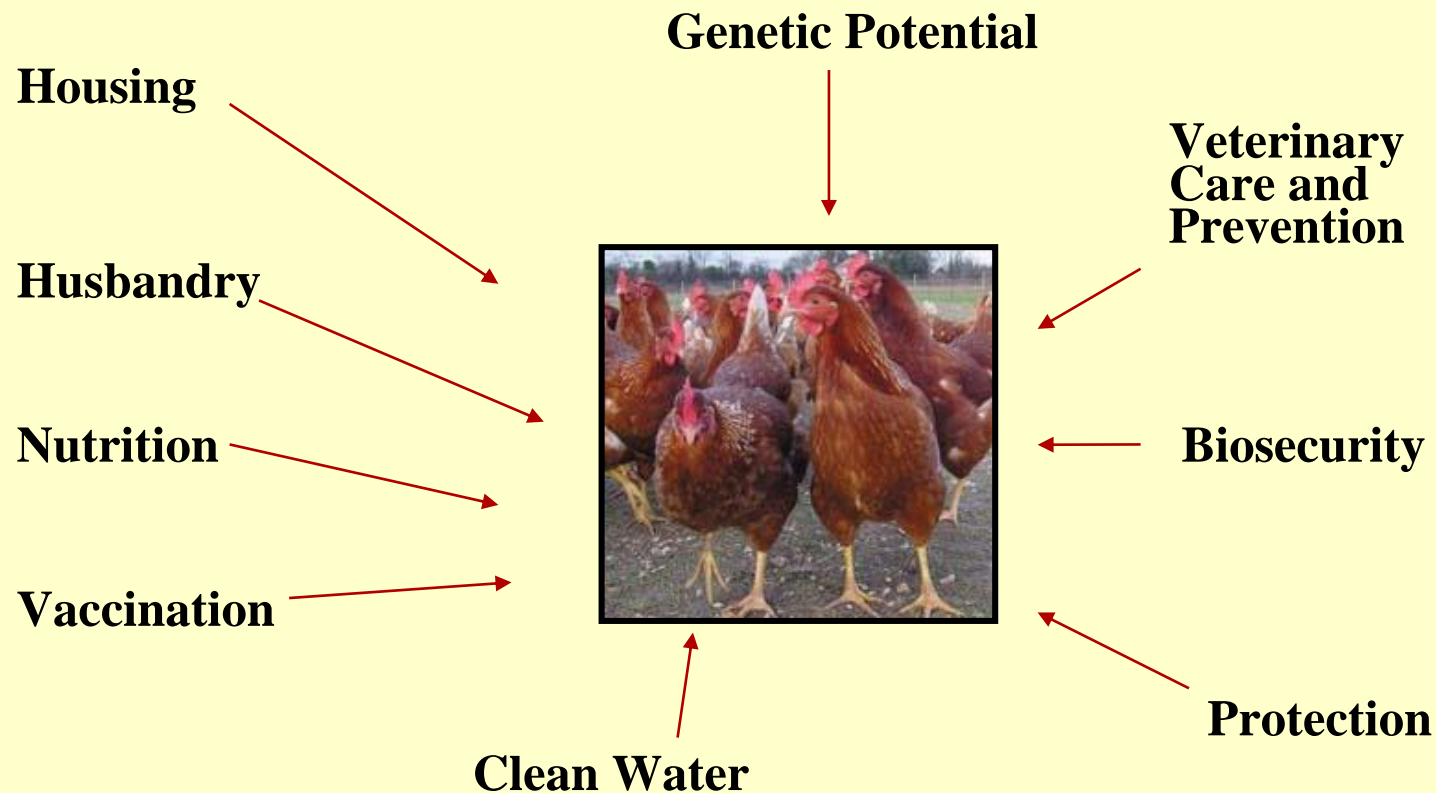


DISEASE MANAGEMENT BASICS

- 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?



The FLAWS of good management

A management assessment checklist



What are the FLAWS?

- 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?

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



Getting Started:

What type of bird do you want?

- ❑ 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?

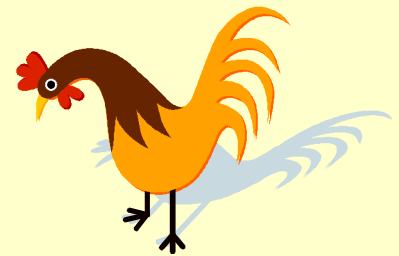
- Ideally an *accredited hatchery*
 - Quality control programs
 - Salmonella monitored
 - Breeder flock health programs, including vaccination
 - Accountability
- If acquiring chicks or birds from other fanciers, make sure you ask about health records; many diseases are spread through trading of birds

Self-Quarantine:

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



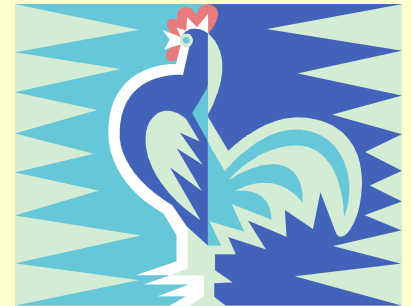
- Upon the *suspicion* of an infectious disease in a poultry flock, an owner can do certain things to limit the spread of disease between birds, and most importantly, the spread of disease off the farm into neighbouring flocks.



Self-Quarantine: when to act

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*

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

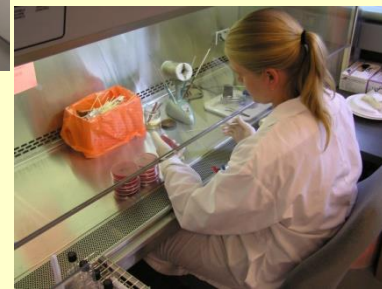
Call your VET

- 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



Submitting Birds

- ❑ Lab open 8:30am-4:30pm, Monday to Friday
- ❑ Birds can be brought in by producer, vet, feed rep, courier, etc.
- ❑ If birds are shipped, they should be frozen prior to shipping or kept on ice
- ❑ Submission form available on Ministry of Agriculture website
- ❑ Indicate reason for submission (e.g., spike in mortality, decreased production) and disease suspected

Testing Procedure

- 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*

Follow the advice of your veterinarian.

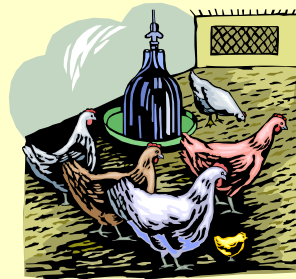
- Base initial treatment of the flock on the disease suspected (treat exposed birds to prevent, affected birds to cure).
- Restrict access to farm and *suspend all unnecessary traffic.*
- Hold back product sales.

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*

- ❑ 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

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?

