

**PREVENTION OF HIGHLY
PATHOGENIC AVIAN
DISEASE**

**Dr Richard Julian
Ontario Veterinary College**

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**Implications and
Recommendations for the
Caribbean Producer**

Routine surveillance by the Veterinary Division could be restricted to:

- 1. routine Government diagnostic
laboratory reports.**
- 2. reports from Company and private
Veterinary diagnostic facilities.**
- 3. monitoring Breeder and Hatchery
Supply Flocks and to importation of
poultry.**

Surveillance

- **For commercial poultry, the industry (poultry companies, feed mills, processing plants and producers) is the front line defense.**
- **Everyone must be aware of the importance of reporting unexpected illness and mortality**

Surveillance

For Village Chickens. Local Agricultural Officers, other Municipal or Federal Government people or Police Officers should be aware that they are to report unusual illness or mortality to the proper authorities.

A) Disease surveillance and strengthening animal health protection.

1. Legislation or agreement must be in place to ensure that all high or unexpected mortality or illness is immediately reported to the Veterinary Division.

2. If high or unexpected mortality or illness is reported the following steps must be taken:

3. After immediate examination (with P.M. etc.) of the flock by the Veterinary Field Service (at no charge to the owner) there would be a decision on quarantine. Further action such as laboratory diagnoses or the use of sentinel birds (remembering that vaccination may mask Exotic ND) would be taken, as necessary. Mortality, medication and vaccination records must also be available for inspection.

4. Owners must be aware that there are penalties for failure to report significant illness or death and for selling or moving sick or dead birds off the premise.

5. Legislation must provide compensation for the slaughter of poultry and loss of income (for poultry slaughtered for the protection of the National flock) so that owners are not penalized for reporting disease.

6. There should be Government or Producer Association funds available to pay individuals for Veterinary fees and diagnostic tests on diseases that are not a threat to the National flock, but are a threat to local producers (if not reported, diagnosed and controlled promptly).

Emergency Preparedness **and Animal Health** **Legislation**

- **-plans must be in place to deal with Highly Pathogenic Avian Diseases if they occur.**

B) Legislation must be in place that gives the Agricultural Department authority to:

1. -issue an order to stop all movement of poultry in the affected Parish, County or entire Country if necessary and to use Police or other Officers to enforce the restrictions.

2. -issue an order to quarantine the affected and suspected premises or areas and institute preventive measures such as killing sick birds, burying dead birds and manure and controlling insects, vermin and the movement of people and animals. Set up surveillance for all poultry within a 10 km radius with permission to move birds to a slaughter plant by permit.

3. **-issue** an order to slaughter and burn or bury the affected flock(s).

**4. -to conduct and pay for
clean-up and disinfection.**

**5. -to place and monitor
sentinel birds and make a
decision on restocking.**

6. -to pay fair compensation.

C) There must be a written organizational plan of responsibility within the Agricultural Department so that:

1. -immediate action can be taken, without the need to call a meeting of officials.

2. - an order can be issued to stop all movement of poultry in the affected Parish, County or entire Country if necessary and to use Police or other Officers to enforce the restrictions.

3. -individuals know in advance their responsibilities and course of action.

**4. -facilities, reagents,
equipment etc. are in place to
do the required diagnostic tests
or plans and agreements have
been made to send material to
outside facilities for diagnosis.**

5. -there should be a periodic trial run of the plan on a regular basis or when new personnel are to be used.

D) ACTION

- **When a highly pathogenic avian disease is suspected, the pre-arranged plan are immediately instituted. The quarantine and if necessary eradication programme can take several forms, such as:**

1. -quarantine the suspect premises and stop all movement of poultry in the suspect area (10 km radius) with particular to attention live bird markets.

Police or National Guard personnel may be required to notify poultry owners and enforce the stoppage.

People must not move from one poultry flock to another without taking proper biosecurity precautions (see biosecurity).

**2. -designated personnel
examine the suspect flock
and dead birds.
Samples taken from sick
and dead birds for
laboratory diagnosis, using
care not to spread infected
material.**

**3. -all sick birds should be killed (to control excretion of infectious organism).
Dead birds should be burnt or buried.**

4. -to stop the spread of infection by flies and other insects an insecticidal spray should be applied.

Rodent and pet animal control is also important.

5. -all manure should be collected, buried or piled, sprayed and covered and the facilities sprayed again. These last 3 steps should be repeated twice daily until a diagnosis is made. If the flock is to be eradicated, insecticide should be applied immediately prior to eradication and again immediately afterwards (to stop insects spreading infection).

6. -surveillance of the suspect area should be done daily (by phone or without direct contact with poultry or attendant, if possible) or poultry owners may be required to report signs of illness.

7. -depending on the circumstances the entire flock or all the village poultry may be eradicated .

8. -depending on the circumstances treatment or vaccination programmes may be instituted.

E) FURTHER ACTION

When a diagnoses of highly pathogenic avian disease is confirmed the programme for eradication, clean-up of the infected premise and surveillance of the quarantine area is instituted (see: decontamination procedures). The diagnoses is reported to the proper officials for notification of the international community.

IMPORTANT NOTICE

- **When HPIA has been diagnosed the flock must be killed in the shed, without allowing feathers and other material to spread outside the shed. The dead birds should then be sprayed with insecticide and composted in the shed for at least 3 days before they are sprayed with disinfectant and buried or burned**

F) Biosecurity.

- See: - Vaillancourt biosecurity CD

Biosecurity

- **Because vaccines are not 100% effective in preventing Newcastle disease, vaccinated poultry can serve as reservoirs for the disease.**
- **Therefore, good management principles and biosecurity measures in commercial poultry flocks are vital**

Biosecurity

Only allow essential workers and vehicles on premises.

- Employees must not keep poultry at home and must avoid handling village poultry

Clean clothing, footwear and disinfection facilities must be provided for employees with special attention on those who live in the village.

Vehicles entering and leaving premises must be disinfected.

Biosecurity

- Other poultry operations should not be visited.
- Clean poultry houses between each lot of birds.
- Have only one age-group per farm ("all-in all-out" policy).
- Chlorinate water taken from dugouts or ponds.

Do not keep pet birds on the premises or hire employees with pet birds.

Protect flock from wild birds by cleaning up spilled feed and removing wetlands near the shed

Take diseased birds to a
diagnostic laboratory for
examination

Pet bird enthusiasts and backyard hobbyists (particularly fighting cocks and hens) can also affect the spread of Newcastle disease.

- These owners should:
- Ensure their birds are legally imported, requesting documentation of the bird's health and safe transportation.
- Isolate new purchases for 30 days, including the restriction of personnel movement between new and old birds

Eradication

- Strict quarantine and destruction of all birds infected with END is necessary to eradicate the virus from an area. Because the virus can survive well in some environmental conditions, special precautions need to be taken during the destruction of birds and subsequent environmental cleanup:
- After cleaning and disinfection is complete, no birds should be reintroduced into depopulated facilities for at least 30 days.

G) Decontamination Procedures

- Any insects or mice that could act as potential vectors need to be destroyed prior to the destruction of birds.
- Contaminated manure must be safely removed by:
 - Burying it at least 5 feet deep
 - Composting it

H) Public Health Issues

- Humans can be infected with AI and Newcastle viruses. Infection generally causes conjunctivitis but more severe disease and death may follow some forms of HPAI infection.
- Most often, those affected are workers in the poultry industry or laboratory technicians who handle the virus.
- If HPAI is suspected workers should wear protective clothing.
- No instance is known of transmission to humans through handling or consumption of poultry products