B.C. Poultry Industry Enhanced Biosecurity Initiative
Producer Self-Assessment Guide

"Vigilance should be constant"

General Principles of Biosecurity

The term "biosecurity" refers to an overall program that uses a combination of physical barriers (things) and directed actions (people) in a specific way that should prevent the introduction of, or limit the spread of , infectious disease causing agents (bacteria & viruses) into a group of susceptible poultry. *Inadequate biosecurity at any level is an industry-wide concern.*

Biosecurity encompasses 3 basic components:

1) **Prevention.** The principle of **preventing the introduction** of a disease agent. Strict physical isolation of barns and birds from potential disease agents. Once the flock or farm is contaminated, the owner of a poultry facility is faced with the challenge and increased costs associated with cleaning and disinfection as well as the potential reliance on vaccines and medications in subsequent flocks.

2) **Containment**. If infected, the steps are in place to **prevent the spread** of an infectious agent by interrupting the disease transmission cycle. This is where application of routine and responsive **sanitation** procedures for personnel and equipment are vital. *The overwhelmingly most common cause of disease spread among farms is contaminated equipment and people.*

   Another aspect of containment includes rapid *diagnostic support and effective communication* between producer, veterinarian and scheduled services such as feed delivery and egg pick-up. Each producer should put in place a set of guidelines for "self-quarantine" that can be referred to during the interim of suspicion and confirmation of a disease problem.

3) **Bird Health**. Optimizing bird health **promotes immunity**, which in turn reduces the amounts of disease causing organisms in the birds environment should an infection occur. Early recognition of a disease problem can be accomplished through daily record-keeping of mortality, feed and water consumption as well as through observational instinct. Minimizing stress promotes optimal bird health and ultimate productivity.

How to Use This Guide

This Guide allows the producer or farm manager the opportunity to assess their current level of on-farm biosecurity. This is a private document entirely for your own personal use. Your answers will provide you with an idea of where there are areas of weakness that require attention or practices that fall below current industry standards. You should develop a plan to address those specific areas that need improvement.

Biosecurity measures that score "Unacceptable" are considered to fall below the minimum standards set out by the industry and will require immediate corrective action because not only your farm but the entire industry is at increased risk of an infectious disease outbreak. Optimal or "Ideal" biosecurity practices, as outlined in the Guide, are to be considered the "gold standard" that producers should aspire to. Remember, your entire biosecurity program is only as good as its weakest point.

Simply read the question and circle the response that best fits your current biosecurity practices. Each response is rated as **Unacceptable**, **Questionable**, **Adequate**, or **Ideal**.

Developing an On-Farm Biosecurity Program

THINK ISOLATION: a defensive fortress, an island.

Using the information provided in this guide and from other available resources, each producer should develop a written and reviewed farm-specific BIOSECURITY PROGRAM. Enhanced biosecurity measures will have an initial cost to implement but this should be viewed as a long term investment in future profitability.

The general approach to developing a workable on-farm biosecurity plan is to systematically identify potential disease risk factors (either physical barriers or an activity a person does) and to formulate a protocol that can reasonably reduce that specific risk. Some risks don't lend themselves to complete elimination and therefore these risks need to be managed appropriately with "work-around" protocols. Each farm is unique and although a recognized compromise, exceptions may have to made to the general recommendations to work around specific insurmountable obstacles. Remember, a biosecurity plan not only protects your investment, it is essential to the long term sustainability of the poultry industry.

Once you have defined your On-Farm BIOSECURITY PROGRAM, practice the **NO EXCEPTIONS** rule. It is the producer who has the ultimate responsibility to refuse entry to any person, vehicle or equipment that is visibly unclean. Choose to do business with people and organizations that have established and display high standards for biosecurity.

It's Easy….

1. IDENTIFY THE RISK

2. MANAGE THE RISK

Terminology Used in the Guide

Unacceptable – Based on current knowledge, this breach of biosecurity puts your flock is at an extremely high risk of disease introduction. This practice requires immediate corrective attention since it also puts the general poultry industry at increased risk of in infectious disease outbreak.

All practices deemed "unacceptable" have been reviewed by the Poultry Committee and are considered to be below the minimum standards set for the industry.

Questionable – Based on current knowledge, this biosecurity practice puts your flock at risk for disease introduction depending on your unique situation. Consultation with your poultry veterinarian is recommended to determine if your biosecurity protocols in these areas should be or can be changed to better protect your flock and the rest of the industry.

Adequate – Based on current knowledge, your farm has reasonable biosecurity practices in place to prevent introduction of disease. However, there is room for improvement and you may consider consultation with your poultry veterinarian to review these practices and assess the value of making changes to further safeguard your flocks.

Ideal – Based on current knowledge, these biosecurity practices are outstanding and you have reduced the risk of introducing infectious disease into your flock. This is the "gold standard" and efforts should be directed toward improving the biosecurity practices that score in the previous categories to meet this level.

The following self-assessment checklist was inspired by The Biosecurity Guide for Pork Producers.

1) **Farm Location**

a) What is the proximity of your farm site to the nearest unrelated poultry operation:

i) Less than 400 meters _____Questionable
ii) 400 meters to less than 2 km _____Adequate
iii) 2 km or greater _____Ideal

b) What is the proximity of your farm site to a public road:

i) Less than 50 meters _____Questionable
ii) 50 to 100 meters _____Adequate
iii) Greater than 100 meters _____Ideal

c) Have you made an effort to familiarize yourself with the location of neighboring backyard poultry flocks?

i) No _____Unacceptable
ii) Yes _____Ideal

d) I routinely meet with my neighbours who own poultry to discuss poultry health issues, including local area disease risks and response plans:

i) Never _____Questionable
ii) Sometimes _____Adequate
iii) Routinely _____Ideal

e) How many backyard poultry flocks are you aware of within 1km of your farm:

i) Greater than 10 _____Questionable
ii) Between 1 and 9 _____Questionable
iii) None _____Adequate

f) How close is the nearest body of water (stream, pond, slough) to your barn(s):

i) Less than 50 meters _____Questionable
ii) Between 50 and 250 meters _____Questionable
iii) Greater then 250 meters _____Adequate

2) **Access deterrents**

a) No biosecurity or information signs at entrance _____Unacceptable
b) Biosecurity sign is readable from the road _____Adequate
c) Biosecurity signs are posted at the gates of all access points onto the farm ____Ideal

d) There is no vehicle disinfection station on the farm _____Unacceptable
e) There is a freshly stocked vehicle disinfection station at the gate _____Ideal

2) Access deterrents (cont'd)

f) No perimeter fence _____Questionable
g) No gated driveway _____*Ultra Unacceptable
h) Driveway is gated and not locked _____Questionable
i) Driveway is gated and always kept locked _____Adequate
j) Perimeter fence exists and driveway is gated and always kept locked _____Ideal

k) There is no clearly identified designated visitor parking area _____ Unacceptable
l) Visitor parking area <30 meters from barn(s) _____Questionable
m) Visitor parking is outside the farm perimeter or "control area" _____Ideal

n) Driveway is dedicated to the barn area and separate from the residence _____Ideal
o) An occupied dwelling exists on the site _____Ideal
p) Farm buildings are not secured with locks _____Unacceptable

q) Driveways are designed for one-way traffic flow _____Ideal
r) Driveways are

i) dirt _____Unacceptable
ii) gravel _____Adequate
iii) paved, no potholes _____Ideal

3) **Barn Layout**

a) Barns are less than 15 meters apart _____Questionable
b) Barns were built with prevailing wind and other poultry facilities in mind ____Ideal
c) Feed is delivered to the barn (s) away from the fan exhaust _____Adequate
d) Barns vent into adjacent barn intakes _____Questionable

4) **Building Entryways**

a) Have clearly defined, visible and maintained "clean" and "dirty" areas _____Adequate
b) Entryways (workrooms) are never cleaned and disinfected _____Unacceptable
c) Entryways are routinely cleaned and disinfected _____Adequate
d) Hand wash stations are conveniently located at entry/exit _____Ideal
e) Entryways are routinely disinfected (refer to specific farm protocol) _____Adequate
f) Entryways are uncluttered, swept daily, clean and always kept dry _____Ideal

g) Entryways that have footbaths/footmats with disinfectant are:

i) changed less than once per week _____Unacceptable
ii) changed weekly _____Questionable
iii) changed daily or with visible soiling _____Adequate
iv) changed daily or with visible soiling and is located under cover from sun/rain __Ideal

h) Each farm has its own set of:

i) clean and routinely laundered personal work clothing and footwear _____Adequate
ii) additional clean and routinely laundered farm outerwear and footwear _____Ideal
iii) one-time use disposable coverall and boot covers _____Ideal
iv) each **barn** has its own designated outerwear and footwear _____Ultra Ideal
v) designated outerwear is NOT available _____Unacceptable

5) **Pest Control programs**

a) What's a pest control program? _____Unacceptable

b) A written rodent control program is maintained by the producer:

i) occasionally or as required _____Unacceptable
ii) routinely, at least weekly, according to written protocol _____Ideal

c) There is untrimmed vegetation or debris within 3 meters of barn(s) _____Unacceptable

d) There is an active fly and beetle control program:

i) seasonally _____Adequate
ii) routinely, year round, according to written protocol _____Ideal

e) Birds have access to inside of barns or feed storage _____Unacceptable
f) Dogs, cats, or wildlife have access to inside of barns or feed storage ____Unacceptable
g) Feed spills are cleaned up immediately _____Ideal
h) Feed storage containers and delivery systems are not water-proof _____Unacceptable

Rodents, feral animals and birds can be sources of pathogens for poultry. Wild birds can transmit *Avian Influenza, Mycoplasma gallisepticum (MG)* and *Northern Fowl Mites,* and rodents can be carriers of *Fowl Cholera* and *Salmonella sp.*

Note: Outdoor production units cannot always control bird, pet, rodent, or wildlife access to poultry or poultry feed. Depending on location, producers with outdoor facilities should be aware of the need to be more cautious and more observant.

6) **Truck Traffic (Feed, Egg Collection etc)**

a) Service truck is dirty on arrival and is allowed entry _____Unacceptable
b) Service trucks are washed & sanitized before entering and leaving farm _____Ideal
c) Service trucks are greeted and inspected at the gate by a producer that enforces biosecurity protocols_____ Ideal

d) Driver wears clean company coveralls and new disposable booties or rubber pull-ons on each delivery _____Adequate
e) Feed driver enters poultry barns during deliveries _____Unacceptable
f) Feed driver and truck has clear, clean and dry access to feed bins _____Ideal
g) Feed driver and truck has to negotiate through mud and/or debris to access feed bins _____Unacceptable

h) Feed is delivered from a HACCP mill _____Ideal

Note: Producers should reject visibly dirty trucks and require them to be washed and disinfected prior to entering past the farm gate.

Vehicles can potentially transmit poultry pathogens when manure containing disease agents is adhered to tires or the vehicle frame. The majority of poultry pathogens are spread by contaminated vehicles and the movement of people.

7) **Tools and equipment**

a) Small tools are brought onto the farm without cleaning and disinfection _____Questionable
b) Equipment is brought onto the farm without cleaning and disinfection _____Unacceptable
c) All tools are cleaned and disinfected before being brought onto the farm _____Ideal
d) All tools and equipment are cleaned and disinfected when moving between farm buildings _Ideal
e) Tools and equipment are cleaned and disinfected before they leave the farm _____Ideal
f) Farm maintains its own sets of tools and equipment for repairs as much as possible _____Ideal

8) **Cleaning and disinfection**

a) On-farm biosecurity protocols are not enforced for catching & vaccinating crews __Unacceptable
b) Producer does not over see the clean-out procedure to finish _____Questionable

c) All birds are removed from barn before cleaning and disinfection _____Ideal
d) Barns are cleaned and disinfected in a 3 step process (litter removal, wash & disinfection) before new birds are placed _____Adequate

e) Medicators and dispensers are cleaned and disinfected after each use _____Adequate
f) Ceiling, walls, flooring, and equipment are all cleaned and disinfected between flocks __Ideal
g) Soap and hot water are used to remove all visible organic material before disinfectant is applied _____Ideal

h) There is a minimum of 10 days "downtime" between flock placements _____Adequate
i) There is a minimum of 21 days "downtime" between flock placements _____Ideal

j) Disinfectants are selected at random or "on sale" _____Questionable
k) Disinfectants are selected based on label claims _____Adequate

l) How would your grandmother rate your farms overall level of cleanliness:

i) You're not going anywhere until that's cleaned up properly _____Unacceptable
ii) Not bad, but try again _____Questionable
iii) Pass without the flying colours _____Adequate
iv) We're serving Sunday dinner on these floors, I'm so proud _____Ideal

The key to proper cleaning and disinfection is to first remove all visible manure from the room and equipment within that room. Hot water and detergents can make this job easier. Disinfection should occur only after all visible manure has been removed. Manure and organic debris can interfere with the effectiveness of some disinfectants. The diseases on your farm and the hardness of your water can also affect disinfectant efficacy. Paying attention to label claims for dilution and contact times and working with your veterinarian to check which disinfectant will work best in your situation and will help optimize disinfectant efficacy on your farm.

9) **Water sanitation**

a) Water quality is checked by a reputable laboratory:

i) sometimes, if I remember _____Unacceptable
ii) yearly _____Adequate
iii) Twice yearly _____Ideal

b) Water lines are sanitized between flocks _____Adequate
c) Water lines are sanitized between flocks and during production _____Ideal

d) There are no in-line water filters _____Questionable
e) Water filters are changed routinely based on written protocol _____Adequate

10) **Supply and Product Deliveries**

a) Delivery person observes all trucking and visitor biosecurity protocols _____Adequate
b) Delivery person sets packages in a designated location away from the barn _____Adequate
c) Producer greets deliveries and ensures biosecurity protocol is followed _____Ideal

11) **Employee concerns**

a) Employees have routine contact with other poultry species without following a written biosecurity protocol _____Unacceptable

b) Following contact with other questionable poultry species, employees have a minimum 24 hour "away time" requirement before re-entering the farm _____Ideal

c) It is explained to employees the consequences of coming in contact with off-farm poultry _____Adequate

d) Employees do repair work on other farms without following a written biosecurity protocol _____Unacceptable

e) Contractual employment agreement outlines biosecurity expectations _____Ideal

f) Biosecurity training is provided for employees _____Adequate
g) Annual biosecurity training is a mandatory condition of employment _____Ideal

h) Catching crews and vaccinators are greeted at the gate, directed to a designated parking area and provided with protective clothing and footwear _____Ideal
i) There is a designated clean and comfortable area for catching and vaccinating crews to assemble, take breaks and avoid returning to vehicles _____Ideal

12) **Visitor concerns**

a) "No Visitor" policy for non-essential visitors _____Ideal
b) Visitors are required to phone ahead and are greeted at the locked gate _____Ideal

c) Visitors wear clothing they have brought with them _____Unacceptable
d) Visitors must wash hands and wear farm provided clothing and footwear _____Adequate
e) Visitors must shower-in, shower-out and wear farm provided clothing _____Ideal

f) Visitor logs are kept, ALL visitors must sign-in:

i) sometimes _____Unacceptable
ii) always insisted upon and enforced _____Ideal

g) Visitors must park vehicles in a designated area _____Adequate
h) Visitors are not allowed to bring vehicles inside perimeter fence _____Ideal

13) **Multi-farm management**

a) Personnel move between farms without following a specific multi-farm management biosecurity protocol _____Unacceptable

b) Move between farms but change into disposable or dedicated outerwear at each site as outlined in the on-farm biosecurity protocol _____Adequate

c) Work only in single farm isolation, no contact with other poultry at any time _____Ideal

14) **Flock Health Management**

a) All-in all-out management is not practiced _____Questionable
b) Each barn is capable of all-in all-out management _____Adequate
c) All-in all-out management is strictly practiced _____Ideal

d) There are more than one species of bird on the farm _____Questionable

e) Birds are acquired from sources that DO NOT engage in a health program _____Unacceptable

f) Mortality is collected and recorded daily _____Adequate
g) Excess mortality or unexplained clinical signs are investigated within 24 hours _____Ideal
h) Excess mortality or unexplained production changes are not routinely investigated _____Unacceptable

i) The local Vet Lab is used when needed:

i) submitted by the producer _____Ideal
ii) submitted by a service rep _____Adequate
iii) never needed _____Unacceptable

14) **Flock Health Management (cont'd)**

j) There is active flock health monitoring through serology _____Adequate

k) I routinely analyze my mortality records, production data and feed/water consumption rate for signs of problems _____Ideal

l) Vaccination protocols are:

i) "routine" and unwritten _____Unacceptable
ii) administered or overseen by the producer _____Adequate

m) Vaccines are not stored or handled according to label requirements _____Unacceptable

n) Medication or vaccine brand name, serial number, date, storage conditions, application and expiry date are part of the written health record _____Ideal

o) Movement of birds on and off the farm is a component of the health records _____Ideal

p) There is NO pre-written "self-quarantine" protocol enacted upon the 1st suspicion of disease _____Unacceptable

q) I do not have an emergency after-hours phone number contact list _____Unacceptable

r) I have immediate access to the advice of a poultry health professional _____Adequate

s) I do not have a written vaccination or disease prevention program _____Unacceptable

t) My vaccination and disease prevention programs are a result of veterinary consultation _____Adequate

u) The written vaccination and disease prevention program is continually being updated as new information becomes available _____Ideal

15) **Continuing education**

a) I take every opportunity to attend industry meetings and educational seminars to keep updated on new developments in disease control _____Ideal

16) **Carcass disposal/ Manure management**

a) How far is your dead bird disposal or compost site from your barn(s)?

i) Less than 15 meters _____Questionable
ii) Between 15 and 100 meters _____Adequate
iii) Greater then 100 meters _____ Ideal

b) Carcasses are disposed of in a timely (<24hr) & appropriate manner as outlined in the on-farm biosecurity protocol _____Ideal

16) Carcass disposal/ Manure management (cont'd)

c) Carcasses are kept in an enclosure that prevents access by scavengers, pets, rodents or wildlife _____Adequate

d) Manure is composted or covered & stored >30 days before leaving farm _____Ideal

e) Manure transporters observe all trucking biosecurity protocols _____Ideal

f) Farm equipment used to haul manure is NOT cleaned and disinfected prior to reentering the farm _____ Questionable

g) Employees wear coveralls and boots designated for hauling manure and do not resume farm duties until they have washed their hands and/or showered, and are wearing clean clothing and boots _____Ideal

THE END

Thank you for taking the time to evaluate your current level of biosecurity. Hopefully it was able to provide insight into those areas that require corrective action.

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