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 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 1 km 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 than 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 deterremts (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

E) 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 ___________ Adequate

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

\[\text{d) Driver wears clean company coveralls and new disposable booties or rubber pull-ons on each delivery} \]

\[\text{_____________________________ Adequate}\]

\[\text{e) Feed driver enters poultry barns during deliveries} \]

\[\text{__________________________ Unacceptable}\]

\[\text{f) Feed driver and truck has clear, clean and dry access to feed bins} \]

\[\text{__________________________ Ideal}\]

\[\text{g) Feed driver and truck has to negotiate through mud and/or debris to access feed bins} \]

\[\text{________________________________ Unacceptable}\]

\[\text{h) Feed is delivered from a HACCP mill} \]

\[\text{_______________________________ Ideal}\]

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 oversee 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 farm’s 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

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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 than 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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