



March 2026

Raised by a Canadian Farmer On-Farm Food Safety Program (OFFSP)

PHYSICAL BARRIERS

Over the last four years, Highly Pathogenic Avian Influenza (HPAI) has caused widespread infections resulting in sector-wide impacts including economic losses associated with depopulation and other response activities, production issues, and trade restrictions.

During this on-going threat of HPAI, Chicken Farmers of Canada (CFC) has been re-assessing biosecurity programming by reviewing scientific literature and epidemiological reports on HPAI infections.

As a result of this review, CFC has determined that the minimum entrance requirements for barns should be increased. Specifically, CFC is removing the minimum allowance that the barrier between the Controlled Access Zone and the Restricted Area can be a “clearly identified line”. Instead, a physical barrier (e.g. a bench or a step-over) will be required to separate the Controlled Access Zone and the Restricted Area.

A “clearly identified line” is no longer sufficient given the risk of HPAI infections, the understanding of how viruses (e.g. Reovirus, IBH) and bacteria may enter the barn, and the impact that these pathogens have on the sector as a whole. Even if boot changes are done properly using a “clearly identified line,” this line does not prevent dust and debris, which can contain harmful viruses and bacteria, from contaminating the Restricted Area.

There are a number of ways that HPAI and other pathogens can enter a barn, either by physical movement (e.g. via personnel, equipment or pests) or through windborne spread. While there is no silver bullet solution to preventing viruses (e.g. HPAI, Reovirus) or bacterial infections from a food safety perspective (e.g. *Salmonella*, *Campylobacter*, *E. coli*), it is in the best interest of the sector to implement a properly designed and used physical barrier to limit these hazards to the flock.

Having a bench or a step-over that is wall-to-wall and flush to the floor is the best practice for minimizing organic material from the Controlled Access Zone contaminating the Restricted Area, and vice versa. When designed and used correctly, this is a great way to protect your flock.

IMPLEMENTATION DATE

Farmers are strongly encouraged to implement this new measure as soon as possible, prior to the next migratory season.

This program requirement will be mandatory and included as part of the OFFSP audit as of the beginning of A-204 (August 23, 2026). By this date, farms will need to have either implemented the physical barrier or have a written action plan for implementing the physical barrier.

With the understanding that this requirement may take longer to implement on some farms due to required structural changes, action plans and physical barriers will have until A-208 (April 4, 2027) to be completed.



RAISED BY A CANADIAN FARMER ON-FARM FOOD SAFETY PROGRAM PHYSICAL BARRIER ADDENDUM

Note: This addendum replaces the text and requirements in Chapter 2, Section 2.2 in the 2021 On-Farm Food Safety Program manual (page 2.3) that discusses the type of barrier at the separation between the Controlled Access Zone (CAZ) and the Restricted Area (RA). Specifically, this removes the allowance that the barrier between these two zones can be a “clearly identified line.”

2.2 SETTING UP THE RESTRICTED AREA INSIDE THE BARN

MD

Inside the barn workroom or entry, farmers are required to implement protocols to prevent contamination between the CAZ and the RA.

A physical barrier (e.g. bench or a step-over) must be used to maintain separation between the CAZ and the RA. This is commonly referred to as a “2-zone Danish entry” system. The physical barrier is to act as a visual reminder for biosecurity practices, to keep CAZ and RA footwear separate, and to prevent organic matter moving from one side to the other.

To be effective the physical barrier must:

- » Be flush to the floor to prevent cross contamination from one side to the other underneath the barrier;
- » Touch the wall on both sides to prevent people from walking around the barrier;
- » Allow enough room on the CAZ side for people to take off their outside gear (footwear, etc.) and enough room on the RA side for people to put on their RA gear (e.g. footwear, coveralls, etc.);
- » Be an appropriate height to 1) be a visual reminder of the need to perform biosecurity protocols, 2) require a step-over from one zone to the next and 3) prevent organic matter moving from one side to the other; and,
- » Not allow outdoor (CAZ) footwear to be worn inside the grow-out area. As such, the location of the physical barrier must not be inside the grow-out area.

Regardless of the physical barrier used, the change of footwear at the barrier between the CAZ and the RA must be done properly so as to prevent cross-contamination (e.g. by footwear, socks or feet) between the CAZ and the RA.

- » RA-specific footwear worn in the grow-out area must fully cover the foot/heel to minimize contamination risks.

The type of barrier and its use is to be described in the farms’ Standard Operating Procedures. Employees are to be given training on how to properly use the barrier.

When designing the barrier, be sure to consider the following points to allow egress in an emergency and to minimize trip and fall risks:

- » Ensure the physical barrier has visual warnings:
 - Barriers should have visual warnings (e.g. high visibility tape or paint) to call attention to the barrier.
 - Ensure there is proper lighting in the entrance room for everyday use.
 - Place signage on the outside of the door warning visitors that a physical barrier is present immediately inside the doorway.



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- » Ensure easy egress in an emergency:
 - The physical barrier should be easily moveable for ease of access in an emergency situation. Alternatively, a swing gate can be built into the physical barrier so as not to impede egress during an emergency.
 - There should be sufficient emergency lighting in the entrance room so that people can navigate the physical barrier safely in case of an emergency.
 - The type and location of the physical barrier should be included on the farm diagram so that farm workers, visitors and/or emergency personnel are aware of the barrier.
 - The barn is to continue meeting fire code requirements by having appropriate unimpeded egress exits on either side of the physical barrier (e.g. within 60m).
- » Limit the possibility of trips and falls:
 - A bench is the ideal option, as it is a better visual reminder to perform biosecurity measures and allows farm workers and visitors a place to sit and properly change their footwear to minimize the risk of cross-contamination.
 - A low barrier can be a tripping hazard. Ideally, the height of the barrier should be a minimum of 12-18" or higher to reduce this hazard.
 - The type of barrier used should be designed to account for accessibility issues and the mobility of farm workers.
- » Every entrance room is different. Consider how to best limit contamination in the CAZ area of the entrance room:
 - Outdoor footwear should be kept as far away as possible from the grow-out area. Ideally, the CAZ "dirty area" of the barn entrance should be as small an area as possible near the CAZ barn entrance door to limit the outside contamination in the entrance room and to allow for ease of cleaning on a regular basis.
 - If using a door threshold as the physical barrier, ensure that there are adequate separation measures in place (e.g. footwear location), that a step-over is required to prevent contamination between the two zones, and that it acts as a barrier to prevent organic matter moving from one side to the other.
 - As an added layer of protection, a specific set of entrance room footwear can be used when transitioning from outside (CAZ) footwear and prior to putting on RA-specific footwear; this will help to keep outside footwear farther away from the grow-out area.
 - The barrier should be built for ease of cleaning and disinfecting.

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When building a new barn or entrance room, the following are required to promote effective biosecurity protocols:

- » Design the entrance room to be large enough to allow enough room on the CAZ side for people to take off their outside gear (footwear, etc.) and enough room on the RA side for people to put on their RA gear (e.g. footwear, coveralls, etc.).
- » Design the entrance room with a bench as the physical barrier.

Prior to building or retrofitting a new entrance room, consider consulting your local building inspector.



CREATING A PHYSICAL BARRIER

BETWEEN THE CONTROLLED ACCESS ZONE (CAZ) AND THE RESTRICTED AREA (RA)

Working to keep viruses (e.g. HPAI, IBH, Reovirus, etc.) and bacteria (e.g. *Salmonella*, *Campylobacter*, *E. coli*) out of the RA via biosecurity at the entrance involves

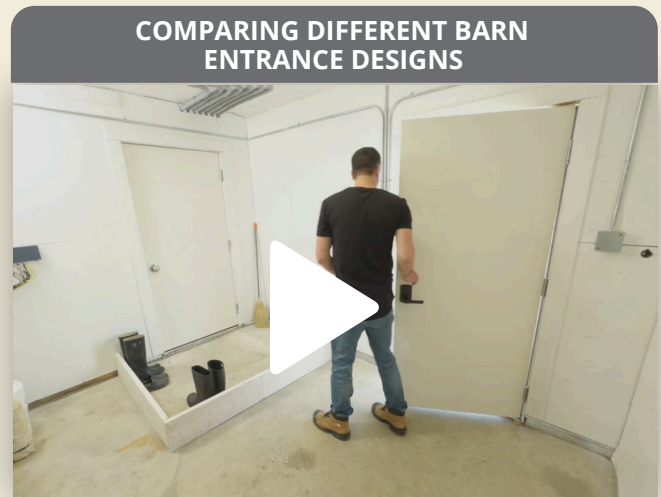
- 1) Having an effective physical barrier; and
- 2) Following the proper protocol to prevent contamination while changing footwear.

In many cases building a physical barrier will be straightforward. However, it is understood that this will be a larger change for some farms that will require more time and/or construction. There are many different solutions, as each barn will require its own design based on the amount of space and the entry protocol.

To help with this, a series of videos and factsheets are available that demonstrate the proper entrance protocol and different types of design options.

THE BARN ENTRY PROCESS WITH A PHYSICAL BARRIER

BARN ENTRY IN FOUR EASY STEPS!



THE PROCESS FOR PROPER BARN ENTRY

BARN ENTRY IN FOUR EASY STEPS!

A physical bench at the barn entry is a best practice and a demonstrated way to improve biosecurity compliance. The physical barrier should be:

- Flush to the ground to prevent air movement across from one side to the other, and
- Touching the wall on both sides to prevent people from simply walking around the barrier.

2-ZONE BARN ENTRY

Follow these steps to enter the barn and keep pathogens and viruses out!

1. Enter the barn and hang up your outerwear.
2. Remove your outdoor shoes without letting your soles touch the floor. Spin 180 degrees and put on the designated shoes immediately, without letting your soles touch the floor.
3. Wash your hands or apply disinfectant.
4. Put on your designated clothes or coveralls and you're ready for the barn!

PROTECT OUR FLOCKS!

WATCH THE VIDEO HERE!

chickenfarmers.ca

ENTRANCE DESIGNS FOR MULTI-STORY BARN

MULTI-STORY BARN IS A GOOD BARN ENTRY DESIGN POSSIBLE?

In North America – and specifically Canada – the poultry industry is now faced with a higher disease threat from Avian Influenza than in years past. Due to this increased disease risk, all stakeholders should critically analyze their biosecurity practices to be as prepared as possible.

An improved barn entrance design is one of the most impactful biosecurity changes that can be made on farms to prevent disease. But how can this be designed well with the limited entry space of multi-story barns?

General principles to remember:

- Keep what's in, in, and what's out, out – complete separation between the Controlled Access Zone (CAZ) and the Restricted Area (RA)
- A physical barrier between the CAZ and RA is ideal to ensure complete separation – Wait to walk
- Flush to the ground
- Tall enough (wood barriers) or wide enough (benches) to not be easily ignored
- Dirty boots stay on the dirty side (CAZ), clean boots stay on the clean side (RA)
- Socks should never touch the ground on either side of the barrier
- In a smaller space:
 - Limit the door opening over the line
 - Limit footwear going over the line when going from one floor to the other
 - Give enough space to get around the door

FOOTBATHS: HELPING OR HINDERING BIOSECURITY?

FOOTBATHS HELPING OR HINDERING BIOSECURITY EFFORTS?

FOOTBATHS ARE NEVER AN ADEQUATE REPLACEMENT TO BOOT CHANGES WHEN MOVING FROM THE CONTROLLED ACCESS ZONE (CAZ) TO THE RESTRICTED AREA (RA).

The OFSP requirement states that:

- Farm workers and all people entering the RA, after the barn has been cleaned and/or disinfected and during the grow-out period up to the point the entire flock is shipped from the barn, must take precautions not to carry pathogens from outside the barn into the barn by way of their boots. This can be accomplished by having a dedicated pair of boots at each barn or by another acceptable means (e.g. plastic disposable boots). This footwear change is to occur at the barrier between the CAZ and the RA. A footbath is not an acceptable method of decreasing the risk of contamination.

Having dedicated RA boots is the only way to ensure that boots from the CAZ environment don't bring bacteria or viruses into the RA and in contact with your flock.

WHAT'S THE PROBLEM WITH FOOTBATHS?

Footbaths are sometimes used to sanitize boots before entering the barn in an effort to reduce the viral and/or bacterial load on footwear!

However, because footbaths are difficult to maintain and use correctly, they may actually act as a reservoir for pathogens.

If footbaths are in use on your farm, it's important to follow the specific product recommendations for the proper mixing guidelines, contact times, and footbath solution changes.

Footbaths are hard to maintain and use effectively due to the product's specific recommendations. These include:

- Scrubbing your boots so they are free of organic material before stepping into the footbath.

Version 1.0

EXAMPLES OF EFFECTIVE PHYSICAL BARRIERS:



- » These barriers extend from wall to wall so people can't walk around the barrier.
- » These barriers are flush to the ground to prevent dust and debris, which can contain harmful viruses and bacteria, from contaminating the RA.
- » The CAZ footwear and RA footwear can't touch each other underneath these barriers.
- » Several of these barriers incorporate a bench for people to sit and change their footwear – which is an excellent practice to help reduce the risk of cross-contamination.
- » When used correctly, dirty boots stay on the dirty side and clean boots on the clean side, while socks don't touch the ground on either side of the barrier.

EXAMPLES OF NON-EFFECTIVE PHYSICAL BARRIERS:



- » Some of these barriers don't extend from wall to wall, making it easy for people to avoid using the barrier or changing footwear.
- » These barriers are open underneath the seat (i.e. they are not flush to the ground). As a result, dust and debris, which can contain harmful viruses and bacteria, can contaminate the RA.
- » With these barriers open underneath the seat, the CAZ footwear and RA footwear are stored very close to each other, making it easier for contamination to move between the two zones.