



Canadian Pork Council
Conseil canadien du porc



CANADIAN SWINE BIOSECURITY GUIDELINE



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INTRODUCTION



What is the Canadian Swine Biosecurity Guideline (CSBG)?

The **Canadian Swine Biosecurity Guideline (CSBG)** is a comprehensive resource designed to help pork producers safeguard the sanitary status of the Canadian pork industry. It highlights practices that will help minimize the risks of introducing and spreading disease within the herd, as well as spreading disease to other herds, and underlines the impact of disease on animal health, welfare and industry sustainability.

The guideline gives producers the ability to protect their herds and related industries for example, from Foreign Animal Diseases (FAD) prevention. **The Canadian Swine Biosecurity Guideline (CSBG) has two key components:**

1. **Best Biosecurity Practices and Procedures**

The guideline outlines best practices and procedures aimed at preventing the spread of disease and ensuring the health and welfare of swine herds across Canada.

2. **Benchmark Tool**

This tool is designed to help producers assess biosecurity levels on their farms, which assists in identifying areas for improvement and strengthening overall biosecurity.

These two components complement each other. While they share a similar structure, they each have distinct objectives.

CSBG Objectives

The key objective of the **Best Biosecurity Practices and Procedures** component is to protect the health and welfare of the Canadian swine herd. The objectives are:

▶ **Minimizing Disease Risk**

Preventing disease introduction into a herd, disease spread within a herd, and disease spread to other herds.

▶ **Supporting Employee Training**

Providing training tools to help employees implement the best biosecurity practices.

▶ **Promoting Sustainable Biosecurity Practices**

While helping to reduce the incidence of disease, these best practices contribute to decreasing the need for antimicrobial treatments on farms.

The Benchmark Tool has three key objectives:

- ▶ **Assessing Biosecurity Practices**
Providing a Biosecurity Assessment Tool for producers, veterinarians, and other stakeholders to evaluate on-farm biosecurity practices.
- ▶ **Providing Educational Resources**
Supporting both learning and real-world application of biosecurity measures on the farm.
- ▶ **Enhancing Biosecurity Planning**
Improving day-to-day biosecurity practices on the farm, with a focus on continuous improvement.

The Canadian Swine Biosecurity Guideline (CSBG) and the Benchmark Tool, were developed by a range of industry stakeholders, including the members of the Provincial Pork Organizations, the Canadian Pork Council (CPC), swine veterinarians, researchers, and the Canadian Food Inspection Agency (CFIA). The guideline will be regularly updated to reflect emerging risks and best practices.

Biosecurity Guideline Scope

The Canadian Swine Biosecurity Guideline **applies to all types of pig production in Canada** (farrow to finish, indoor and outdoor production, single-site and multi-site operations, small and large scale producers). The Practices and procedures outlined in the CSBG serve to counter pathogens that cause disease in swine as well as those affecting food safety and human health.



Biosecurity Definition and Categories

The Canadian swine industry defines biosecurity as a set of measures and procedures designed to protect pig populations from the introduction and spread of pathogens within and outside the herd.

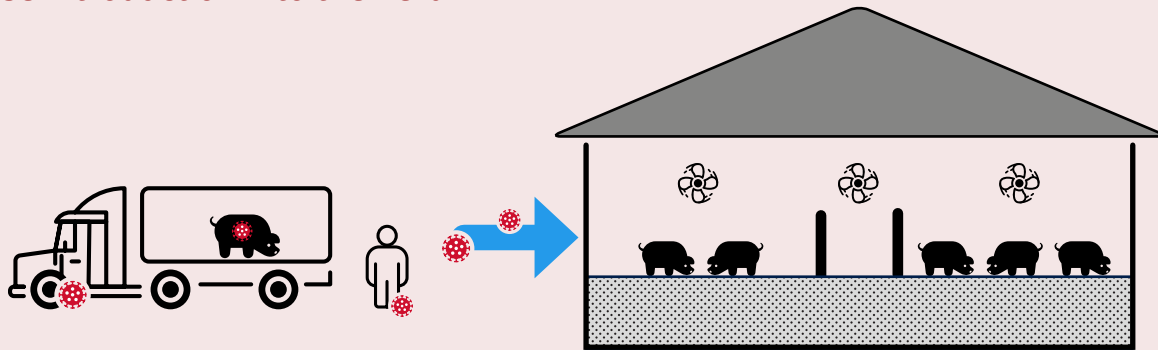
| BIOSECURITY CATEGORIES | IT REDUCES THE RISK OF: |
|-------------------------|--|
| EXTERNAL BIOSECURITY | Introducing disease into the herd |
| INTERNAL BIOSECURITY | Spreading disease within the herd |
| CONTAINMENT BIOSECURITY | Releasing and spreading disease to other herds |

BIOSECURITY CATEGORIES

EXAMPLES OF CONTAMINATION ROUTES

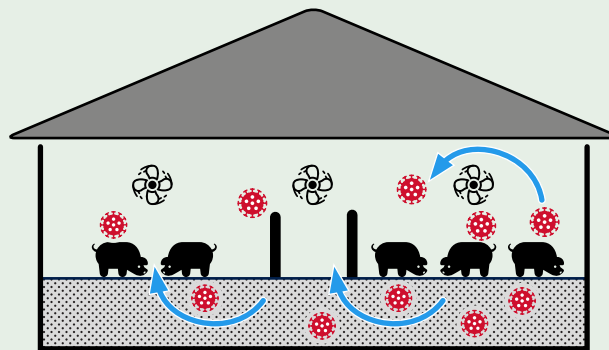
EXTERNAL BIOSECURITY

Disease introduction into the herd



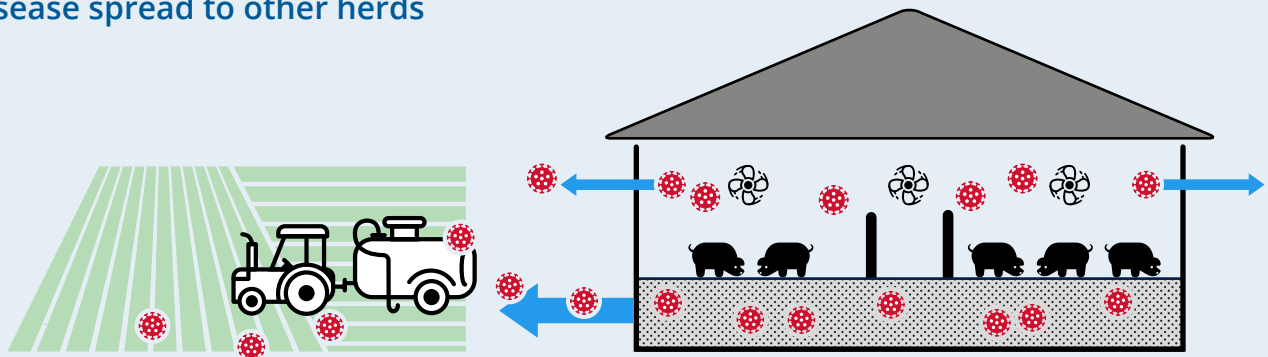
INTERNAL BIOSECURITY

Disease spread within the herd



CONTAINMENT BIOSECURITY

Disease spread to other herds

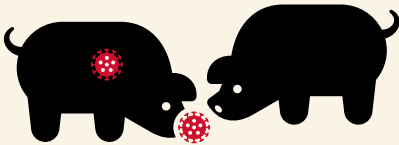


WHAT ARE CONTAMINATION ROUTES?

Contamination routes are the ways diseases can enter and spread on a farm or between farms. These routes explain how pathogens like bacteria and viruses move from place to place, whether through direct or indirect contact, or through the air.

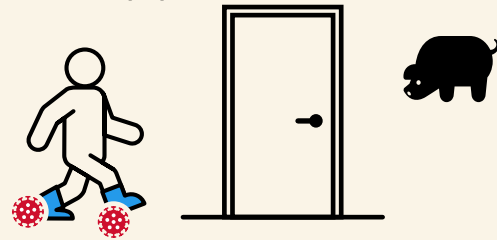
DIRECT CONTAMINATION

Pathogens travel between infected and non-infected pigs through pig-to-pig contact, e.g. nose to nose, feces.



INDIRECT CONTAMINATION

Disease spreads from sick pigs to healthy ones through carriers like rodents, insects, or contaminated items like people, boots, tools, or equipment.



AIRBORNE CONTAMINATION

WHEN ANIMALS BREATHE IN PATHOGENS

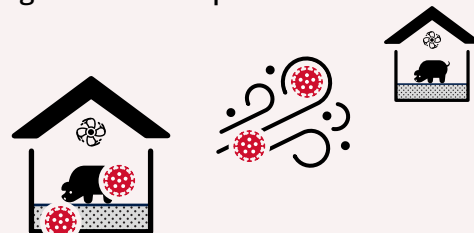
AIRBORNE DROPLETS

(>5 microns - Short distance <1 metre)
Larger liquid particles from a pig's cough or sneeze that can travel short distances (generally less than 1 metre). They can infect nearby pigs or land on surfaces. It usually affects the upper airways.



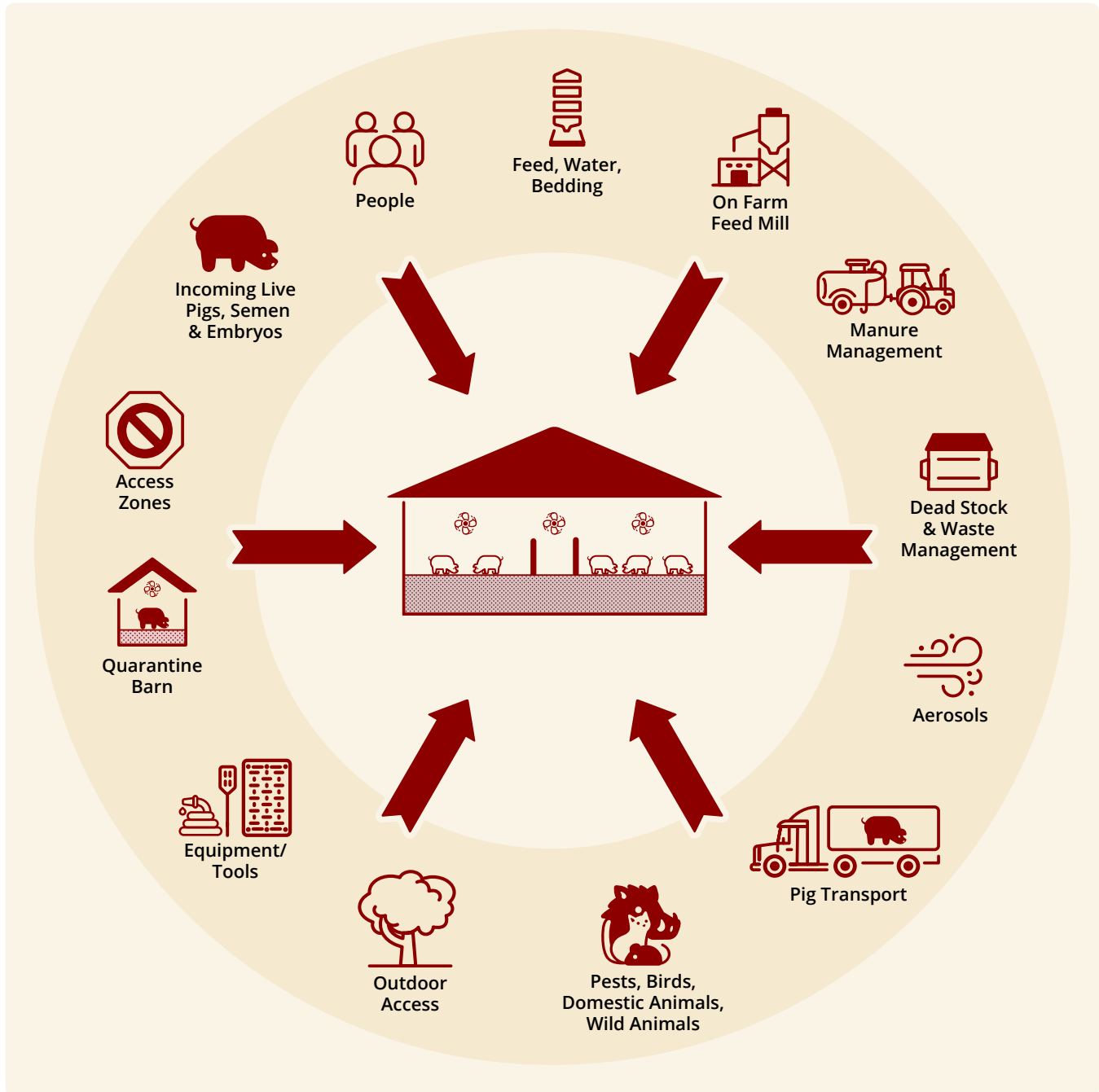
AIRBORNE AEROSOLS

(<5 microns - Long distance >1 metre)
Very tiny particles that stay in the air for a long time and can travel more than 1 metre. They can carry pathogens and can reach deep into the lungs. Aerosols can come from things like dried-up droplets or dust with viruses or spores, and may cause infections over longer distances up to a few kilometers.



EXTERNAL BIOSECURITY

THE DIFFERENT CONTAMINATION ROUTES FOR PATHOGENS TO ENTER A BARN

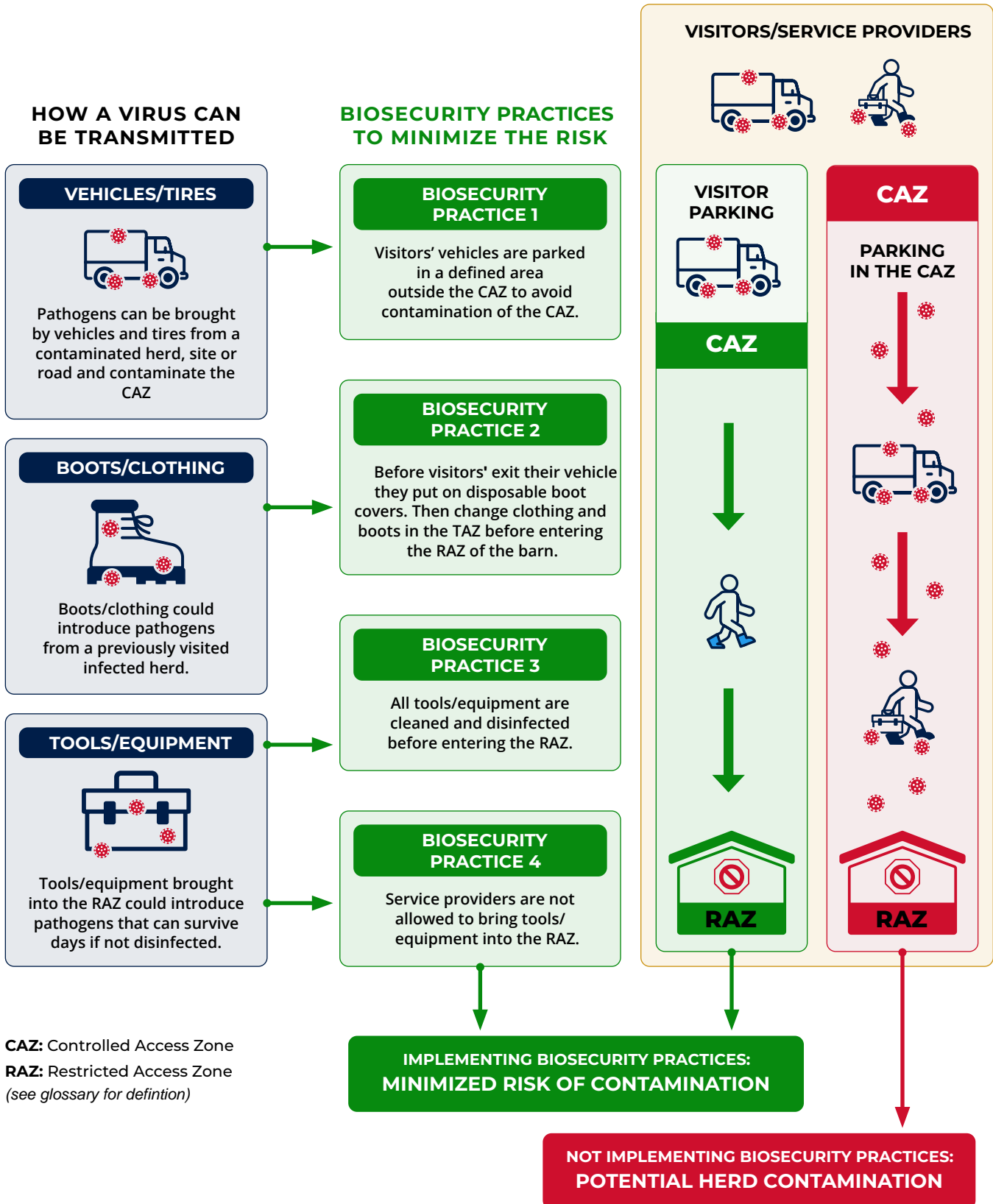


The way pathogens enter a herd can vary significantly. Some require direct contact between pigs, while others can be transmitted through the air.

Each farm has unique characteristics and management styles. This is why it is essential to tailor biosecurity practices on the specific pathogens being targeted.

POTENTIAL HERD CONTAMINATION EXAMPLE

Example of a risk factor (visitors and service providers), the associated contamination route, the risk situation it creates and the corresponding biosecurity practice to reduce the risk.



How to Use the Canadian Swine Biosecurity Guideline

1. Structure

- ▶ The guideline contain 14 modules, each identifying a category of contamination routes (pathways) that could impact biosecurity. The modules provide details on biosecurity levels to achieve best practices. Together, they help explain how diseases are introduced and spread to other pigs and herds.

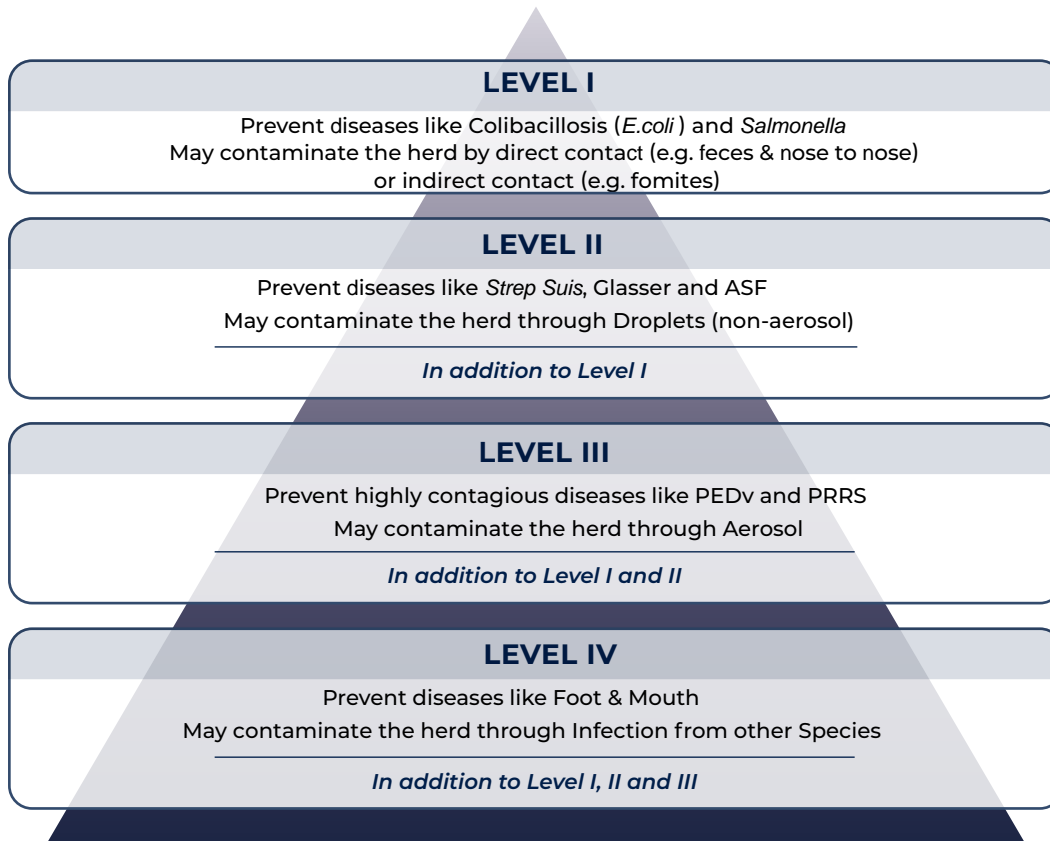
2. Modules

- ▶ Each module provides key information for a better understanding and implementation of biosecurity measures:
 - **Definitions and abbreviations:** Learn or refresh your knowledge on biosecurity concepts and acronyms used throughout the guideline.
 - **Standard Operating Procedures (SOPs):** These are templates that outline step by-step procedures to help implement biosecurity measures.
 - **Factsheets:** Refer to additional science-based documents that provide useful insights and best practices for that specific biosecurity topic.

3. Levels

- ▶ The Best Biosecurity Practices, Procedures and the Benchmark Tool are structured into four levels.
- ▶ Each level is primarily measured based on the contamination route while also taking into consideration the ease of transmission (how contagious it is) and the pathogen's impact on animal health following its introduction into the herd, such as morbidity and mortality rates.

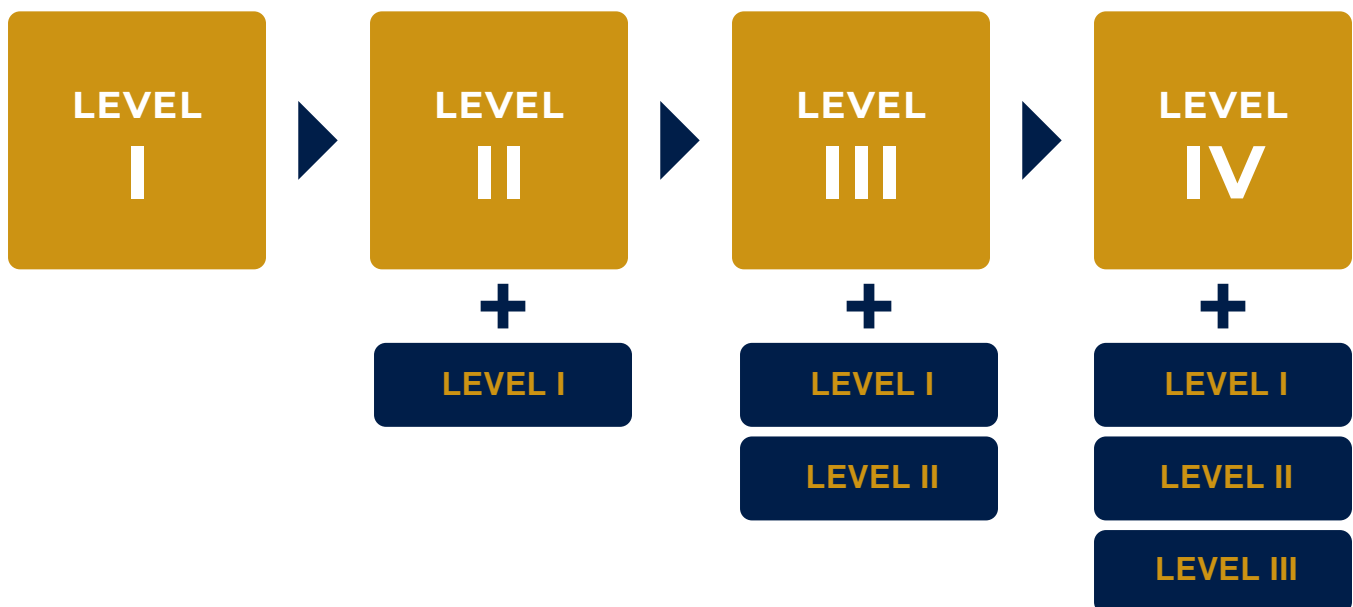
The graphic below presents the four (4) Biosecurity Levels with examples of Pathogens and Contamination Routes.



4. The Benchmark Tool

- ▶ The benchmark tool uses the same best biosecurity practices found in each module of the guideline, along with the corresponding biosecurity levels: I, II, III and IV.
- ▶ The benchmark tool's main differences are that:
 - Each practice is given a score (or weight) based on the impact if the practice is not implemented, as estimated by;
 - a. the chance of introducing a disease, and
 - b. the consequences on the animal health.
 - Practices are scored as follows:
 - » 2 points for low risk
 - » 5 points for medium risk
 - » 10 points for high risk
 - » 10 points for pass/fail
 - Some pathways of contamination are deemed critical and are scored 10 points pass/fail, which means a site has to apply this practice successfully to achieve the level.

To pass a level and move to the next level, a site has to achieve a *minimum score of 75% and all pass/fail practices*. For example, to reach Level III, a site has to successfully complete Level I AND Level II first.



Using the **Canadian Swine Biosecurity Guideline** and the **Benchmark Tool** can help to effectively safeguard your farm(s) from disease outbreaks, enhance animal health and welfare, and contribute to the overall sustainability of the Canadian pork industry.



BEST BIOSECURITY PRACTICES

The following sections include only the External Best Biosecurity Practices.

The Internal and Containment Best Biosecurity Practices and Benchmarks are coming soon.

| MODULE | CATEGORIES OF BIOSECURITY | | |
|---|---------------------------|-------------|----------|
| 1 Access Zones | EXTERNAL | CONTAINMENT | INTERNAL |
| 2 People | EXTERNAL | CONTAINMENT | INTERNAL |
| 3 Live Pigs, Semen & Embryos | EXTERNAL | CONTAINMENT | INTERNAL |
| 4 Quarantine | EXTERNAL | CONTAINMENT | INTERNAL |
| 5 Feed, Water, Bedding & Air | EXTERNAL | CONTAINMENT | INTERNAL |
| 6 Fomites | EXTERNAL | CONTAINMENT | INTERNAL |
| 7 Pests, Birds & Other Animals | EXTERNAL | CONTAINMENT | INTERNAL |
| 8 Manure Management | EXTERNAL | CONTAINMENT | INTERNAL |
| 9 Mortality and Garbage Disposal | EXTERNAL | CONTAINMENT | INTERNAL |
| 10 Swine Transport | EXTERNAL | CONTAINMENT | INTERNAL |
| 11 Outdoor Access and Multiple Species | EXTERNAL | CONTAINMENT | INTERNAL |
| 12 Barn Flow <i>(coming soon)</i> | EXTERNAL | CONTAINMENT | INTERNAL |
| 13 Sanitation <i>(coming soon)</i> | EXTERNAL | CONTAINMENT | INTERNAL |
| 14 Disease Prevention & Management <i>(coming soon)</i> | EXTERNAL | CONTAINMENT | INTERNAL |

BEST PRACTICES FOR

Access Zones



Definitions

CAZ – CONTROLLED ACCESS ZONE

The controlled access zone is a defined area outside of the barn where access and activity need to be managed to ensure the farm's biosecurity. It is the first line of defence and is shaped to provide a buffer around the barns.

RAZ – RESTRICTED ACCESS ZONE

Inside of the barn is considered a Restricted Access Zone. This zone forms the most crucial line of defence for preventing the spread of disease to pigs.

TAZ – TRANSITION ACCESS ZONE

The Transition Access Zone is a defined zone where biosecurity practices are applied to everything (e.g. people, live and dead animals, fomites, equipment, etc.) before entering a biosecurity zone like the RAZ and/or CAZ. Some farms may have more than one TAZ.

OUTDOOR RESTRICTED ACCESS ZONE (RAZ)

An outdoor restricted access zone is an area accessible to pigs raised in barns with outdoor access. It forms part of the overall Restricted Access Zone (RAZ). As pigs move freely between the indoor and outdoor spaces, the Outdoor RAZ is considered an extension of the indoor RAZ. This area must be designed to prevent direct contact such as nose-to-nose interaction with wild animals to reduce the risk of disease transmission.



Factsheets

- ▶ ACCESS ZONES: CAZ TAZ RAZ

ACCESS ZONES

CAZ

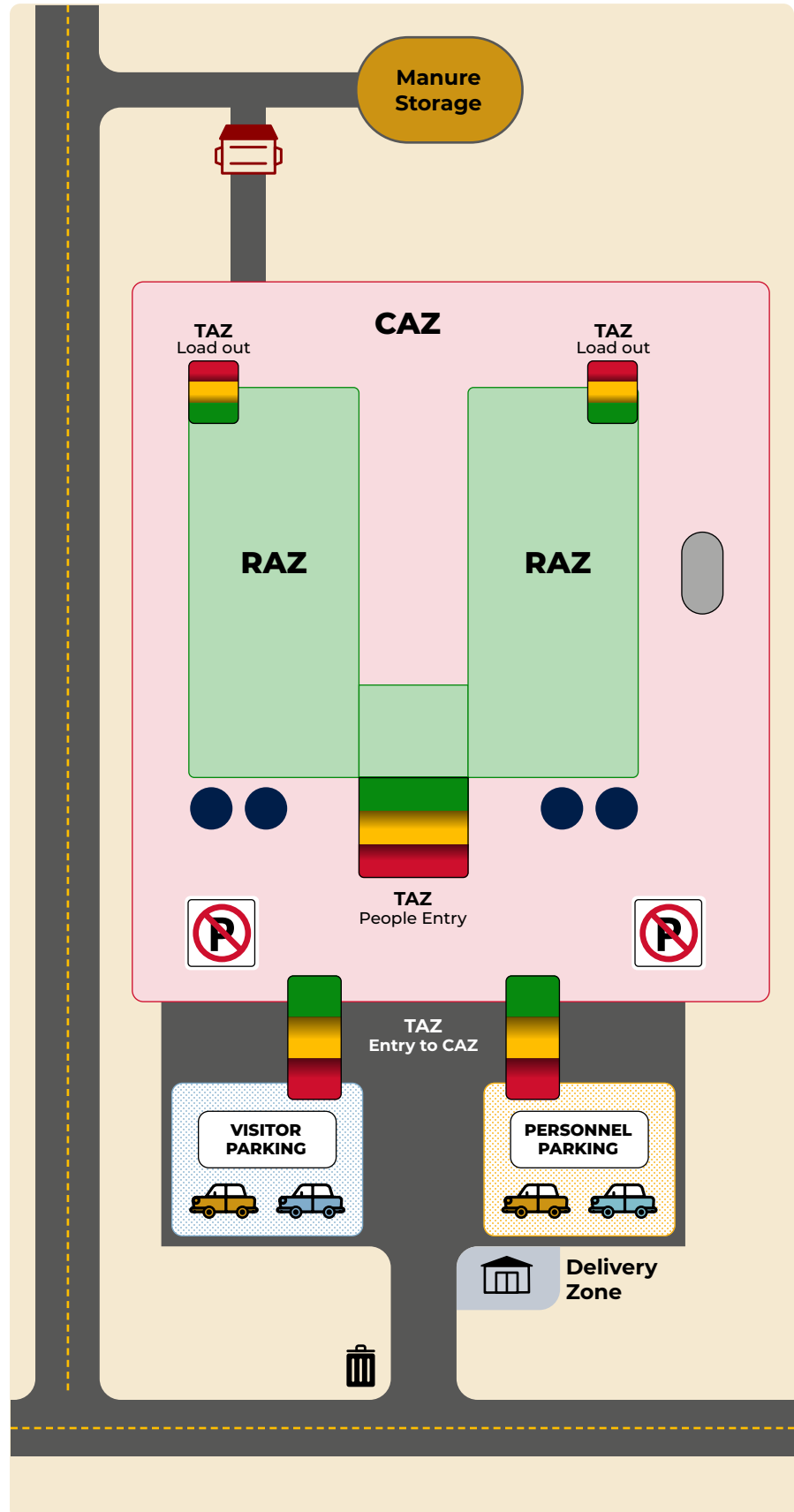
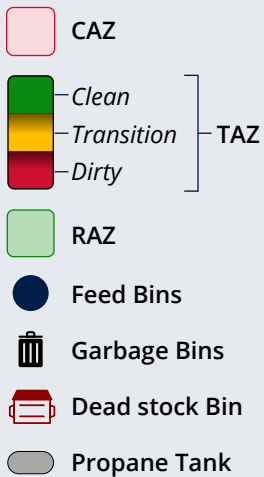
The Controlled Access Zone (CAZ) is a defined area outside of the barn where access and activity need to be managed to ensure the farm's biosecurity. It is the first line of defence and is shaped to provide a buffer around the barns. Only essential farm vehicles and people have access to the CAZ.

TAZ

The Transition Access Zone (TAZ) is a defined zone separating the CAZ and RAZ. Some farms may have more than one TAZ. It is where biosecurity procedures are applied to everything (e.g. people, live and dead animals, fomites, equipment, etc.) before entering a biosecurity zone (CAZ and/or RAZ).

RAZ

Inside of the barn is considered a Restricted Access Zone (RAZ). This zone forms the most crucial line of defence for preventing the spread of disease to pigs.



ACCESS ZONES

| | |
|-------------------------|---|
| <p>LEVEL I</p> | <p>A written Farm Map has been developed and implemented, and delineates the following:</p> <ul style="list-style-type: none"> • Controlled Access Zone (CAZ) • Transition Access Zone (TAZ) • Restricted Access Zone (RAZ) <ul style="list-style-type: none"> › Including Outdoor RAZ for barns with Outdoor Access (if applicable) <hr/> <p>The site keeps all barn doors locked when there are no personnel on site</p> |
| <p>LEVEL II</p> | <p>The written Farm Map has been shared with visitors and service providers prior to the site visit. The farm map includes the following elements:</p> <ul style="list-style-type: none"> • Boundaries for CAZ, TAZ, RAZ • Parking area(s) for personnel and visitors • Feed bins • Water source: Well, dugout, pond • Manure storage/lagoon • Dead stock disposal location • Garbage containers • Delivery area <hr/> <p>All barn doors are locked during working hours and personnel can be contacted.</p> |
| <p>LEVEL III</p> | <p>All barn doors are locked at all times and personnel can be contacted</p> <hr/> <p>There is a dedicated parking area for personnel and visitors clearly identified with signage indicating:</p> <ul style="list-style-type: none"> • No parking in front of the RAZ's main entrance. • No parking in front of the exhaust fans. |
| <p>LEVEL IV</p> | <p>There is a dedicated personnel parking area outside the CAZ year-round</p> <hr/> <p>Visitors are required to park their vehicles outside the CAZ year-round</p> <hr/> <p>A full perimeter fence (suitably robust) is installed to protect the CAZ</p> |

BEST PRACTICES FOR

People

Definitions

PASSTHROUGH SHOWER

A properly designed passthrough/corridor shower requires an entry into the shower from one side, with an exit on the opposite side. The passthrough shower ensures that all outer clothing is removed and remain on the dirty side, and that people complete full-body sanitation prior to crossing into the clean zone. The shower is clean, provides warm water, soap, shampoo, clean towels and barn-specific clothing.

PERSONNEL

All individuals including family members and hired help working full or part-time.

PREMISES / SITE / PID (PREMISES IDENTIFICATION)

A premises is a parcel of land, defined by a certificate of title, on which livestock or poultry are grown, kept, assembled, or disposed of. A premises can also be referred to as a site or PID and assigned a PID number.

VISITORS (includes services providers)

Farm visitors include, but are not limited to, any third party or external person, such as neighbours, friends, auditors, other producers, electricians, plumbers, ventilation system mechanics, farm crew (sanitation crew, vaccination crew, loading crew, etc.) or animal health-related services (veterinarian, agrologist, technician, etc.).

Factsheets

- ▶ Transition Access Zone (TAZ)

Template for Standard Operating Procedure (SOP)

- ▶ Personnel & Visitor Entry SOP
- ▶ Individuals Who Have Contact with Other Pigs

TRANSITION ACCESS ZONE (TAZ)

The **Transition Access Zone (TAZ)** between the CAZ and the RAZ, is either a Two-Area Entry or Three-Area Entry and includes the following elements:

- ▶ **A dirty area:** where outdoor footwear and clothing are removed.
- ▶ **A transition area:** A clear line of separation between the dirty and clean area that has to be stepped over or stepped on, depending on the level.
- ▶ **A clean area:** where barn footwear and clothing are put on.

Two-Area Entry

A Transition Access Zone (TAZ) that is divided into two distinct areas:

1. Dirty area (outside area)
2. Clean area (inside area)

1. Outdoor footwear and clothing should be removed on the dirty side of the TAZ. Socks/bare feet must not touch the floor of the dirty side.

- ▶ There is a clear line of separation between the dirty area and clean area of the TAZ with a **knee-high physical barrier that has to be stepped over**.
- ▶ The personnel and visitors entering are provided with hand sanitizer or water and soap to **wash their hands**, or provided with new gloves.



2. In the clean area, **barn dedicated footwear / disposable boots and dedicated clothing** are provided.
- ▶ It is recommended to use non-porous surface construction materials that are easy to clean.

Three-Area Entry

A Transition Access Zone (TAZ) that is divided into three distinct areas:

1. Dirty area (outside area)
2. Changing area
3. Clean area (inside area)

1. Outdoor footwear and clothing are removed on the dirty side of the TAZ. Socks/bare feet must not touch the floor of the dirty side.

- ▶ There is a clear line of separation between the dirty area and the changing area of the TAZ with a **knee-high physical barrier that has to be stepped over**

2. **Changing area / shower area** (if applicable): Personnel and visitors entering are provided with a hand sanitizer or water and soap to wash their hands, or provided with gloves.

- ▶ **If there is a shower area**, it is a passthrough/ corridor shower. The shower is clean, provides warm water, soap/shampoo, clean towels.



3. There is a clear line of separation between the changing area and clean area of the TAZ. Once in the clean area, **barn dedicated footwear / disposable boots & dedicated clothing** are provided
- ▶ It is recommended to use non-porous surface construction materials that are easy to clean.

PERSONNEL

LEVEL I

Personnel Training:

- All personnel have been trained on applicable biosecurity practices before starting to work alone
- Personnel sharing accommodations with personnel from another site are trained on the biosecurity practices to follow
- Measures are implemented when **shared farm personnel** are entering the CAZ and RAZ

The site management has a **Personnel & Visitors Entry SOP** for anyone entering and exiting the **Controlled Access Zone (CAZ)**, the **Transition Access Zone (TAZ)** and the **Restricted Access Zone (RAZ)**:

The **Personnel & Visitors Entry SOP** is implemented and includes the following elements:

- Visitors entering the CAZ put on disposable boot covers, or clean and dedicated footwear prior to exiting the vehicle.
- The TAZ is **either a 2-area entry or 3-area entry** and includes:
 - › Removing outdoor footwear and clothing
 - › A physical barrier to step over/ step on
 - › Hand wash station or hand sanitizer
 - › Barn-dedicated clothing
 - › Barn-dedicated footwear

A written SOP is implemented for personnel **who have contact with other pigs outside of work and/or wild pigs** (e.g. pigs from another flow/pyramid, pet pigs, home butchering, hunting and livestock fairs)

There are measures in place to control the entry of **meat products** (such as dried, cured, raw) at the entrance of the RAZ for personnel and visitors

Personnel have access to an **onsite washroom** either in the barn or in a facility outside of the barn

PERSONNEL

LEVEL II

If personnel from multiple sites share transportation means, measures are implemented to mitigate the risk of cross-contamination.

The site management has a **written Personnel & Visitors Entry SOP** for anyone entering and exiting the **Controlled Access Zone (CAZ)**, the **Transition Access Zone (TAZ)** and the **Restricted Access Zone (RAZ)**:

The **Personnel & Visitors Entry SOP** is implemented and includes the following elements:

- Visitors are made aware of the entry measures prior to their arrival.
- Visitors entering the CAZ put on disposable boot covers, or clean and dedicated footwear prior to exiting their vehicle.
- The TAZ is **either a 2-area entry or 3-area entry** and includes:
 - › Removing outdoor footwear and clothing
 - › A solid **stepover knee-high physical barrier** *or* a **passthrough shower**
 - › Hand wash station or hand sanitizer
 - › Barn-dedicated clothing
 - › Barn-dedicated footwear

LEVEL III

Personnel Training:

All personnel have been trained on applicable biosecurity measures prior to starting work and are trained annually on applicable biosecurity measures.

The site management has a **written Personnel & Visitors Entry SOP** for anyone entering and exiting the **Controlled Access Zone (CAZ)**, the **Transition Access Zone (TAZ)** and the **Restricted Access Zone (RAZ)**:

The **Personnel & Visitors Entry SOP** is implemented and includes the following elements:

- Visitors are made aware of the entry measures prior to their arrival.
- All **personnel and visitors entering the CAZ** put on disposable boot covers, or clean and dedicated footwear prior to exiting their vehicle.
- Visitors are accompanied by barn personnel when entering the RAZ.
- The TAZ is a **3-area entry** and includes:
 - › Removing outdoor footwear and clothing
 - › A solid **stepover knee-high physical barrier, AND**
 - › A **passthrough shower** that is clean, has warm water, provides soap/shampoo, and clean towels.
 - › Barn-dedicated clothing
 - › Barn-dedicated footwear
 - › **Visual prompts** explaining the measures in each section of the TAZ.

PERSONNEL

| | |
|-------------------------|---|
| <p>LEVEL III</p> | <p>If personnel and/or swine health providers (e.g. Veterinarian) have contact with pigs outside of work and/or wild pigs (e.g. pigs from another pig flow/pyramid, pet pigs, home butchering, hunting, and livestock fairs), a written SOP is implemented, and these measures are followed:</p> <ul style="list-style-type: none"> • Allow for at least 24 hours downtime following contact with domestic pigs and 2 days downtime following international contact with pigs. • Utilize a passthrough shower for showering in. <hr/> <p>A Personnel Logbook is kept on-site and all personnel who enter the RAZ are logged daily.</p> <p>The logbook includes the following elements:</p> <ul style="list-style-type: none"> • Date of visit • Time of visit • Name • Date of previous pig contact <hr/> <p>Personnel Entry / Exit Measures:</p> <ul style="list-style-type: none"> • Site management has implemented measures for sick personnel and visitors (including the site manager) (e.g. People with flu-like symptoms wear a mask and gloves) • The site does not share personnel with other sites outside the pig flow/pyramid • Measures are in place to control the entrance of personal belongings into the RAZ (such as lunch kits, glasses, phones, etc.) |
| <p>LEVEL IV</p> | <p>Personnel Entry / Exit Measures:</p> <ul style="list-style-type: none"> • Sick personnel and visitors (e.g. flu-like symptoms) are not allowed to enter the RAZ • Personnel who share accommodations only share with personnel from the same site, pig flow or pyramid • The site does not share personnel with other sites outside the pig flow/pyramid and a vehicle hierarchy flow based on each site's health status is implemented and developed with a licensed swine veterinarian. |

VISITORS

VISITORS (Includes Services Providers)

Farm visitors include, but are not limited to, any third party or external person, such as neighbours, friends, auditors, other producers, electricians, plumbers, ventilation system mechanics, farm crew (sanitation crew, vaccination crew, loading crew, etc.) or health-related services (veterinarian, agrologist, technician, etc.).

LEVEL I

Site management has a **Personnel and Visitors Entry SOP** for anyone entering and exiting the **Controlled Access Zone (CAZ)**, the **Transition Access Zone (TAZ)** and the **Restricted Access Zone (RAZ)**:

The **Personnel and Visitors Entry SOP** is implemented and includes the following elements:

- Visitors entering the CAZ put on disposable boot covers, or clean and dedicated footwear prior to exiting their vehicle.
- The TAZ is **either a 2-area entry or 3-area entry** & includes:
 - › Removing outdoor footwear and clothing
 - › A physical barrier to step over/ step on
 - › Hand wash station or hand sanitizer
 - › Barn-dedicated clothing
 - › Barn-dedicated footwear

Deliveries (e.g. semen, medical supplies) are completed outside the CAZ or if the deliveries are inside the CAZ, measures are implemented to minimize cross-contamination

A **Visitor Logbook** is kept on-site and all visitors who enter the RAZ **are logged daily**. The logbook includes the following elements:

- | | |
|-----------------|---|
| • Date of Visit | • Phone number |
| • Time of Visit | • Date of previous pig contact |
| • Visitor Name | • Has the visitor travelled outside Canada in the last 5 days |

VISITORS

LEVEL II

Site management has a **written Personnel and Visitors Entry SOP** for anyone entering and exiting the **Controlled Access Zone (CAZ)**, the **Transition Access Zone (TAZ)** and the **Restricted Access Zone (RAZ)**:

The **Personnel and Visitors Entry SOP** is implemented and includes the following elements:

- Visitors are made aware of the entry measures prior to their arrival
- All visitors entering the CAZ put on disposable boot covers, or clean and dedicated footwear prior to exiting the vehicle.
- The TAZ is either a 2-area entry or 3-area entry & includes:
 - › Removing outdoor footwear and clothing
 - › A solid **stepover knee-high physical barrier or a passthrough shower**
 - › Hand wash station or hand sanitizer
 - › Barn-dedicated clothing
 - › Barn-dedicated footwear

RAZ Entry / Exit Measures:

- Visitors (including service providers and farm crew, etc.) going to multiple sites are required to follow the flow between sites based on health status.
- Visitors are accompanied by barn personnel when entering the RAZ.

VISITORS

| | |
|-------------------------|---|
| | <p>Site management has a written Personnel and Visitors Entry SOP for anyone entering and exiting the Controlled Access Zone (CAZ), the Transition Access Zone (TAZ) and the Restricted Access Zone (RAZ):</p> <p>The Personnel and Visitors Entry SOP is implemented and includes the following elements:</p> <ul style="list-style-type: none"> • Visitors are made aware of the entry measures prior to their arrival. • All personnel and visitors entering the CAZ put on disposable boot covers, or clean et dedicated footwear prior to exiting their vehicle. • Visitors are accompanied by barn personnel when entering the RAZ. • The TAZ is a 3-area entry and includes: <ul style="list-style-type: none"> › Removing outdoor footwear and clothing. › A solid stepover knee-high physical barrier, AND › A passthrough shower that is clean, has warm water, provides soap/shampoo, and clean towels. › Barn-dedicated clothing › Barn-dedicated footwear › Visual prompts explaining the measures in each section of the TAZ. |
| <p>LEVEL III</p> | <p>If visitors have contact with pigs and/or wild pigs (e.g. pigs from another flow/pyramid, pet pigs, home butchering, hunting and livestock fairs), a written SOP is implemented, and these measures are followed:</p> <ul style="list-style-type: none"> • Allow for at least 3 days downtime following contact with domestic pigs and 5 days downtime following international contact with pigs. • Utilize a passthrough shower for showering in. |
| | <p>RAZ Entry / Exit Measures:</p> <p>A Visitor Logbook is kept on site and visitor entry to the RAZ is logged daily. The logbook includes the following elements:</p> <ul style="list-style-type: none"> • Date of visit • Date of previous pig contact • Time of visit • Has the visitor travelled outside Canada in the last 5 days • Visitor Name • Company name • Phone number • Equipment that visitor is bringing in |
| | <p>Measures are in place to control the entrance of visitors' belongings into the RAZ (e.g. lunch kits, glasses, phones, etc.)</p> <p>Visitors (including service providers and farm crews, etc.) going to multiple sites are required to follow the flow between sites based on health status.</p> <p>CAZ Measures:</p> <ul style="list-style-type: none"> • Signage is positioned to guide visitors within the CAZ. • Entry of visitor vehicles into the CAZ is logged daily. • Deliveries (e.g. semen, medical supplies) are completed outside the CAZ. |
| <p>LEVEL IV</p> | <p>No additional measures</p> |

TEMPLATE SOP

PERSONNEL & VISITOR ENTRY SOP

| | |
|--|---|
| LEVEL I | <p>Visitors (including service providers) are informed of the Personnel & Visitor Entry SOP prior to arriving at the farm.</p> |
| | <p>All visitors entering the CAZ put on disposable boot covers, or clean or dedicated footwear prior to exiting the vehicle.</p> |
| | <p>There are measures in place to control the entry of meat products (e.g. dried, cured, raw) at the entrance of the RAZ.</p> |
| | <p>The TAZ is either a 2-Area Entry or 3-Area Entry and includes:</p> |
| | <p>Dirty Area</p> <p>Remove outdoor footwear and clothing on the dirty side of the TAZ</p> <p>Socks do not touch the floor on the dirty side</p> |
| | <p>Transition Area</p> <p>Transition from the dirty area by stepping over / stepping on a physical barrier into the clean area of the TAZ</p> |
| <p>Clean Area</p> <p>Wash hands with water and soap or disinfect hand with hand sanitizer or wear gloves.</p> <p>Put on barn dedicated-footwear (or disposable boots) and clothing.</p> | |

TEMPLATE SOP

PERSONNEL & VISITOR ENTRY SOP

| | |
|---------------------|--|
| LEVEL II | Visitors (including service providers) are informed of the Personnel & Visitor Entry SOP prior to arriving at the farm |
| | Visitors' movements (including service providers) from site to site are planned based on the health status of each site visited |
| | Visitors put on boot covers to walk from their vehicle (CAZ) to the RAZ |
| | Barn personnel accompany visitors entering the RAZ |
| | There are measures in place to control meat products (e.g. dried, cured, raw) at the entrance of the RAZ |
| | A written Personnel and Visitor Entry SOP is visible to personnel and visitors at the entrance of the TAZ |
| | The TAZ is either a 2-Area Entry or 3-Area Entry and includes: |
| | Dirty Area Remove outdoor footwear and clothing on the dirty side of the TAZ Socks do not touch the floor on the dirty side |
| | Transition Area Transition from the dirty area by stepping over a knee-high physical barrier or a passthrough shower into the clean area of the TAZ |
| | Clean Area Wash hands with water and soap or disinfect hand with hand sanitizer or wear gloves Put on barn-dedicated footwear (clean or disposable boots) and dedicated barn clothing |

TEMPLATE SOP

PERSONNEL & VISITOR ENTRY SOP

Visitors (including service providers) are informed of the **Personnel and Visitor Entry SOP** prior to arriving at the farm

Visitors (including service providers and farm crews) going to multiple sites are required to follow the flow between sites based on health status. Movements from site to site are planned based on the health status of each site visited

All personnel and visitors put on boot covers to walk from their vehicles (CAZ to the RAZ)

Barn personnel accompany visitors entering the RAZ

If personnel show signs of illness, additional measure are taken, such as wearing a mask and gloves — For Level IV, sick personnel and visitors are not allowed to enter the RAZ.

There are measures in place to control the entrance of personnel and visitors' belongings into the RAZ (e.g. lunch kits, glasses, phones, etc.)

There are measures in place to control meat products (e.g. dried, cured, raw) at the entrance of the RAZ

Visual prompts explaining the measures are posted in each section of the TAZ

**LEVEL
III
IV**

The TAZ has a 3-Area Entry and includes:

Dirty Area

A written **Personnel and Visitor Entry SOP** is visible to personnel and visitors at the entrance of the TAZ

Remove outdoor footwear and clothing on the dirty side of the TAZ

Socks do not touch the floor on the dirty side

Transition Area

From the dirty area, step over a knee-high physical barrier into the changing area

Shower completely from head to toe by using a passthrough shower with hot water and soap

Clean Area

Change into barn-dedicated clothing (including disposable masks, gloves).

Put on barn-dedicated footwear

There is a clear line of separation between the changing area of the TAZ and the RAZ

TEMPLATE SOP

INDIVIDUALS WHO HAVE CONTACT WITH OTHER PIGS

| | |
|-----------------------------|---|
| LEVEL I | <p>Individuals who were in contact with other pigs, other pigs outside work and/or wild pigs (pigs from another flow/pyramid, pet pigs, home butchering, hunting and livestock fairs) need to shower before entering the Restricted Access Zone (RAZ)</p> <p>The shower is taken either at home or at the barn (clothing worn with other pigs are not worn to the barn)</p> <p>Personnel have been trained on the Personnel & Visitor Entry SOP</p> |
| LEVEL II | <p>Individuals who were in contact with other pigs, other pigs outside work and/or wild pigs (pigs from another flow/pyramid, pet pigs, home butchering, hunting and livestock fairs) need to shower before entering the Restricted Access Zone (RAZ)</p> <p>The shower is taken at the barn by utilizing a passthrough shower located in the TAZ</p> <p>Personnel have been trained on the Personnel & Visitor Entry SOP</p> |
| LEVEL III IV | <p>If personnel and/or swine health providers (e.g. Veterinarian) have contact with pigs outside of work and/or wild pigs (e.g. pigs from another pig flow/pyramid, pet pigs, home butchering, hunting, and livestock fairs)</p> <p>The written SOP is implemented, and these measures are followed:</p> <p>Allow for at least 24 hours downtime following contact with domestic pigs and 2 days downtime following international contact with pigs.</p> <p>Utilize a passthrough shower for showering in</p> <p>If visitors have contact with pigs and/or wild pigs (e.g. pigs from another flow/pyramid, pet pigs, home butchering, hunting and livestock fairs)</p> <p>The written SOP is implemented, and these measures are followed:</p> <p>Allow for at least 3 days downtime following contact with domestic pigs and 5 days downtime following international contact with pigs.</p> <p>Utilize a passthrough shower for showering in</p> |

BEST PRACTICES FOR

Pigs, Semen and Embryos



Definitions and Abbreviations

AIAO - ALL IN / ALL OUT

AIAO is the management practice of removing all the animals and cleaning and decontaminating the space where the animals are housed before the arrival of new animals to prevent the transmission of pathogenic agents between groups of animals. The space can be defined as a barn or site.

CLINICAL SIGNS

Detectable signs or symptoms of a disease or illness.

CONTINUOUS FLOW

A management system where pigs are moved through a barn in a steady, uninterrupted flow and share the same airspace.

SUPPLIER

A company supplying things to a farm, such as feed, animals, pharmaceutical/veterinary material (e.g. needles, syringes, medications), barn supplies (e.g. markers, spray markers), semen-related materials (e.g. insemination catheters, semen bags).

VET TO VET

Consultation between the veterinarian who provides services to or works for a supplier and the veterinarian who works for the company purchasing/receiving.

LIVE PIGS

| | |
|-------------------------|---|
| <p>LEVEL I</p> | <p>For nursery and grow/finish barns, the pigs arrive using the All In-All Out practice for each barn/building.</p> <hr/> <p>Swine Veterinarian Support:</p> <ul style="list-style-type: none"> • There is a veterinarian-to-veterinarian consultation regarding the health status of all incoming pigs annually. • If the health status of the source of pigs changes, the supplier informs the site management or the herd’s licensed swine veterinarian prior to animal entry. • If the pig supplier changes, the herd’s licensed swine veterinarian is informed prior to animal entry. • A licensed swine veterinarian reviews and approves the purchase of pigs from foreign countries to ensure the pigs are in compliance with the health status of the herd before they arrive. |
| <p>LEVEL II</p> | <p>For nursery and grow/finish barns, the pigs arrive using the All In-All Out practice for each site.</p> |
| <p>LEVEL III</p> | <p>Incoming pigs come from a single supplier source (a single genetic company) or a single pig flow/pyramid.</p> |
| <p>LEVEL IV</p> | <p>No Additional Measures</p> |

SEMEN AND EMBRYOS

| | |
|-------------------------|--|
| <p>LEVEL I</p> | <p>Swine Veterinarian Support:</p> <ul style="list-style-type: none"> • Before the arrival of Semen and Embryos from foreign countries a licensed swine veterinarian reviews and approves the purchase to ensure they are in compliance with the health status of the herd. • Site management and the herd veterinarian agree on a testing standard with the semen and embryo supplier to ensure compliance with the health standards of the herd <hr/> <p>Semen and/or embryos are purchased from a supplier who has a procedure to immediately inform site management if the semen and/or embryos' health status changes.</p> |
| <p>LEVEL II</p> | <p>Site management and the licensed swine veterinarian are aware of the semen and/or embryos testing protocol implemented by the supplier to meet the health standards.</p> |
| <p>LEVEL III</p> | <p>Prior to Receiving Semen and Embryo Supplies:</p> <ul style="list-style-type: none"> • Site management and the licensed swine veterinarian are aware of the semen and/or embryo supplier's herd biosecurity measures. • The number of semen and/or embryo sources is reduced to a minimum. |
| <p>LEVEL IV</p> | <p>The semen and/or embryos come from a single supplier</p> |

BEST PRACTICES FOR

Quarantine

Definitions

CLINICAL SIGNS

Detectable signs or symptoms of a disease or illness.

DETACHED QUARANTINE BARN

A barn that is completely detached from any other barn; the quarantine barn could be either off-site or elsewhere on the production site.

DOWNTIME

The expected timeframe to minimize the transmission of disease usually expressed in days, in which a person (or tools and equipments) has no contact with pigs or swine premises.

IN-BARN QUARANTINE SECTION

A quarantine section that is attached to or under the same roof as other production phases, not in a detached quarantine barn.

Template for Standard Operating Procedure (SOP)

- ▶ Quarantine Barn Personnel Entry SOP

QUARANTINE

LEVEL I

DETACHED QUARANTINE BARN

All incoming breeding stock complete a quarantine period in a **separate/standalone quarantine barn**.

If the quarantine barn is on the same site as the main herd, the site has **measures in place to minimize cross-contamination of the main herd**.

IN-BARN QUARANTINE SECTION

All incoming breeding stock complete a quarantine period in a dedicated section of the main barn that has its own:

- TAZ either from the main barn or a separate exterior barn entry/exit
- Dedicated area for a boot change and hand disinfection
- Separate / enclosed feeding system
- Full solid wall separating it from the main herd

Pigs in quarantine are **assessed for clinical signs prior to being moved to the main herd, and, if needed, are tested for specific disease(s)** based on a **licensed swine veterinarian's recommendation**.

Measures are implemented to control the **movement of farm personnel** from the main barn or site to the quarantine barn or section and vice versa.

LEVEL II

DETACHED QUARANTINE BARN

All incoming breeding stock complete a quarantine period as **established by the licensed swine veterinarian in a separate/standalone quarantine barn**.

If the quarantine barn is on the same site as the main herd, the site has **measures in place to minimize cross-contamination of the main herd**.

IN-BARN QUARANTINE SECTION

All incoming breeding stock complete a **quarantine period as established by the licensed swine veterinarian** in a dedicated section of the main barn that has its own:

- TAZ from a separate exterior barn entry/exit
- Dedicated area for a boot change and hand disinfection
- Separate / enclosed feeding system
- Full solid wall separating it from the main herd
- Separate manure system

The Quarantine Barn has a written **Quarantine Barn Personnel Entry SOP** including:

- Personnel in charge of the quarantine barn do all their other tasks before going to the quarantine barn at the end of the workday.
- Site management notify personnel and visitors to ensure the flow between barns based on the health status of the site(s) is respected.

QUARANTINE

LEVEL III

DETACHED QUARANTINE BARN

All incoming breeding stock complete a quarantine period as **established by the licensed swine veterinarian in a separate/standalone quarantine barn.**

If the quarantine barn is on the same site as the main herd, site management needs to discuss a safe **distance between the main herd and the quarantine barn** with the licensed swine veterinarian.

IN-BARN QUARANTINE SECTION

All incoming breeding stock complete a **quarantine period as established by the licensed swine veterinarian** in a dedicated section of the main barn that has its own:

- TAZ from a separate exterior barn entry/exit
- Dedicated area for a boot change and hand disinfection
- Separate / enclosed feeding system
- Full solid wall separating it from the main herd
- Separate manure system
- **Separate ventilation system**
- **All openings between the main herd and the quarantine are locked and sealed**

Based on a licensed swine veterinarian's recommendations, pigs in the quarantine are **assessed for clinical signs and tested for specific diseases** (e.g. PRRS or PED) prior to being moved to the main herd

LEVEL IV

DETACHED QUARANTINE BARN

All incoming breeding stock complete a quarantine period as established by the licensed swine veterinarian in a separate/standalone quarantine barn located a **minimum distance of 200 metres** from any other pig barn, and site management has implemented measures to **minimize airflow contamination of the main herd.**



TEMPLATE SOP

QUARANTINE BARN PERSONNEL ENTRY SOP

| | |
|---------------------------------|---|
| LEVEL II III IV | All personnel and visitors implement the following measures: |
| | All personnel and visitors follow the Personnel & Visitor Entry SOP of the quarantine. |
| | Site management notify personnel and visitors to respect the flow between barns based on the health status of the site(s). |
| | The personnel in charge of the quarantine barn do all their other tasks before going to the quarantine barn at the end of the workday. |

BEST PRACTICES FOR

Feed, Water, Bedding and Air



Definitions

ANIMAL BY-PRODUCTS

A by-product containing substances derived from animals such as plasma (sometimes used in piglet feed), animal fat, meat and bone meal.

FEED QUALITY ASSURANCE PROGRAM:

A HACCP-based program, such as Feed Assure, implemented by feed mills for quality assurance and control.

PORCINE BY-PRODUCT

A by-product containing substances derived from pigs, such as porcine plasma, meat and bone meal, blood meal, enzymes, dried solubles/peptones, etc.

SWILL FEEDING

Feeding of food waste (human and other).

WATER TREATMENT

A treatment process using approved additives, disinfection and sanitation methods or filtration to improve the quality of drinking water.

WILDLIFE

Non-domesticated birds and animals, such as raccoons, skunks, opossums, bats, coyotes, cervids, wild turkeys, ducks, geese and wild pigs.

| FEED | |
|------------------|---|
| LEVEL I | <p>Feed Storage areas are kept clean, dry and free of significant contamination from bird and animal feces.</p> <p>The areas surrounding the feed bins and feed lines are clear from spilled feed</p> <p>Site management does not allow swill feeding or feeding garbage and kitchen waste to pigs.</p> <p>Feed and feed ingredients are kept in completely enclosed storage containers so they are not accessible to pests, birds, wildlife and wild pigs.</p> <p>Pork and Pork by-products are not fed to pigs.</p> <p>Feed from another pig farm is not accepted on site, except if it is from the same pig flow/pyramid and approved by a licensed swine veterinarian.</p> |
| LEVEL II | <p>Same as Level I – No new measures.</p> |
| LEVEL III | <p>Animal by-products (all origins) are not fed to any pigs on site.</p> <p>Feed blower pipe/hose is supplied by the farm and remains on site. When not in use, the pipe/hose is stored off the ground and protected with end caps.</p> <p>Complete feed is purchased from feed supplier(s) who implement a recognized feed quality assurance program or other recognized risk management program that contains appropriate risk mitigation measures.</p> <p>A procedure, developed in consultation with the herd veterinarian, is in place for cleaning liquid feed tanks and the feed distribution system, including specified cleaning frequencies, for sites using liquid feeding systems or un-pelleted feed.</p> <p>Measures are implemented to minimize the introduction of pathogens when bagged feed is received and it is stored in a clean environment to prevents contamination.</p> <p>Site management has informed the feed company and the feed truck driver where to go on site.</p> |
| LEVEL IV | <p>Feed blower pipe/hose is supplied by the farm and remains on site. One pipe/hose is dedicated to each bin or a cluster of bins on the same feed pad, and it cannot be dragged to other bulk feed storage areas on the farm. When not in use, the pipe/hose is stored off the ground and protected with end caps.</p> <p>The feed delivery truck is dedicated to bulk grains or feed ration and does not haul animal by-products (of all origins) or feed rations containing animal by-products.</p> |

ON-FARM FEED MILL

| | |
|------------------|--|
| LEVEL I | <p>All doors of the on-farm feed mill are locked when there is no personnel on site.</p> <p>The on-farm feed mill is kept clean to minimize the buildup of dust and contaminants.</p> |
| LEVEL II | <p>The areas surrounding the feed mill, feed bins and feed lines are clear from spilled feed.</p> |
| LEVEL III | <p>If the on-farm feed mill uses the feed scale to weigh only transport trailers with pigs from the same pyramid or pig flow, there is a written SOP in place to mitigate cross contamination if the grain or feed is unloaded on the scale, including:</p> <ul style="list-style-type: none"> • Cleaning by physical removal of manure • Sanitation measure (e.g. Cleaned Washed Disinfected (CWD), lime application) <p>All doors of the on-farm feed mill are locked at all times</p> <p>The personnel change boots before entering the on-farm feed mill.</p> |
| LEVEL IV | <p>If the on-farm feed mill uses the feed scale to weigh only transport trailers with pigs from the same site, there is a written SOP in place to mitigate cross contamination if the feed is unloaded on the scale, including:</p> <ul style="list-style-type: none"> • Cleaning by physical removal of manure • Sanitation measure (e.g. Cleaned Washed Disinfected (CWD), lime application) |

WATER, BEDDING AND AIR

| | |
|----------------------|---|
| LEVEL I | <p>If the pigs' water source is not municipal water, the site must complete a water test at least once a year to verify the level of total coliforms or nitrates. If the test results for total coliforms is above 10 colony-forming units (CFU)/100 mL, or if the nitrate levels exceed 300 mg/L, a functional and effective water treatment plan is implemented.</p> |
| LEVEL II | <p>A full perimeter fence is installed around any dugouts and/or ponds to protect the pigs drinking water source.</p> <p>Measures are implemented to prevent the bedding from being contaminated with feces from birds, rodents, wildlife or domestic animals in the storage area.</p> <p>For sites using bedding, the bedding removal equipment (e.g. tractor, skid steer, shovel, fork) is dedicated to a pig flow/pyramid or to the site.</p> |
| LEVEL III | <p>WATER</p> <p>If the pigs' water source is not municipal water, the site has an effective ongoing water treatment system to ensure the water contains fewer than 10 colony-forming units (CFU/100 mL) of total coliforms.</p> <p>If the site has a water-holding tank, the tank is cleaned at least twice a year.</p> <p>Measures are implemented to mitigate the contamination of the well / trench / dugout water for the pigs' drinking water</p> <p>Examples of measures:</p> <ul style="list-style-type: none"> • No manure spreading around the water source • The well is sealed and covered or the well head is locked • No use of marsh water <p>BEDDING</p> <ul style="list-style-type: none"> • For sites using bedding, the bedding removal equipment (e.g. tractor, skid steer, shovel, fork) is dedicated to the site and measures are implemented to minimize the contamination between areas of the RAZ and/or CAZ. • For sites using bedding, the bedding removal equipment (e.g. tractor, skid steer shovel, fork) is Cleaned Washed Disinfected Dried (CWDD) before entering the RAZ. <p>AIR</p> <ul style="list-style-type: none"> • An air filtration system designed to reduce the risk of airborne pathogens from contaminating the herd, has been put in place. • A wind break (artificial or natural) slows the dominant wind and minimizes pathogen entry into the herd. |

WATER, BEDDING AND AIR**LEVEL
IV**

If the pigs' water source is not municipal water, a **water test** is performed **at least twice a year** to determine the effectiveness of the ongoing water treatment to ensure the water contains less than 10 colony-forming units (CFU)/100 ml) of total coliforms

Sites using bedding, measures are implemented to minimize the contamination of the RAZ and/or CAZ during bedding handling and removal activities.

The machinery and equipment used on farm for bedding removal are **Cleaned Washed Disinfected Dried (CWDD)** between the different activities.

BEST PRACTICES FOR

Fomites

(Supplies, Tools and Equipment)



Definitions

DOWNTIME

The expected timeframe to minimize the transmission of disease, usually expressed in days, in which a person (or tools and equipments), has no contact with pigs or swine premises.

FOMITES

Any non-living objects such as supplies, tools and equipment that, once contaminated with pathogens, serve as a source of infection in susceptible animals.

- **SUPPLIES**

All essential items used in the care, management, and reproduction of pigs. This includes, but is not limited to, pharmaceutical and veterinary materials (e.g. needles, syringes, and medication bottles), farm materials (e.g. tags, spray markers, barn clothing and footwear), semen-related materials used in reproductive procedures (e.g. insemination catheters and semen bags).

- **TOOLS AND EQUIPMENT**

All devices used for animal husbandry and barn sanitation and maintenance, including, but not limited to, needleless injectors, rattle paddles, handling boards, pressure washers, hoses, brooms, tube feeders, calipers, navel cord clamps, drills, hammers, electrical equipment, plumbing equipment, tractors etc.

FOMITES (Supplies, Tools and Equipment)

| | |
|------------------|---|
| LEVEL I | <p>The service providers' tools and equipment are Cleaned Washed Disinfected Dried (CWDD) (or at least disinfected if it is not possible to use water) before entering the RAZ.</p> |
| LEVEL II | <p>Decontamination Measures are implemented on all incoming supplies before they enter the RAZ to mitigate the risk of cross-contamination.</p> <p>Examples of measures:</p> <ul style="list-style-type: none"> • Fumigation room • UV chamber • Disinfect and dry • Onion procedure: The item is wrapped in multiple layers of airtight packaging, with the outer layers removed before entering or exiting sections of the barn <hr/> <p>Measures are implemented to Clean Wash Disinfect Dry (CWDD) all tools and equipment either purchased new or brought from another pig site.</p> <hr/> <p>Entry measures (including some downtime) are established with a licensed veterinarian for tools and equipment that cannot be Cleaned Washed Disinfected Dried (CWDD)</p> |
| LEVEL III | <p>All necessary tools and equipment are provided to service providers to perform their task. Exception: The specialized tools and equipment that site management cannot provide are disinfected and dried before entering the RAZ.</p> <hr/> <p>Supplies from another pig site are not allowed into the RAZ.</p> <hr/> <p>Tools and equipment from another pig site are not allowed into the RAZ.</p> |
| LEVEL IV | <p>All necessary tools and equipment are provided to service providers to perform their task.</p> |

BEST PRACTICES FOR

Pests, Birds, Other Animals



Definitions

DUGOUT

Small freshwater reservoirs constructed to trap and store water.

PESTS

Animals that cause damage and put the pigs at risk (because they can carry pathogens), such as rodents, mice, rats, squirrels, birds and certain insects.

DOMESTIC PIGS

Swine raised and managed in a contained environment (including outdoor raised pigs).

WILDLIFE

Non-domesticated birds and animals such as raccoons, skunks, opossums, bats, coyotes, cervids, wild turkeys, ducks, geese and wild pigs etc.

WILD PIGS

Any animals of the species *Sus scrofa* that are not contained or under the physical control of any person or are otherwise roaming freely. This includes any type of pig (domesticated pig, Eurasian wild boar, or hybrid) that has escaped or been released from containment, is no longer on the owner's property and is free-roaming. It also includes any pigs that were born in the wild.

PESTS, BIRDS AND OTHER ANIMALS

| | |
|--|---|
| <p style="text-align: center;">LEVEL I</p> | <p>A written Pest Management SOP for the control of rodents is developed and implemented, either by a licensed exterminator or performed in-house, for the RAZ and the on-farm feed mill.</p> <p>This Pest Management SOP includes:</p> <ul style="list-style-type: none"> • A list of all chemical products used on-farm; • The frequency of pest activity monitoring; • The type of traps and the locations of the bait stations used; and • Observation to ensure the efficacy of the SOP. <p>If the Pest Management SOP is implemented by a licensed exterminator, it includes measures such as:</p> <ul style="list-style-type: none"> • The exterminator’s contact information; and • Their recommended practices for extermination and the corrective actions to take if the situation remains unsatisfactory. |
| | <p>Measures are implemented to prevent birds from entering the barns(s)/housing structures, feed mill, and feed storage areas.</p> <p>Examples of measures that could be implemented:</p> <ul style="list-style-type: none"> • Bird screening • Feed storage is closed and sealed |
| | <p>Measures are implemented to prevent wildlife and wild pigs from entering the barn(s)/housing structure(s), feed mill and feed storage area(s).</p> |
| | <p>A minimum of a one-metre perimeter of gravel or concrete or short-cut grass is maintained around the barn.</p> |
| | <p>Dogs and cats are kept out of the RAZ, on-farm feed mill and feed storage area(s) at all times.</p> |
| | <p>The outside walls of the barn and any onsite buildings are kept clear of equipment and clutter.</p> |
| <p style="text-align: center;">LEVEL II</p> | <p>Measures are implemented to prevent birds from entering the barns(s)/housing structure(s), feed mill, feed storage areas and accessing the dugout (water source).</p> <p>Examples of measures that could be implemented:</p> <ul style="list-style-type: none"> • Bird screening • Feed storage is closed and sealed • Deterrents such as bird bangers around the dugout (water source) |

**PESTS, BIRDS AND OTHER ANIMALS**

| | |
|----------------------|--|
| LEVEL III | Measures are implemented to minimize the presence of insects in and around the barn. Examples of measures that could be implemented: <ul style="list-style-type: none">• Minimize stagnant water• Manure storage management• Dead stock container is sealed |
| LEVEL IV | No additional measures |



MODULE 8

EXTERNAL

CONTAINMENT

INTERNAL

BEST PRACTICES FOR

Manure Management

MANURE MANAGEMENT

| | |
|------------------|---|
| LEVEL I | The manure is not spread or applied near the pig barn drinking water source (or land sloped towards the drinking water source, e.g. well, creeks). (See provincial legislation.) |
| LEVEL II | The access to the manure storage minimizes the contamination of the CAZ. |
| LEVEL III | If manure handling equipment is shared between sites , the equipment is either moved from site to site based on the health status OR its outer surfaces are Cleaned and Disinfected and visually inspected before entering the site. |
| | If manure handling equipment contained manure from another site, it has been flushed before entering the site: <ul style="list-style-type: none"> • With manure from another species or water, and • All hoses have been blown out |
| | The manure is spread or applied in a way to prevent the contamination of the RAZ. Examples of measures: <ul style="list-style-type: none"> • Spreading based on field slope • Injection spreading |
| | If manure from another site is spread within a radius of less than 500 metres around the RAZ, site management has an agreement with the neighbour and/or manure applicator to prevent the contamination of the RAZ. Examples of acceptable measures: <ul style="list-style-type: none"> • Manure is injected • The manure to be applied is in an anaerobic state (no fresh manure was added to the source's manure storage in the past 48 hrs) |
| LEVEL IV | The manure storage has a dedicated access road , separate from the main entrance (preventing the contamination of the CAZ). |
| | If manure handling equipment is shared between sites , the equipment is moved from site to site based on the health status and the outer surfaces are Cleaned Washed Disinfected (CWD) and visually inspected before entering the site (Exception: the cleaning of the equipment does not apply if the equipment moves following the pig flow). |
| | If manure equipment contains manure from another site or manure from other species, it has been flushed with water, and all hoses have been blown out before entering the site. |
| | Only manure from this site is spread within a radius of less than 500 metres around the RAZ. |

BEST PRACTICES FOR

Mortality and Garbage Disposal



Definitions

ON-FARM POSTMORTEM

An assessment, done by a qualified person, that consist in a visual inspection of the dead pig to detect external abnormalities and in the (careful) opening of the animal's abdominal and chest cavities to detect lesions in the various organs and tissues to determine the cause of death.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Specialized clothing or equipment worn by individuals to protect themselves from exposure to hazardous substances or environments. PPE acts as a barrier between the wearer and potential risks such as chemicals, biological agents, physical injuries, or airborne contaminants.



Template for Standard Operating Procedure (SOP)

- ▶ Dead stock Removal and Disposal SOP

MORTALITY AND GARBAGE DISPOSAL

| | |
|------------------------|---|
| <p>LEVEL I</p> | <p>A Dead stock Removal and Disposal SOP is developed and implemented to protect the RAZ and minimize CAZ contamination. It includes:</p> <ul style="list-style-type: none"> • The designation of a person responsible for dead stock disposal, • The use of appropriate Personal Protective Equipment (PPE), e.g. disposable gloves or gloves dedicated to this purpose, • Timing of dead stock removal from the pen and barn, • Measures to move dead stock to the disposal site, • The designated disposal site, • The equipment specifications, • The cleaning frequency, and • How to dispose of heavy/large dead stock. <hr/> <p>The method used to dispose of dead stock prevents pests, wildlife, and domesticated animals from having access to carcasses.</p> <hr/> <p>Measures to prevent contamination of the dead stock container :</p> <ul style="list-style-type: none"> • The dead stock container is covered at all times. • The dead stock container is leakproof. • Measures are taken to prevent contamination of the CAZ when dead stock is moved (e.g. use of lime around the container). • The dead stock truck driver does not enter the RAZ. <hr/> <p>Garbage containers are covered at all times.</p> |
| <p>LEVEL II</p> | <p>The dead stock container is located outside the CAZ in an area that prevents dead stock trucks from crossing paths with other vehicles entering the CAZ.</p> |

MORTALITY AND GARBAGE DISPOSAL

| | |
|------------------|--|
| LEVEL III | <p>The equipment used to move dead stock to the site's disposal area (e.g. compost pile) is dedicated to the site.</p> |
| | <p>The dead stock is taken out of the barn as the last task of the workday.</p> |
| | <p>The site has implemented cleaning measures in the RAZ after removing large dead stock to minimize contamination of the RAZ.</p> |
| | <p>The site has a TAZ to dispose of dead stock, (e.g. dead stock room, separated loadout zone). Cleaning and preventative measures are implemented in the TAZ after removing the dead stock to minimize RAZ contamination.</p> |
| | <p>On-farm postmortems are performed in a location with reduced traffic and in a secure area that can easily be cleaned and disinfected.</p> |
| | <p>Access to the dead stock container is through a different path than the main entrance of the CAZ.</p> |
| | <p>The equipment and machinery used to move dead stock do not cross paths with the dead stock truck.</p> |
| LEVEL IV | <p>Dead stock is disposed of at the farm (e.g. composting, burial, incineration).</p> |
| | <p>The site has sufficient dead stock storage capacity in the RAZ (e.g. freezer, cold room) to minimize the frequency of disposal activity.</p> |
| | <p>The equipment and machinery dedicated to moving dead stock is Cleaned Washed Disinfected (CWD) after each use.</p> |
| | <p>Dead stock Truck Measures:</p> <ul style="list-style-type: none"> • Site management has organized a dead stock truck pickup based on the health status of the site. • Site management requires a leakproof dead stock pickup truck. • The site has a dedicated route to move dead stock to the dead stock container to ensure no vehicles are crossing paths with the dead stock equipment. |



TEMPLATE SOP

DEAD STOCK REMOVAL AND DISPOSAL SOP

Dead stock removal and Disposal SOP is developed and implemented to protect the RAZ and minimize CAZ contamination. The SOP includes:

Person(s) responsible for disposal of dead stock:

Type of gloves used:

Disposable gloves

Dedicated gloves

When is the dead stock taken out of the pen(s)?

As soon as observed

LEVEL
I
II
III
IV

When is the dead stock taken out of the barn(s)?

The dead stock is taken out of the barn as the last task before the end of the workday

Where is the dead stock disposed of?

Freezer

In-vessel composter

Dead stock container

Compost pile

Burial

Incinerator

What are the measures taken to move the dead stock from the barn to the disposal site?



TEMPLATE SOP

DEAD STOCK REMOVAL AND DISPOSAL SOP

Type of equipment used to move dead stock, including large livestock:

Buckets

Sleds

Snares (used for pulling)

Manual Dead Stock Carts

Wheelbarrow

Mobilized Carts/ Trolleys

Winches/ Pullers

Loader Tractor

LEVEL
I
II
III
IV

How is the equipment used to move dead stock cleaned, and how often?



BEST PRACTICES FOR

Swine Transport



Definitions

CWD-BAKED

Cleaned, Washed, Disinfected, and Baked. The bake process requires bringing the trailer surface to a target temperature and maintaining that temperature for a specific amount of time (e.g. 80°C for at least 15 minutes or 70°C for at least 20 minutes). The trailer may not be completely dry at the end of the baking process but must be fully dried before use.

CWD-THERMALLY ASSISTED DRIED (TAD)

Cleaned, Washed, Disinfected and Thermally Assisted Dried (TAD). The TAD process requires blowing warm air (e.g. 45°C) over the surface of the trailer until the trailer is completely dry.

THIRD-PARTY TRANSPORT

Any external commercial truck fleet or any other transporter that a farm hires to transport the pigs. The farm doesn't own the truck/trailer(s).



Factsheets

- ▶ Transport Sanitation (*coming soon*)

SWINE TRANSPORT

| | |
|-------------|--|
| LEVEL I | <p>Site management has implemented measures to ensure the third-party truck driver do not enter the RAZ.</p> |
| | <p>Truck and Equipment Sanitation</p> <p>Site management ensures that all livestock transport trailers coming from an assembly yard or slaughterhouse have been Cleaned Washed Disinfected Dried (CWDD) before going to any site. The water used to wash the transport trailer has the same water quality as the pigs' drinking water.</p> |
| LEVEL II | <p>Site management and the licensed swine veterinarian have established a pickup hierarchy based on the health status of each site, and site management ensures the truck driver or the third-party company respects it.</p> |
| | <p>Site management requests the truck driver puts on clean and dry footwear and clothing, or puts on disposable boots and coveralls, before stepping into the transport trailer.</p> |
| | <p>The loadout area is built in a way to prevent pigs from returning into the barn.</p> |
| | <p>A transport trailer is dedicated to the site or the pig flow/pyramid for internal movement. That transport trailer is never used to go to a slaughterhouse or assembly yard.</p> |
| | <p>The trailer is dedicated to incoming breeding stock (sows, boars, gilts, multipliers), and it is confirmed with the genetic supplier and/or third-party transporter.</p> |
| | <p>Site management ensures the transport trailer and handling tools are Cleaned Washed Disinfected Dried (CWDD) between each load of pigs if the health status of the sites differ within the pig flow/pyramid.</p> |
| | <p>Site management ensures the transport trailers used to move pigs are Cleaned Washed Disinfected Dried (CWDD) before each load of pigs.</p> |

SWINE TRANSPORT

LEVEL III

Truck Driver Measures

Site management requests that the transport truck driver changes footwear or puts on disposable boots as they **exit the truck** cab.

Site management requests that the transport truck driver remove disposable boots, and wash or sanitize hands before **entering the truck** cab.

Site management ensures that the transport trailers used to transport pigs be **Cleaned Washed Disinfected (CWD) and Thermally Assisted Dried (TAD)** between each load of pigs.

A downtime period is established with the licensed veterinarian for each clean transport trailer entering the CAZ.

LEVEL IV

When site management does its own transport of finisher and/or cull sows:

- A **transport trailer is dedicated to pigs** going to slaughter or assembly yards. (Does not apply to bumper to bumper pig transfers)

Transport trailers used to transport pigs are **Cleaned Washed Disinfected and Baked** and fully dried before use between each load of pigs.

Third-Party Transport Measures:

If a third-party transport company is used, the following measures are implemented:

- **Transport trailers have been audited and sealed** following the sanitation procedure:
 - › Cleaned Washed Disinfected (CWD) and Baked and fully dried before use **or**,
 - › Cleaned Washed Disinfected (CWD) and Thermally Assisted Dried (TAD)
- Transport trailers used to move pigs are **Cleaned Washed Disinfected Dried (CWDD)** at a wash facility that is **audited on a yearly basis**.
- Transport trailers used to move pigs are from a company who participates in a **transporter biosecurity program** or certification program.

BEST PRACTICES FOR

Outdoor Access and Multiple Species



Definitions

AVIAN SPECIES

Poultry, fowl and other avian species.

DOUBLE FENCE

The existence of two fence lines made with the same or different fencing material. The double fence prevents nose-to-nose contact with wildlife and wild pigs and is high enough to prevent wildlife and wild pigs from jumping over the fence and it must prevent pigs from digging under the fence.

NON-AVIAN SPECIES

Cattle, other ruminants, horses and other non-avian species.

PEST

Animals that cause damage and put the pigs at risk (because they can carry pathogens), such as rodents, mice, rats, squirrels, birds and certain insects.

SOLID FENCE

A fence with no holes or gaps. It prevents nose-to-nose contact with wildlife and wild pigs, and is high enough to prevent wildlife and wild pigs from jumping over the fence.

WILD PIGS

Any Animals of the species *Sus scrofa* that are not contained or under the physical control of any person or are otherwise roaming freely. This includes any type of pig (domesticated pig, Eurasian wild boar, or hybrid) that has escaped or been released from containment, is no longer on the owner's property and is free-roaming. It also includes any pigs that were born in the wild.



Template for Standard Operating Procedure (SOP)

- ▶ Avian Species Management SOP
- ▶ Non-Avian Species Management SOP

OUTDOOR ACCESS

| | |
|--------------|--|
| LEVEL I | <p>Outdoor Access Facilities:</p> <ul style="list-style-type: none"> • If wild pigs have been reported within 10 km of the RAZ, there is a full solid fence/wall or double fence to prevent nose-to-nose contact and entry of wild animals (does not apply to fully enclosed barns). • Speak to your Provincial Pork Organization (PPO) to better understand where wild pigs have been located. |
| | <p>Measures are implemented to minimize the presence of pests and wildlife in the outdoor pens and pasture / outdoor RAZ.</p> <p>Examples of measures:</p> <ul style="list-style-type: none"> • Full solid fence/wall or double fence • Removal of any feed spillage • Only having feeders indoors |
| | <p>Outdoor feeding areas are designed, maintained, managed and kept clean to prevent wildlife from accessing them.</p> <p>Examples of measures:</p> <ul style="list-style-type: none"> • Covers on Feeders • Removal of any feed spillage or left over feed |
| LEVEL II | <p>Site management has installed fencing that prevents nose-to-nose contact between the pigs and other animals.</p> <p>Acceptable type(s) of fencing:</p> <ul style="list-style-type: none"> • Double fencing • Single full solid fence/wall in concrete, plastic or wood • Fencing that prevents pigs from digging under the fence |
| | <p>There are measures in place to prevent outdoor RAZ contamination.</p> <p>Example of a measure:</p> <ul style="list-style-type: none"> • Having an Outdoor Transition Access Zone (TAZ), outside the RAZ for the entry of large equipment into the RAZ (e.g. tractors) |
| LEVEL III | Not Allowed |
| LEVEL IV | Not Allowed |

MULTIPLE SPECIES

| | |
|--------------|---|
| LEVEL I | Cattle, other ruminants, horses and other non-avian species are penned separately from pigs. |
| | Poultry, fowl, and other avian species are not housed in the same room(s) as pigs. |
| | <p>Written SOP for the following:</p> <p>An Avian Species Management SOP is <i>implemented and includes</i>:</p> <ul style="list-style-type: none"> • How the ventilation and manure management systems can mitigate the risk of pathogen cross-contamination from avian species (see template SOP). <p>A Non-Avian Species Management SOP is <i>implemented and includes</i>:</p> <ul style="list-style-type: none"> • How the manure management system can mitigate the risk of pathogen cross-contamination due to exposure to the fecal material of other non-avian species (see template SOP). |
| LEVEL II | No Additional Measures |
| LEVEL III | Not Allowed |
| LEVEL IV | Not Allowed |

TEMPLATE SOP

AVIAN SPECIES MANAGEMENT SOP**LEVEL
I
II**

An **Avian Species Management SOP** is implemented and includes how the ventilation and manure management systems can mitigate the risk of pathogen cross-contamination from **AVIAN SPECIES**:

Pigs are housed in a **room separate** from poultry, fowl, and other avian species.

Pigs have a **separate ventilation system/airspace** from poultry, fowl, and other avian species.

The pig area has dedicated boots/footwear that are not worn in avian species areas.

All personnel are trained.

Choose at least one option for cleaning equipment:

Equipment is visually inspected to ensure no organic matter is visible; any equipment with visible organic matter from other species is cleaned prior to being used in the pig area.

There is dedicated cleaning equipment (shovels, forks, brooms, etc.) for the pig area.

All equipment is **Cleaned Washed Disinfected (CWD)** before being used in the pig area.

Equipment shared with another premises is cleaned and disinfected prior to being used in the pig area.

TEMPLATE SOP

NON-AVIAN SPECIES MANAGEMENT SOP**LEVEL
I
II**

A **Non-Avian Species Management SOP** is implemented and includes how the manure management system can mitigate the risk of pathogen cross-contamination due to exposure to the fecal material of **OTHER NON-AVIAN SPECIES**:

Pigs are penned separately from all other species with a barrier to prevent cross-contamination of manure.

The pig area has a separate entrance from other species area(s).

The pig area has dedicated boots/footwear that are not worn in the other species' areas.

All personnel are trained.

Choose at least one option for cleaning equipment:

Equipment is visually inspected to ensure no organic matter is visible; any equipment with visible organic matter from other species is cleaned prior to being used in the pig area.

There is Dedicated cleaning equipment (shovels, forks, brooms, etc.) for the pig area.

All equipment is **Cleaned Washed Disinfected (CWD)** before being used in the pig area.

Equipment shared with another premises is cleaned and disinfected prior to being used in the pig area.



MODULE 12

EXTERNAL

CONTAINMENT

INTERNAL

BEST PRACTICES FOR

Barn Flow



COMING SOON



MODULE 13

EXTERNAL

CONTAINMENT

INTERNAL

BEST PRACTICES FOR

Sanitation



COMING SOON



MODULE 14

EXTERNAL

CONTAINMENT

INTERNAL

BEST PRACTICES FOR

Disease Prevention and Management



COMING SOON



GLOSSARY

| Terminology | Definition |
|--|---|
| Airborne Contamination | When an infectious agent travels through the air to reach the respiratory tract. There are 2 types of airborne contamination: airborne aerosols and airborne droplets. |
| Airborne Aerosols | Aerosols are defined as breathable fine particles (<5 microns) that remain suspended in the air for extended periods. These particles, which may contain infectious agents, such as fungal spores or viruses, can be inhaled from both a short and longer distances (>1 m). Aerosols can remain infectious over time. They can even be produced by processes such as evaporation of droplets or be carried by tiny dust particles, potentially causing long-distance transmission events. Once inhaled, aerosols can reach the lower respiratory system (lungs) because of their very small size. |
| Airborne Droplets | Transmission by droplets happens most often from close contact contamination. This means small liquid particles (>5 microns), released when the host coughs or sneezes, travel directly from the respiratory tract of an infected host to another susceptible one. These droplets, which contain infectious agents, can remain suspended in the air over a short distance (usually <1 m). They are typically larger, and either contaminate the upper respiratory tract of animals and people nearby or settle quickly on nearby surfaces (then generating possible indirect contamination). |
| All In-All Out (AIAO) | AIAO is the management practice of removing all the animals and cleaning and decontaminating the space where the animals are housed before the arrival of new animals to prevent the transmission of pathogenic agents between groups of animals. The space can be defined as a barn or site. |
| Animal By-Products | A by-product containing substances derived from animals such as plasma (sometimes used in piglet feed), animal fat, meat and bone meal. |
| Avian Species | Poultry, fowl and other avian species. |
| Cleaned Washed Disinfected (CWD) and Baked | Cleaned, Washed, Disinfected, and Baked. The bake process requires bringing the trailer surface to a target temperature and maintaining that temperature for a specific amount of time (e.g. 80°C for at least 15 minutes or 70°C for at least 20 minutes). The trailer may not be completely dry at the end of the baking process but must be fully dried before use. |
| Cleaned Washed Disinfected (CWD) and Thermally Assisted Dried (TAD) | The TAD process requires blowing warm air (e.g. 45°C) over the surface of the trailer until the trailer is completely dry. |

| Terminology | Definition |
|---------------------------------------|--|
| Controlled Access Zone (CAZ) | A defined area outside the barn where access and activity need to be managed to preserve the farm's biosecurity. It is the first line of defence shaped around the barns to provide a buffer zone. |
| Clinical Signs | Detectable signs or symptoms of a disease or illness. |
| Continuous Flow | A management system where pigs are moved through a barn in a steady, uninterrupted flow and share the same airspace. |
| Detached Quarantine Barn | A barn that is completely detached from any other barn; the quarantine barn could be either off-site or elsewhere on the production site. |
| Domestic Pig | Swine raised and managed in a contained environment (including outdoor raised pigs). |
| Double Fence | The existence of two fence lines, made with the same or different fencing material. The double fence prevents nose to nose contact with wildlife and wild pigs, and it is high enough to prevent wildlife and wild pigs from jumping over the fence and it must prevent pigs from digging under the fence. |
| Downtime | The expected timeframe to minimize the transmission of disease, usually expressed in days, in which a person (or tools and equipments) has no contact with pigs or swine premises. |
| Dugout | Small freshwater reservoirs constructed to trap and store water. |
| Feed Quality Assurance Program | A HACCP-based program, such as Feed Assure, implemented by feed mills for quality assurance and control. |
| Fomite | Any non-living objects such as supplies, tools and equipment that, once contaminated with pathogens, serve as a source of infection in susceptible animals. |
| In Barn Quarantine Section | A quarantine section that is attached to or under the same roof as other production phases, not in a detached quarantine barn. |
| Non-Avian Species | Cattle, other ruminants, horses and other non-avian species. |
| On-Farm Postmortem | An assessment, done by a qualified person, that consist in a visual inspection of the dead pig to detect external abnormalities and in the (careful) opening of the animal's abdominal and chest cavities to detect lesions in the various organs and tissues to determine the cause of death. |

| Terminology | Definition |
|---|--|
| Outdoor Restricted Access Zone (Outdoor RAZ) | An outdoor area that forms part of the overall Restricted Access Zone (RAZ) for pigs raised in barns with outdoor access. As pigs can move freely between the two spaces, the outdoor RAZ is considered an extension of the indoor RAZ. This area must be designed to prevent direct contact—such as nose-to-nose—with wild animals to reduce the risk of disease transmission. |
| Passthrough Shower | A properly designed pass through/corridor shower requires an entry to the shower from one side, with an exit on the opposite side. The passthrough shower ensures that all outer clothing is removed and that people complete full-body sanitation prior to crossing into the clean zone. The shower is clean, provides warm water, soap/shampoo, clean towels and barn specific clothing. |
| Pathogen | A pathogen invades a host and disrupts normal bodily functions, leading to illness and diseases. The main categories include bacteria, viruses, parasites. |
| Personnel | All individuals including family members and hired help working full or part-time. |
| Personal Protective Equipment (PPE) | Specialized clothing or equipment that individuals wear to protect themselves from exposure to hazardous substances or environments. PPE acts as a barrier between the wearer and potential risks such as chemicals, biological agents, physical injuries, or airborne contaminants. |
| Pest | Animals that cause damage and put the pigs at risk (because they can carry pathogens), (because they can carry pathogens), such as rodents, mice, rats, squirrels, birds and certain insects |
| Porcine By-Products | A by-product containing substances derived from pigs, such as porcine plasma, meat and bone meal, blood meal, enzymes, dried solubles/peptones, etc. |
| Premises / Site / PID (From PigTRACE) | A premises is a parcel of land, defined by a certificate of title, on which livestock or poultry are grown, kept, assembled, or disposed of. A premises can also be referred to as a site or PID and assigned a PID number. This includes a farm/stable, feedlot, pasture, community pasture, hatchery, abattoir, assembly yard, auction, livestock sale facility, rendering plant, zoo/petting zoo, exhibition / fairgrounds, racetrack, competition facility, veterinary hospital and lab, insemination centre, and livestock and poultry research facility. |
| Restricted Access Zone (RAZ) | Inside of the barn is considered a Restricted Access Zone. This zone forms the most crucial line of defence for preventing the spread of disease to pigs. |

| Terminology | Definition |
|---|---|
| Solid Fence | A fence with no holes or gaps. It prevents nose-to-nose contact with wildlife and wild pigs and is high enough to prevent wildlife and wild pigs from jumping over the fence. |
| Supplier | A company supplying things to a farm, such as feed, animals, pharmaceutical/veterinary material (e.g. needles, syringes, medications), barn supplies (e.g. markers, spray markers), semen-related materials (e.g. insemination catheters, semen bags). |
| Supplies | All essential items used in the care, management, and reproduction of pigs. This includes, but is not limited to, pharmaceutical and veterinary materials (e.g. needles, syringes, and medication bottles), barn supplies (e.g. tags, spray markers, barn clothing and footwear), semen-related materials used in reproductive procedures (e.g. insemination catheters and semen bags). |
| Swill Feeding | Feeding of food waste (human and other). |
| Transition Access Zone (TAZ) | The Transition Access Zone is a defined zone where biosecurity measures are applied to everything (e.g. people, live and dead animals, fomites, equipment, etc.) before entering a biosecurity zone like the RAZ and/or CAZ. Some farms may have more than one TAZ. |
| Third-Party Transport | An external commercial truck fleet or any other transporter that a farm hires to transport pigs. The farm doesn't own the truck/trailer(s). |
| Tools and Equipment (See Fomites) | All devices used for animal husbandry and barn sanitation and maintenance, including, but not limited to, needleless injectors, rattle paddles, handling boards, pressure washers, hoses, brooms, tube feeders, calipers, navel cord clamps, drills, hammers, electrical equipment, plumbing equipment, tractors etc. |
| Vet-to-Vet Consultation | Consultation between the veterinarian who provides services to or works for a supplier and the veterinarian who works for the company purchasing/receiving. |
| Visitors (includes Services Providers) | Farm visitors include, but are not limited to, any third party or external person, such as neighbours, friends, auditors, other producers, electricians, plumbers, ventilation system mechanics, farm crew (sanitation crew, vaccination crew, loading crew, etc.) or animal health-related services (veterinarian, agrologist, technician, etc.). |
| Water Treatment | A treatment process using approved additives, disinfection and sanitation methods or filtration to improve the quality of drinking water. |

| Terminology | Definition |
|-------------|--|
| Wildlife | Non-domesticated birds and animals such as raccoons, skunks, opossums, bats, coyotes, cervids, wild turkeys, ducks and geese and wild pigs. |
| Wild Pigs | Any animals of the species <i>Sus scrofa</i> that are not contained or under the physical control of any person or are otherwise roaming freely. This includes any type of pig (domesticated pig, Eurasian wild boar, or hybrid) that has escaped or been released from containment, is no longer on the owner's property and is free-roaming. It also includes any pigs that were born in the wild. |

| Acronyms | Meaning |
|----------|---|
| ASF | African Swine Fever |
| AIAO | All In / All Out |
| CAZ | Controlled Access Zone |
| CPC | Canadian Pork Council |
| CFIA | Canadian Food Inspection Agency |
| CSBG | Canadian Swine Biosecurity Guideline |
| CWD | Cleaned, Washed, Disinfected |
| CWDD | Cleaned, Washed, Disinfected and Dried |
| FAD | Foreign Animal Diseases |
| PEDv | Porcine Epidemic Diarrhea Virus |
| PID | Premises Identification |
| PPO | Provincial Pork Organization |
| PPRS | Porcine Reproductive and Respiratory Syndrome |
| RAZ | Restricted Access Zone |
| SOP | Standard Operating Procedure |
| TAD | Thermally Assisted Dried |
| TAZ | Transition Access Zone |