



Zoning and permitting during an ASF outbreak in Canada

The who, what, when where and why?



Dec. 2024

A photograph of several piglets in a field of green grass under a clear blue sky. The piglets are white and pink, looking towards the camera. The text "Zoning during an ASF outbreak" is overlaid in the center of the image.

Zoning during an ASF outbreak

CFIA's ASF Response

The basic principles used in eradicating ASF are:

1. **Eradicate** sources of the disease agent; (stamping-out, C and D).
2. **Prevent contact** between susceptible animals and the disease agent; (movement controls and biosecurity).
3. **Contain** the disease agent to a geographic area (**zoning**).
4. **Stabilize** market access until disease free status is regained.

Why is zoning used?

- Zoning is a disease control tool used to help achieve one of the 4 basic principles of disease eradication – **CONTAINMENT**

The **primary goal of zoning** is to contain the disease to part (or parts) of Canada.

- Beyond the zone, the rest of Canada is considered disease-free
- Zoning has the **secondary benefit** of managing trade risk by defining disease-free areas

What is zoning?

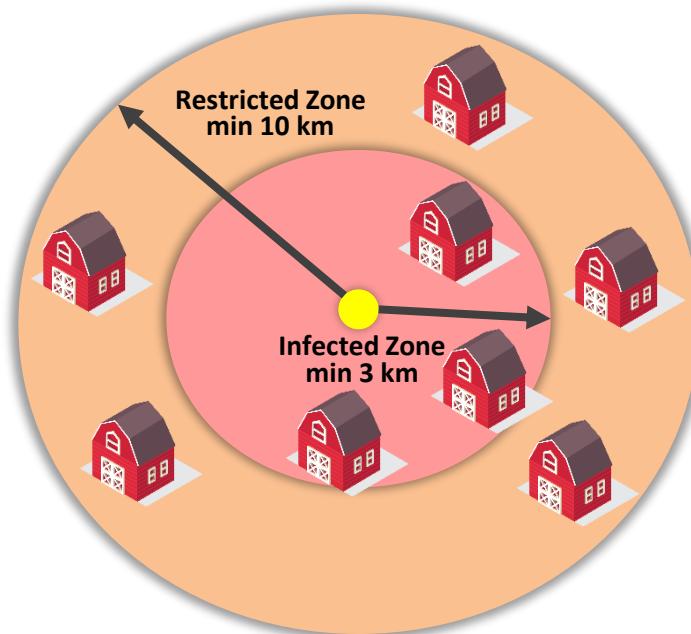
- A common and critical disease response tool used in the management and eradication of ASF and other foreign animal diseases.
- A tool that allows us to control movements on a larger scale
 - A geographic area that is established to prevent the spread of disease from an infected area to areas free of the disease → movement control & biosecurity

We call this area the primary control zone (PCZ)

How does zoning prevents disease spread?

General actions required on any premises with swine in the PCZ include:

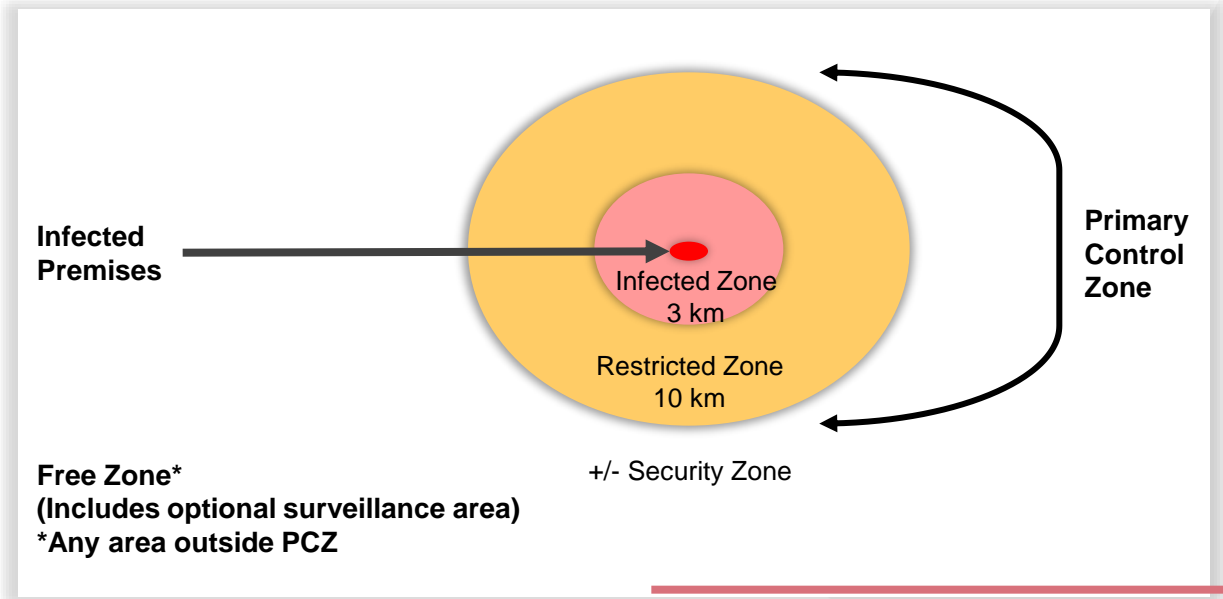
- ✓ Increased biosecurity and industry awareness
- ✓ Movement controls and movement permitting
- ✓ Surveillance
- ✓ Reporting of sick or dead pigs



What does a PCZ look like?

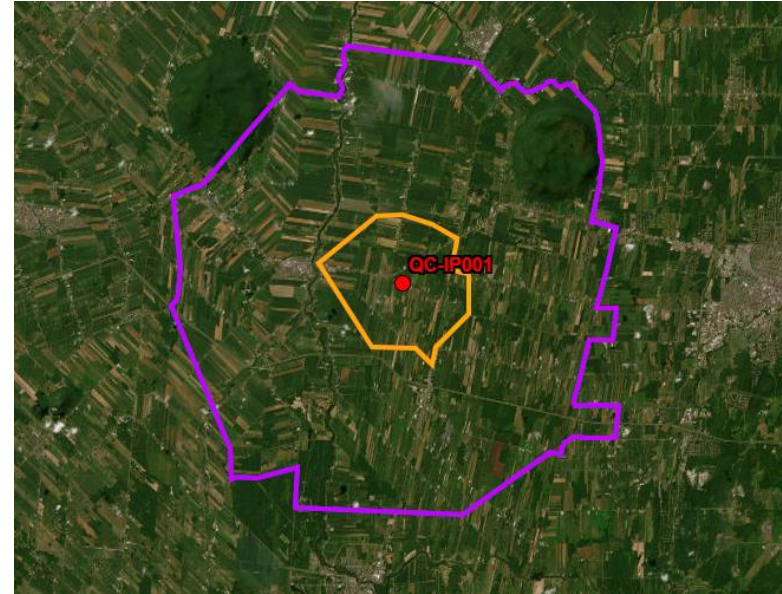
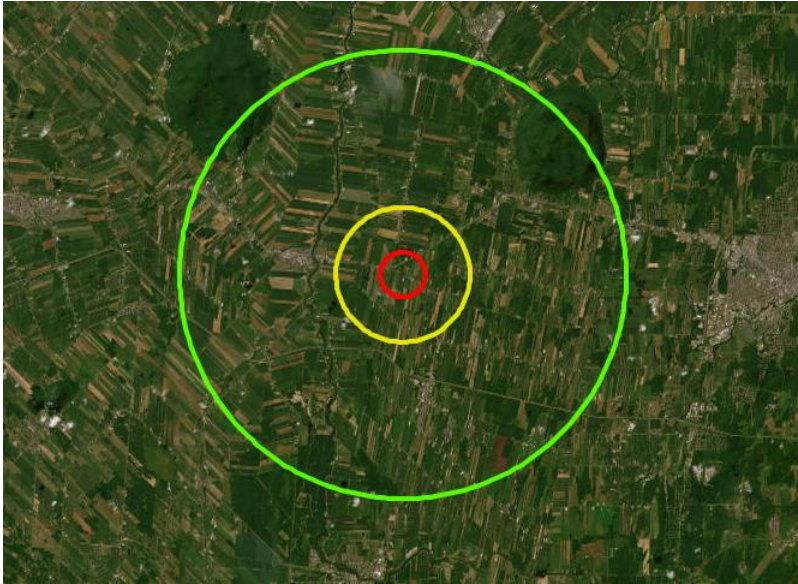
A PCZ is made up of:

- Infected zone (IZ): a **minimum** of 3km from any infected premises
 - All IP's will be located in the infected zone(s)
- Restricted zone (RZ): a **minimum** of 10 km from any infected premises
- Security zone: may or may not be used.



A look back at the ASF
exercise in Quebec

Fictitious PCZ related to the September exercise



How does a PCZ affect trade?

- The export of designated animals and products from a PCZ is not allowed. This includes:
 1. Animals or pork from animals originating from inside the PCZ;
 2. Pork or by-products processed in the PCZ; and
 3. Pigs, pork or by-products that transited through a PCZ (even if they do not stop in the zone).

When is a PCZ declared? Domestic swine

- When the Minister (CFIA) believes that a disease exists within a defined geographic area.
 - **Declaration of a PCZ will be made as soon as possible after the confirmed case definition has been reached.**
 - Index case: requires confirmatory testing done at the National Centre for Foreign Animal Diseases (NCFAD) in Winnipeg, MB.

A new PCZ is declared with each newly identified infected premises (IP)

When is a PCZ declared? Wild pigs

- ASF detection in a wild pig will also result in a PCZ declaration = **immediate border closure**.
 - Instead of the zone centered around an IP, it is placed around the detection site of the wild pig/carcass.
 - **In order to satisfy international obligations, a comprehensive ASF response involving both wild and domestic populations must be in place.**
- Results in **increased biosecurity requirements**, movement restrictions and surveillance in the domestic pigs in that wild pig PCZ.
 - to ensure domestic pigs have not already been exposed.
 - to contain the virus to the wild population
 - To minimize the risk of spread to other areas.

A photograph of several white piglets in a field of green grass. The piglets are looking towards the camera. The sky is blue with some light clouds. The text is overlaid on the image.

Permitting when a PCZ is used during an ASF outbreak

Why is permitting important?

- Unrestricted movement of “designated” animals and things can spread disease, increasing the number of infected premises and prolonging the length of the outbreak.
- During an outbreak, it is still critical to allow for some movements to occur for the welfare of the animals and to carry out the proper outbreak response.
 - Permitting or licencing is used to allow for **safe** movements into, within, and out of the disease control zone.
 - Control of source and destination premises as well as in transit
 - Special conditions must be met for each type of movement in order to ensure it is safe and for permission to be issued.

Animals or products originating from or slaughtered/processed within a zone generally cannot be exported!

Who is responsible for permitting?

Requester of permits and licenses is officially the owner.

- The owner, producer or designated employee can fill out the request.
- Often provincial industry boards will provide guidance or assistance.

Issuers of licenses and permits require designation under the *Health of Animals Act and Regulations*.

- Also is an expectation of international trading partners that the “competent veterinary authority” = CFIA or a person under contract by the CFIA issues the permits in order to accept zoning.

What is permitting?

- A legal document that must be carried with the designated animals or things at the time of movement.
- The movement must:
 - not present a risk of transmission of the virus; and
 - be compliant with the requirements set out by the CFIA on the document.
- Movements requests may be:
 - **prohibited** depending on:
 - ✓ timing during the outbreak
 - ✓ the commodity involved
 - ✓ infection status of the premises
 - ✓ zones involved (IZ or RZ)
 - ✓ deemed unsafe
 - **allowed**
 - **allowed with special requirements** that need to be met (i.e. additional biosecurity, cleaning and disinfection, and/or testing).

What types of permits are available?

- **General permits (Gp):** risk associated with the movement is low
 - ✓ May not be available early in the course of the outbreak.
 - ✓ Requires adherence to biosecurity principles
 - ✓ Provided with the general permit.
 - ✓ The permit must be carried by the transporter at all times.
 - ✓ Applied for online
 - ✓ A record of general permits issued are kept for tracing purposes in case a problem arises.

What types of permits are available? Continued

- **Specific permits (SP):** risk associated with the movement is high
 - *Biosecurity protocols are the cornerstone*
 - List specific conditions that need to be met such as pre-movement testing, veterinary inspection, surveillance results.
 - Dependent on information supplied by applicant *and approved on a case-by-case basis by an inspector.*

What types of permits are available? continued

- **Multi-use specific permits** are available in some situations.
 - They are permits that can be used repeatedly by the operator for the same movement (same source and destination) once conditions are in place and are effective.
 - Eliminates the need for individual permit assessments for repeated movements of the same type

When are permits required?

For the movement of any “designated” animal or thing.

1 Live Swine

- A. Live swine to welfare cull or depopulation
- B. Live swine from a premises to slaughter
- C. Live swine to another premises

2 Swine Carcasses

3 Swine Germplasm from an Embryo Collection Site or Artificial Insemination Centre

4 Swine Meat and Swine By-Products

- A. Products and by-products used for edible purposes
- B. Hog by-products used for non-edible purposes from an operator to rendering facilities or to an approved disposal site
- C. Products/ by-products that have been processed in a way that would inactivate ASF

5 Feed and/or clean bedding material

- A. Feed and/or bedding material to feed or care for swine from a commercial supplier
- B. Feed and/or clean bedding material to feed or care for swine originating from a premises with susceptible species onsite.

6 Swine Manure, Soiled bedding and Slurry

7 Diagnostic Specimens

8 Movement of Non-Susceptible Species

9 Any Other “Things” That May Act as a Fomite

Where are permits required?

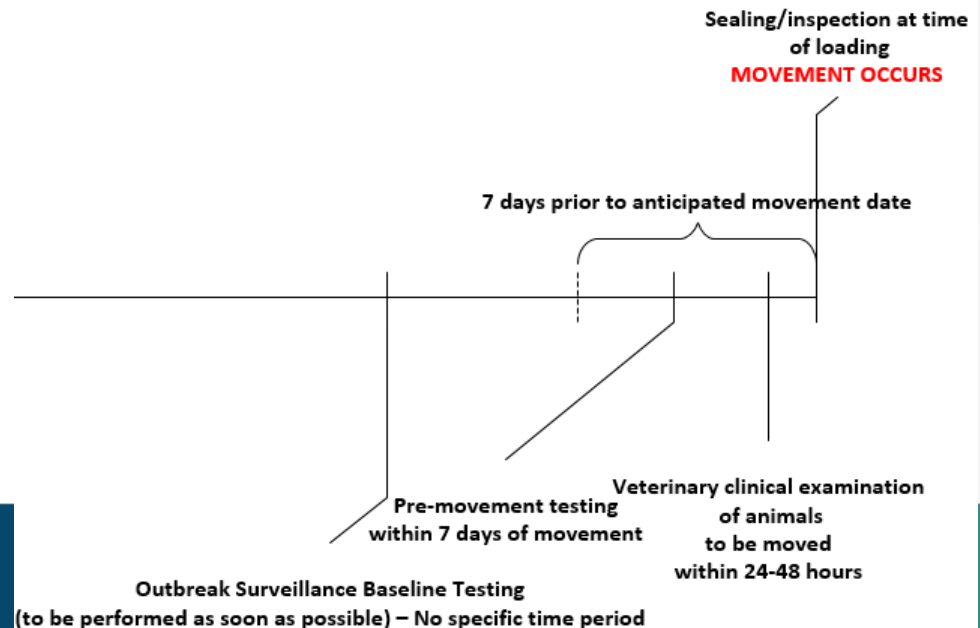
- A movement to occur **into, out of, within, or through** a PCZ
- A movement between two PCZ's.

When are Permissions Issued?

Timeline of Conditions

- Once all the conditions are met by the owner.
- Pre-movement conditions may require extended timelines to be able to meet requirements
 - Depends on the commodity being moved.
 - Live animal movements the most complex

- ❖ Applications need submitted at least 7 days in advance
 - Time for coordination of live animal testing, receipt of results, clinical examination etc



When are permissions issued?

(more details on the movement of live pigs)

Live pig movement type	When permit is available?	End use of animal	Testing required before movement?	Can animal move out of PCZ?
Premises to premises	Not issued in early stages of outbreak	✓ Pigs remain alive	Yes	Not in early stages of outbreak
Direct to slaughter	Not issued in early stages of outbreak	<ul style="list-style-type: none"> ✓ Slaughtered for human consumption ✓ Domestic use only 	Yes	Not in early days of the outbreak, then direct to a designated location for immediate slaughter
Direct to cull	Can be issued early during outbreak	<ul style="list-style-type: none"> ✓ Disposal ✓ Rendering 	Yes	Yes – to a designated location, may be to another zone or DIP

When will the permitting end for a PCZ?

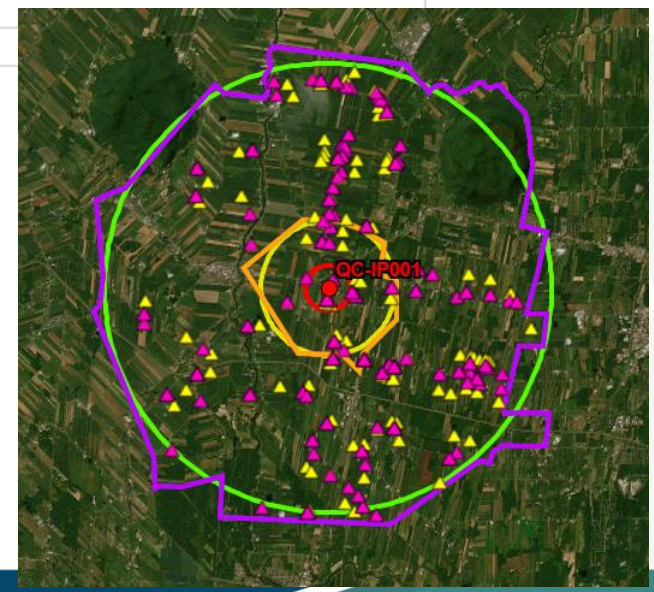
- Permitting will remain in place until the PCZ is revoked.
 - It does not have to stay in place until disease freedom of the entire country is declared.
 - Permitting restrictions usually lessen over time.
- The PCZ will be lifted the following is complete (for that zone):
 - Depopulated and disposal of all IP's
 - Approved C&D
 - Required post outbreak surveillance with negative results and no new cases

Estimated number of permits to be issued in one month in the fictitious PCZ

Number of farms

Bilan des sites de production porcine dans un rayon de 10 km			
Type de batiment	Nombre de No Batiment	Nombre de fermes	
ENGRAISSEMENT	125	80	
ENGRAISSEMENT-POUP.	2	2	
MATERNITE	11	8	Après validation, il y avait une seule maternité dans la zone
POUPONNIERE	23	17	
	161	101	

Source: EQSP



Estimated number of permits to be issued in one month in the fictitious PCZ

Number of permits

Type de visite	Maternité	Pouponnière	Engraissement	Total permis
Livraison de moulée	1	19	80	100
Semence porcine	8	0	0	8
Livraison de truies	1	0	0	1
Livraison de porcelets	4	14	31	49
Livraison porcs abattoir	1	0	125	126
Superviseur technique	1	19	32	52
Livraison de propane	1	0	0	1
Visite exterminateur	0	10	40	50
Entretien	0	2	8	10
Épandage de lisier	0	5	20	25
			Total	422

What is the Role of Stakeholders (Industry & Provinces)

- Develop SOP's and best practices
- Plan as far as advance as possible for movements during an outbreak
- Prioritization of essential movements that require permitting

Bonus: What are the challenges of permitting?

- Initial prohibition of permits for high-risk commodities:
 - Live animals, germplasm, and manure/slurry
 - Manure/slurry pit maintenance
 - Do not allow to fill to capacity before emptying in case a hold is needed
- Extended timelines to meet conditions for some permits
 - Early requests/planning of known live animal movements
- Consider requirements for feed storage to reduce frequent deliveries
- During an outbreak, standard practices will need to change
 - C&D of conveyances at the plants

Questions?

