



Canadian Food
Inspection Agency

Agence canadienne
d'inspection des aliments

Canadian Food Inspection Agency



Our vision:

To excel as a science-based regulator, trusted and respected by Canadians and the international community.

Our mission:

Dedicated to safeguarding food, animals and plants, which enhances the health and well-being of Canada's people, environment and economy.

The Risk of FMD and how would Canada Respond.

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Canada

Presentation outline

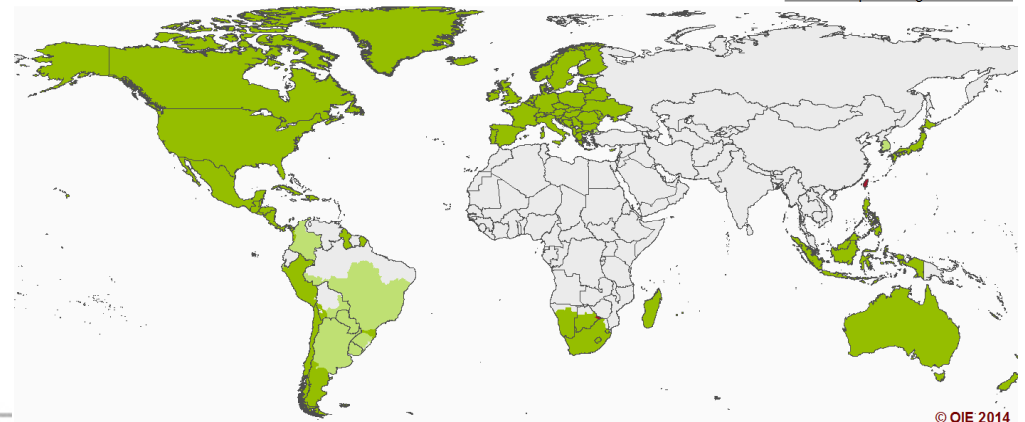
1. CFIA Overview
2. Risk of FMD introduction
3. How does Canada respond?
4. Movement controls and establishment of a Primary Control Zone
5. Vaccination.
6. Containment Zone Proposal



OIE Member Countries' official FMD status map

Last update February 2014

[Click on a specific region to zoom in](#)



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Official FMD status of Member Countries - Whole country or zone(s)

- | | | |
|---------------------------------------|---|----------------------|
| Country/zone free without vaccination | Suspension of the status free without vaccination | Containment zone |
| Country/zone free with vaccination | Suspension of the status free with vaccination | No recognised status |

CFIA Mandate



- The Canadian Food Inspection Agency (CFIA) is Canada's largest science-based regulatory agency, and is dedicated to safeguarding food, animal and plant health, which enhances the health and well-being of Canada's people, environment, and economy.
- The CFIA develops and delivers inspection and other services to:
 - Prevent and manage food safety risks
 - Protect plant resources from pests, diseases and invasive species
 - Prevent and manage animal and zoonotic diseases
 - Contribute to consumer protection; and
 - Facilitate market access for Canada's food, plants and animals.

CFIA Workforce

Approximately 6900 staff are employed across Canada.

Veterinary Inspectors: 588

Inspectors: 3476

Four Operational areas:
West, Ontario, Quebec and Atlantic.

Regional offices: 18

Field offices (Including border points of entry): 178

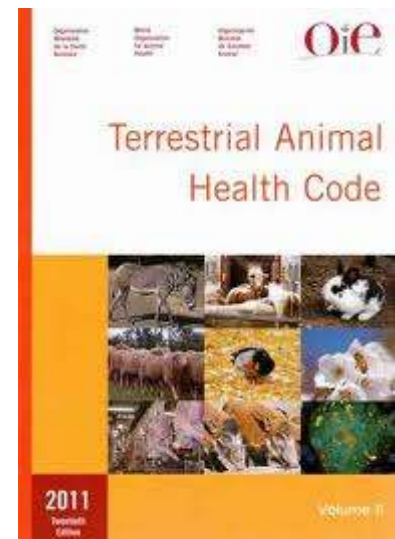
Laboratories: 13
(Terrestrial Animal)



CFIA's Goal if FMD discovered

In diseases of a National magnitude such as FMD, CFIA has the lead role with a close provincial and industry partnership.

At the start of any FMD outbreak, the desired outcome is to re-establish FMD-freedom without vaccination as quickly as possible.



Economic Impact of Foot and Mouth



- An outbreak of FMD in Canada has been projected to have an economic impact on Canada's economy between 8.3 - 46 billion dollars. (Serecon 2002)
- Canada's border's would immediately close to trade in related animals and animal products and would likely take between a year and 18 months to re-open.
- Foot and Mouth is a country freedom disease and so the whole country would be treated as an infected country, not just the affected area.

Entry of FMD into Canada



- The most likely route of FMDV entry into Canada appears to be the illegal importation of infected animal(s) or contaminated product(s), which may be intentional (including bioterrorism) or unintentional.
- The Asia region poses one of the most significant FMD risks for Canada.
- In 2009, around 1.2 million people from the Asia region visited Canada, while in 2010, over 7 million travelled to the USA.
- In 2009, over 117 000 people immigrated to Canada from Asia.



Canadian Border Services Agency



- Inspection of goods and people entering North America from Asia does occur, but because of the large volume of people and products being brought in, only a small percentage of the total is examined in detail.
- To combat these threats, risk-based inspections of people and products, along with creating awareness about the threat of FMD spread by using animal products as feed, could be used to help mitigate the risk of FMD entering North America from the Asia region.

**BE AWARE
AND DECLARE!**



**PENSEZ-Y
ET DÉCLAREZ!**



FMD Introduction



- Feeding food waste to pigs (swill-feeding) is prohibited in Canada; however, enforcement of small-scale and urban operations is difficult if it is not reported.
- The threat of illegally imported animal products being used to supplement the normal diets of 'back yard' pigs is a threat to Canadian agriculture because of the growth of urban animal agriculture in ethnic communities with strong ties to their home countries.



Foot-and-Mouth Disease Response



The basic principles used in eradicating exotic diseases are:

1. Eradicate sources of the disease agent; (stamping-out)
2. Prevent contact between susceptible animals and the disease agent; (movement controls)
3. Increase the resistance of susceptible animals to the disease agent; (emergency vaccination)
4. Contain the disease agent to a geographic area; (zoning)

The Response Strategy may need to change over time and it may not be applied uniformly



CFIA response



- CFIA has no ability to impose zoning until the minister declares a Primary Control Zone (PCZ) and can only quarantine farms present within 5 kilometers of the infected farm.
- In partnership with the provinces and stakeholders CFIA would conduct an initial response on the infected farm and focus on tracing activities in order to determine potential spread.
- The minister would then be informed of the potential spread and be advised to declare a PCZ large enough to encompass all potential premises.
- All movements of susceptible animals and anything capable of acting as a carrier of the disease would require a permit to move into, out of or within the zone

Simulated outbreak of FMD in Alberta with Auction Mart Involvement

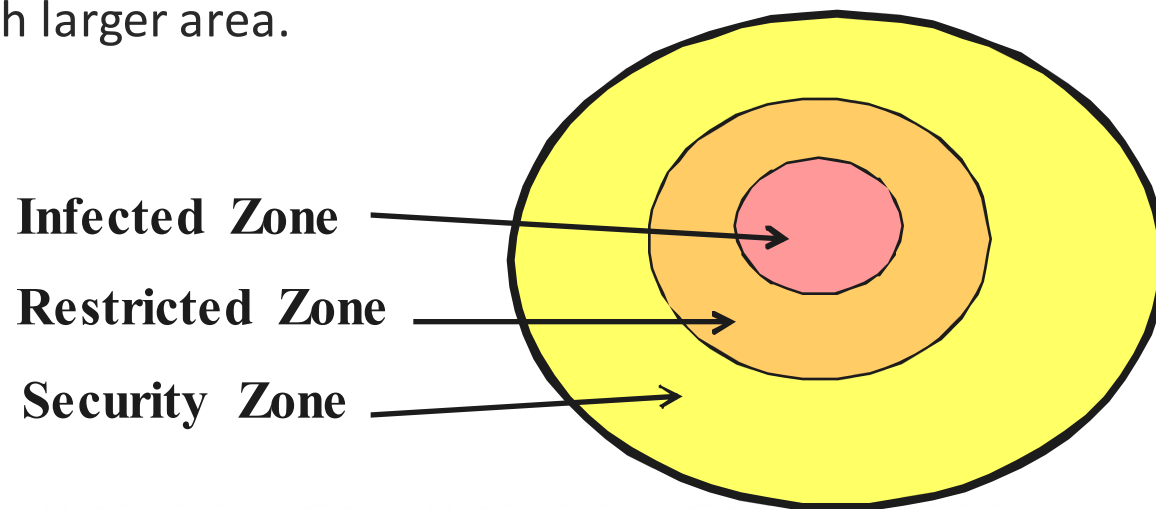


FMD Primary Control Zone In Reference To Rest of Canada

**FOOT AND MOUTH DISEASE
PRIMARY CONTROL ZONE
2015**

Zones within Primary Control Zone

- Once the Minister has declared a PCZ, CFIA has the ability to implement zones of varying movement controls within that zone.
- Infected zone - Minimum radius of 3 km from an infected premise.
- Restricted zone – Minimum radius of 10 km from an infected premise
- Security zone – The remainder of the PCZ.
- There will likely be multiple infected and restricted zones which join into a much larger area.



Canada – US RCC Zoning



- In October of 2012, Canada and the US signed an agreement to establish parameters whereby the participants recognize each other's zoning decisions in the event of a highly contagious FAD outbreak in either or both countries.
- The arrangement is supported by reciprocal evaluations of Canada and the United States which concluded that each country has sufficient veterinary infrastructure and emergency response capacity to contain and eradicate an FAD outbreak via zoning.
- Other trading partners would likely impose trade restrictions on the unaffected country if they recognized the zoning of the affected country and began trade from the 'free' area.
- North America may be treated as a single entity anyway.

Emergency Vaccination



- Emergency FMD Vaccination is controversial for a variety of reasons, but;
- From an economic, ethical and environmental point of view, stamping out is less and less accepted as the sole disease control method.
- The use of vaccination to augment control of an FMD outbreak in a previously free country is increasingly being recognised as a potentially important component of the response
- Many countries have or are developing contingency plans and vaccine supply arrangements.



North American Foot and Mouth Vaccine Bank (NAFMDVB)



- Canada, USA and Mexico are members of the NAFMDVB
- NAFMDVB maintains a store of Vaccine Antigen Concentrates (VAC) that can be quickly made up into useable vaccine. VAC's are currently stored at Plum Island New York.
- Once the serotype & subtype are confirmed the VAC will be shipped back to the manufacturer
- Usable vaccine would be shipped directly to Canada
- Quads countries plus Mexico are currently working on an 'Arrangement' for sharing vaccine between their three banks in the event of a FMD outbreak.



Vaccination by producers



- Currently most on farm routine vaccination is done by the producers.
- Utilizing producers to perform the vaccination allows CFIA to optimize resource allocation, it solves biosecurity issues and allows quicker implementation of a vaccination program.
- CFIA validator would be responsible for monitoring the vaccine cold chain, making sure all vaccinates were permanently identified and that all identification was documented and recorded by CFIA.



CFIA Vaccination Policy



- A decision to vaccinate will be done quickly and is most likely to occur in situations where there is high density of animals, in cold weather, and where there is a lack of resources
- Currently CFIA believes that vaccinating herds within 3 km of the infected premises will shorten the outbreak and reduce the number of infected herds.
- All vaccinates will need to be controlled until a decision is made as to their final disposition.
- Once the outbreak is contained, Canada will apply to the OIE to establish a Containment Zone.

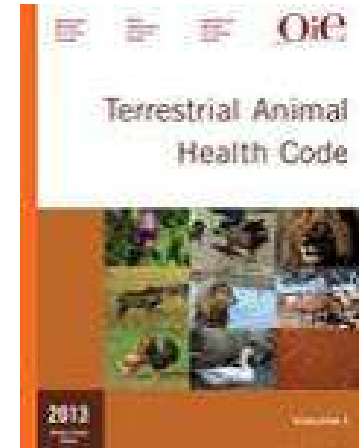
OIE Zoning



World
Organisation
for Animal
Health

- Only have 3 defined zones. More dealing with trade rather than disease control
- Infected zone - means a *zone* in which a *disease* has been diagnosed.
- For the purposes of chapter 8.7 of the Terrestrial Animal Health Code, an FMD **infected country** is a country that does not fulfil the requirements to qualify as either an FMD free country where *vaccination* is not practised or FMD free country where *vaccination* is practised.
- Protection zone – means a *zone* established to protect the health status of *animals* in a free country or *free zone*, from those in a country or *zone* of a different *animal health status*
- Containment zone - means a defined *zone* around and including suspected or infected *establishments*

Containment Zone implementation



- Once the outbreak is over, you have to notify the OIE of your intent to establish a containment zone.
- You must wait the two incubation periods with no new cases and then submit your documentation to the OIE.
- The OIE will convene an emergency meeting to evaluate your request.
- If approved, the zone is established and the rest of the country is designated a free zone and can resume trade.
- The containment zone would then be subject to the periods described under recovery of freedom.



0 25 50 100 150 200 Kilometers

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FOOT AND MOUTH DISEASE CONTAINMENT ZONE 2015



Map Produced By NEOC GIS Services March 4, 2015

Canada

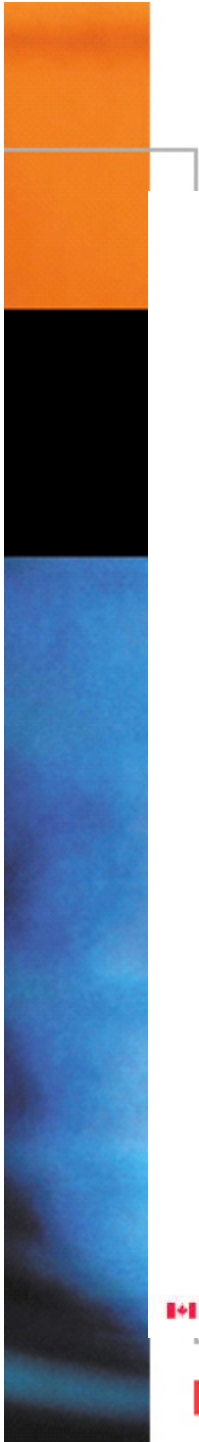
Canada | 21

OIE Proposal by the Quads



- Canada proposed to the quads countries to include a second option for the establishment of zoning during an outbreak in situations where the outbreak area can be confined to a limited area and allow trade to resume from the remainder of the country..
- The Quads agreed with Canada's proposal and asked the OIE to consider allowing the establishment of a larger containment zone which contains within and along its perimeter a surrounding protection zone.
- While outbreaks may still occur within the central parts of the containment zone, only the occurrence of such outbreaks within the protection zone would lead to the withdrawal of the containment zone and the loss of status for the rest of the country.





0 25 50 100 150 200 Kilometers



FOOT AND MOUTH DISEASE CONTAINMENT ZONE AND PROTECTION ZONE 2015

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Questions ?

