

# 2023 Small Holder Swine and Poultry Seminar Series



## Small Holder Swine Biosecurity

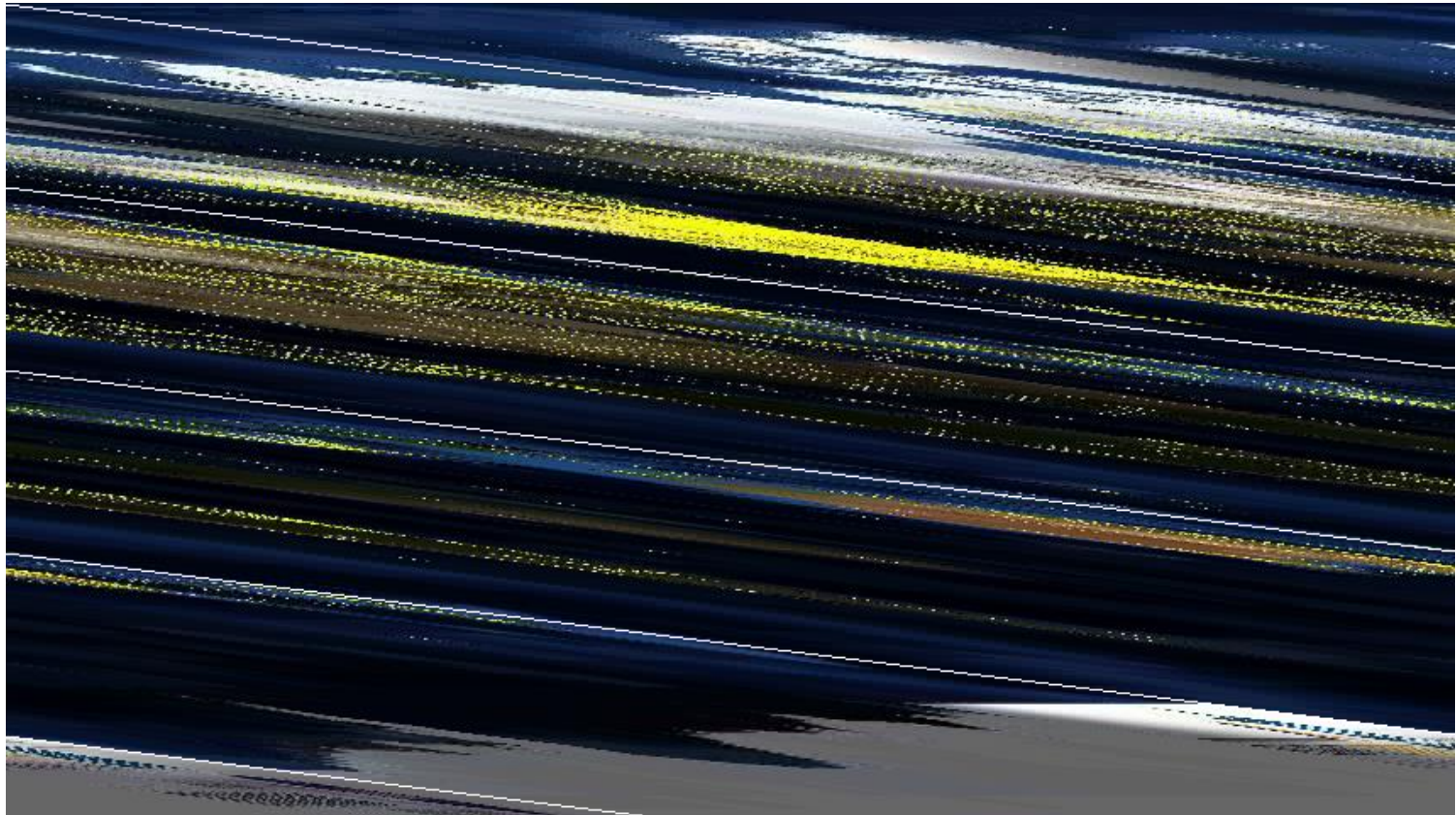
Robyn Harte  
Provincial Swine Specialist  
Manitoba Agriculture



# Overview

- Why Biosecurity
- Concepts
- Sources of Biosecurity Breaks
- Biosecurity on Farm

# 24 H of International Travel



# Scott Dee and The Snowball From Hell



SNOWBALL FROM HELL





# Snowball From Hell

- Sampled at the truck wash, floor of the truck, floor of the 'barn', bottom of the box.
- 8/10 times the virus had been transported
- 8/8 virus infected pigs!!!!

# Why Biosecurity



Swine Health Information Center  
Made possible by 

[HOME](#)
[ABOUT SHIC](#)
[CONTACT SHIC](#)
[PODCASTS & WEBINARS](#)
[SIGN UP FOR OUR NEWSLETTER](#)
[PLAN OF WORK](#)
[RESEARCH ▾](#)
[EMERGING DISEASES ▾](#)
[DISEASE MONITORING REPORTS ▾](#)
[NEWS ▾](#)

## SHIC CLOSELY OBSERVING ASF OUTBREAK IN GERMANY

Confirmation of African swine fever (ASF) on three farms in eastern Germany, where restriction zones already exist, was widely reported in industry press the week of July 12, 2021. The Friedrich-Loeffler-Institut (FLI) confirmed the diagnoses. The Swine Health Information Center (SHIC) continues to monitor the situation and will have detailed information in the August [Global Swine Disease Monitoring Report](#) to be published in the Center's newsletter on August 4, 2021. All three affected farms are near the border with Poland.

Per press reports, the largest farm had 200 pigs and all were culled after the diagnosis. This was an organic farm and sows were able to be outdoors, therefore assumed to be at greater risk of contracting ASF due to the virus's prevalence in wild boar. The second and third locations had two pigs and four pigs respectively.

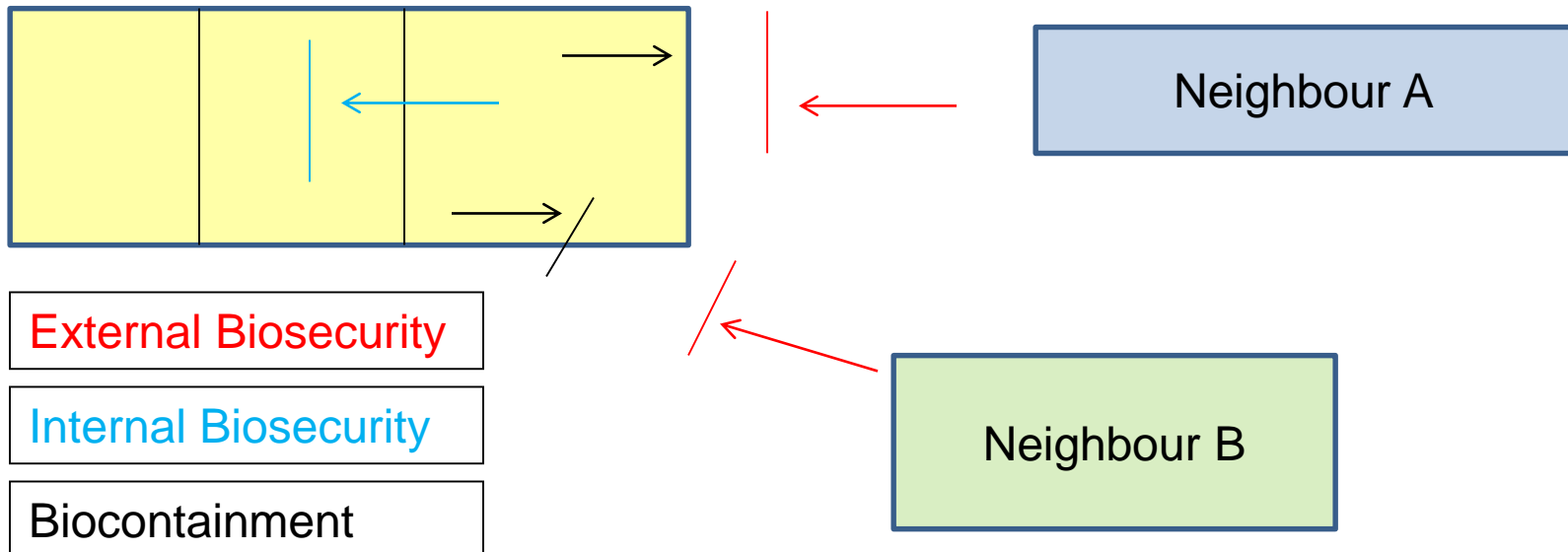
These are the first cases of ASF in domestic pigs in Germany, however, it has been prevalent in wild boar in the nation near neighboring Poland. German agricultural officials have responded to the outbreak with pleas for continued strict biosecurity and diligence.

SHIC, launched in 2015 with Pork Checkoff funding, continues to focus efforts on prevention, preparedness, and response to novel and emerging swine disease for the benefit of US swine health. As a conduit of information and research, SHIC encourages sharing of its publications and research. Forward, reprint, and quote SHIC material freely. SHIC is funded by America's pork producers to fulfill its mission to protect and enhance the health of the US swine herd. For more information, visit <http://www.swinehealth.org> or contact Dr. Sundberg at [psundberg@swinehealth.org](mailto:psundberg@swinehealth.org).

3 farms – 1<sup>st</sup> 200 sow outdoor organic farm, 2<sup>nd</sup> farm 2 pigs, 3<sup>rd</sup> farms 4 pigs

# Biosecurity Concepts

- Biosecurity is:
  - A set of measures taken to avoid the introduction, spread and transport of disease onto, throughout or off of a premise through hazard control.



# Sources of Biosecurity Breaks

- Live Pigs
- Semen
- Transport
- Personal and Visitors
- Pest, Pets and Birds
- Fomites
- Water, Food and Bedding
- Manure
- Deadstock and Waste
- Aerosols

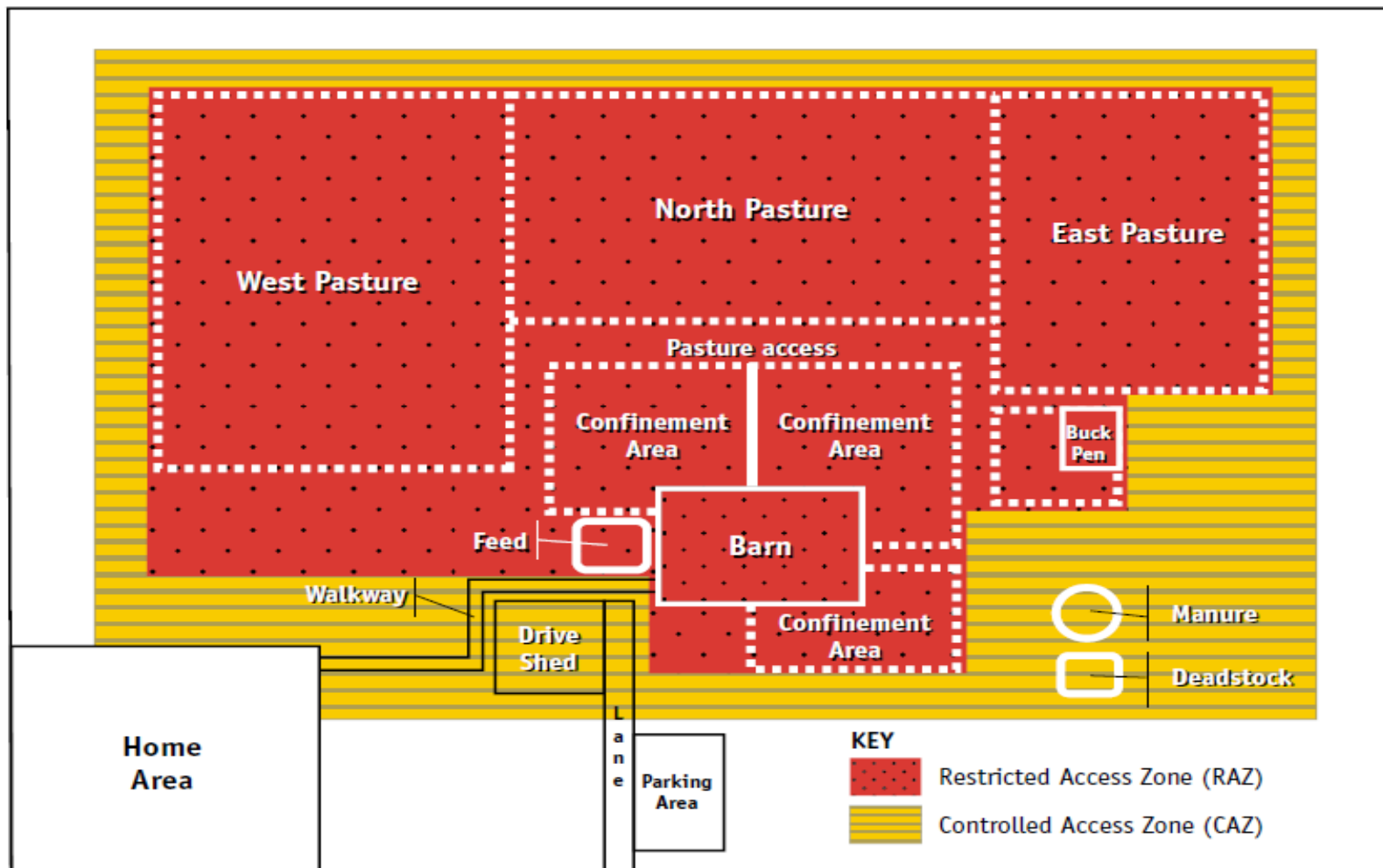
## How to manage the hazards – Live Pigs/Semen

- Only purchase pigs/semen from reputable sources
- Don't bring pigs into your herd immediately –  
QUARANTINE!
  - This protects your herd/facility from the introduction of pathogens
  - Aides your new pig in adapting to any/all pathogens on your farm.
- Vaccinate animals for diseases

# How to Manage the Hazards - People

- Keep track of who visits your place
  - Calendar/sign in book/text messages/delivery slips
- Have farm clothes and boots available
  - No street shoes near the animals
  - No off farm clothes near the animals
- Make sure everyone washes their hands before/after touching the animals

# How to Manage the Hazard - Zones



# Control the Hazard - Feed

- Feed can be sources of infection
  - PEDv has been found in feed ingredients, ingredients act as mediums for pathogens, salmonella and other diseases can also be transmitted
- Important to buy feed from a trusted retailer.
  - Avoid slopping pigs
- Keep feed in a secure, clean, dry, pest free environment

*E. coli*

Salmonellosis



Dysentery

Rotavirus

Toxoplasmosis

Leptospirosis



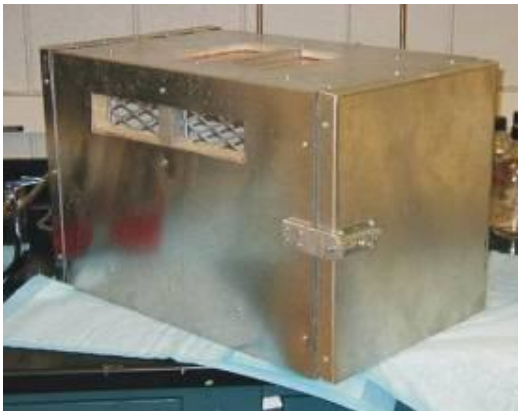
Fill  
the holes

# Control the Hazard – Cleanliness is next to...

- Pathogens thrive in dirty environments
- Keeping the things you can clean, well cleaned is important.
  - Recognize that wood doesn't clean
  - Organic matter inactivates disinfectants
  - The younger your animals are... the cleaner their environment should be

# Back to Dr. Dee

- Built a mini trailer
- Filled it with shavings and pigs that had PRRS for 2 hrs
- Testing 4 types of cleaning



## T1: Removal of shaving



## T2: Removal of shaving, pressure wash, disinfect



### T3: Scrape, wash, disinfect, freeze and thaw



### T4: Scrape, wash, disinfect, dry



Introduced naïve piglets to the trailer and also did swabs after the scrape out to test for PRRS.



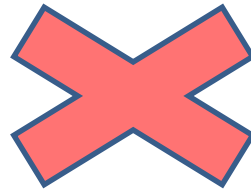
# And the winner is?????

Treatment Type		PCR Test	
		Swab	Piglets
<b>T1</b>	Cleaning & removal of bedding	9/10	8/10
<b>T2</b>	Cleaning, washing, disinfecting	6/10	6/10
<b>T3</b>	Cleaning, washing, disinfecting, freezing, thawing	6/10	5/10
<b>T4</b>	Cleaning, washing, disinfecting, drying	0/10	0/10

## Control the Hazard - Manure

- Composting manure is an excellent way of returning nutrients to the soil
  - Needs the right temperature, the right mixing, the right length of time to breakdown both nutrients and pathogens
- Ensure manure is cleaned from pens regularly (at least once a year depending on the size of the pen and the number of animals).

# Control the Hazard – Deadstock



# The 4 P's to avoid the Apocalypse

- PID
  - If we don't know you exist, we can't plan for you if there is a fire/flood/disease/crisis.
- PigSafe/PigCare/PigTrace
  - Outdoor Access is a certified section of Pork Excellence



# PigTrace

- Reporting movements of pigs is the law
  - All pig owners must report movements within 7 days
  - Information required:
    - Origin and destination
    - Date and time of departure/arrival
    - License plate of vehicle or trailer
    - Number of animals
    - Animal Identification number (if needed...not all animals need numbers)

# Key Relationships for Biosecurity

- Your vet
  - Integral for health information
- Your suppliers
  - Integral for health supplies
- MPC
  - Information about biosecurity strategies, funding opportunities, etc.
- Your friendly neighbourhood swine specialist
  - Information about funding, costs, feed, housing, laws, regulations, unbiasedly offered.
- Your neighbours
  - Working together to keep everyone's farms and animals healthy
- Trusted internet sources
  - 3 am crisis need 3 am answers

## More Information

- [www.pigtrace.ca](http://www.pigtrace.ca) : request a pigtrace number and fill in the form
- Call PigTrace Customer Service: 1.866.300.1825
- Contact Manitoba Pork Council 1.888.893.7447
- Canadian Association of Swine Veterinarians small holder guide [www.casv-acup.com/small-scale-pig-farming.html](http://www.casv-acup.com/small-scale-pig-farming.html)
- Robyn Harte: 204.918.9483 [robyn.harte@gov.mb.ca](mailto:robyn.harte@gov.mb.ca)

## Please join the conversation with Manitoba Agriculture and Resource Development

- Subscribe to our [newsletter](#)
- Follow us on Twitter: [twitter.com/MBGovAg](https://twitter.com/MBGovAg)
- Visit our website: [Manitoba.ca/agriculture](https://Manitoba.ca/agriculture)
- Call our general inquiries line 1-844-769-6224
- View our videos on YouTube:  
[youtube.com/ManitobaAgriculture](https://youtube.com/ManitobaAgriculture)