
*Pig production in Alberta:
A guide for small-scale producers*



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Canadian pork is recognized at home and throughout the world for its high quality. Alberta pork production is a strong pillar of the economy and agriculture in Canada, with operations of varying size. Some producers may raise only a few grower pigs seasonally, or they may raise thousands of pigs at all stages of production year-round.

Alberta Pork is a non-profit organization representing all of Alberta's registered hog producers. We represent producers' interests to governments, the media, the general public and other groups involved in the pork industry.

We currently collect a \$1 levy on all market hogs sold and \$0.25 on pigs under 50 kilograms that are sold out of Canada. These funds are used for the development, growth and promotion of the Alberta pork industry.

If you have chosen to be part of the hog industry, there are some production topics that must be considered to maintain the highest standards of meat quality, food safety and animal care. Taken together, these attributes ensure we continue to produce the highest-quality product.

1. Housing (Think about comfort)

Whether you are raising hogs outdoors, indoors or in combination, housing must provide adequate space, good ventilation and preferably temperature controls as part of indoor production. You can find all the space allowances and requirements for animals in the National Farm Animal Care Council's [Code of Practice for the Care and Handling of Pigs](#).

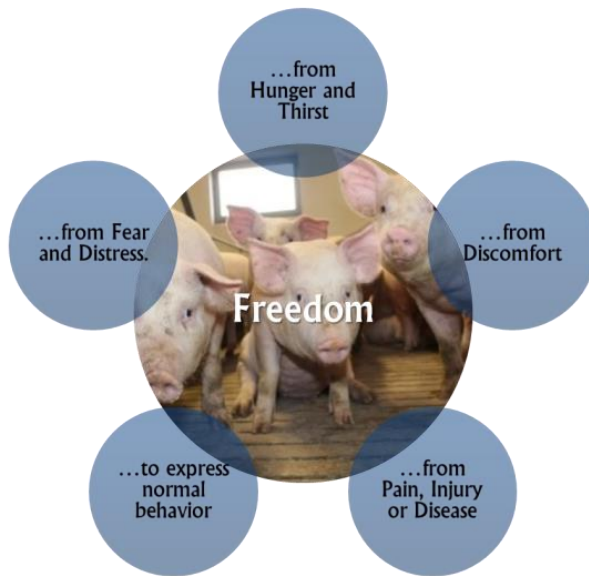


For animals raised outdoors, shelters need to be provided. Shelters should be weatherproof, providing protection for all weather conditions, to prevent hypothermia in winter and sunburns and hyperthermia in summer. Help maintain thermal comfort by providing proper bedding, shelter, heating devices and shade at all stages of production. Shelters must have enough space to allow the free movement of pigs and protection from predators.

Shelter design should accommodate pigs using group pens according to age and size, preventing excessive weight variation within groups. Before introducing new animals to your herd, it is recommended you isolate individuals for observation in a separate, sheltered quarantine area for several days. If everything appears well, new animals can be allowed in your main shelter areas. Shelters should also have an area available for sick or injured animals (hospital pen).

Maintain shelters in a manner that reduces any potential for injury. Chemically treated wood should not be used in the construction of pens if animals have direct contact with that material. Another important factor is that all areas of the barn or outdoor housing structure must have adequate drainage to prevent accumulation of stagnant water and manure. This provides pigs with a dry resting area.

2. Welfare (Fulfilling the five freedoms)



Animal welfare should be considered in terms of the “five freedoms,” whether animals are on farm, in transit, at market or at a place of slaughter. These freedoms are shown in the adjacent graphic.

Alberta Pork believes all pigs should have these five essential conditions at a minimum.

To achieve these freedoms, your animals need proper housing conditions, adequate handling, access to feed and water and veterinary treatment when required.

Veterinary assistance may also require establishing vaccination protocols for your farm the location of your farm and when you have any health issues. Keep a record of all your treatments.

In consultation with your veterinarian, you should consider implementing a **program to control parasites** in your herd (*Toxoplasma* and *Trichinella*).

As with all livestock industries, pork production has challenges. Our industry has been fighting the spread of disease by being proactive with biosecurity protocols and educating producers. See *Appendix 1* for more information on common and federally reportable diseases.

Be sure to check your pigs every day! Positive interaction with humans reduces fear in your animals and provides valuable information to your production, such as health status and changes in behavior, and reduces the chance of injuring pigs when moving them from your farm to market.

3. Water (The forgotten nutrient)

A reliable supply of water and the necessary equipment to treat it should be available at all times. Depending on age, a pig will drink up to 20L of water per day (*Table 1*). Water must be available for use by all pigs. Manual watering systems are most common in small productions, but automatic watering systems are recommended as a simpler and safer way to provide clean water. Water hauled manually can be contaminated easily and become a potential source of disease and pathogens.



Certain types of watering equipment should be cleaned daily, such as portable, durable devices or plastic buckets. Pigs need to have access to fresh, clean water at all times, night and day. If you use automated watering systems, please keep equipment out of direct sunlight to minimize the risk of algae and bacteria.

build-ups, and clean the water lines frequently to remove biofilm. Several water line sanitizer products are available on the market.

Prevention of fecal contamination of the water source is a practice that must be include in your daily routines.

Table 1: Water Consumption by Swine

Type	Weight Range (kg)	Water Requirement Range (L/Day) ¹	Average Water Use (L/Day) ²
Weaner	7 to 22	1.0 to 3.2	2.0
Feeder pig	23 to 36	3.2 to 4.5	4.5
	36 to 70	4.5 to 7.3	4.5
	70 to 110	7.3 to 10	9
Boar or gestating sow		13.6 to 17.2	15
Lactating sow ³	-	18.1 to 22.7	20

¹ A result of the animals' environment and management.

² Typical consumption over a year on a daily basis under average agricultural conditions in Ontario.

³ Includes unweaned piglets.

Source: Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) fact sheet, 2015.

Water source and availability can make a big difference in the health and productivity of your pigs. Testing your water quality both at the source (e.g. well) and at the barn (e.g. nipples) is recommended at least once a year. Keep in mind the following water quality tips:

1. Water quality is crucial for food safety and for the health and welfare of pigs.
2. Water may contain a variety of microorganisms, including bacteria and viruses.
3. Among bacterial contaminants, *Salmonella*, *Leptospira*, and *E. coli* are the most commonly encountered.
4. Fecal coliforms in the water may indicate an elevated risk of salmonella infection in the herd.
5. Due to potential nitrate toxicity, water with a nitrate level above 300 mg/L may reduce average overall growth and performance.
6. Keep record of all tests.

4. Feed (Ensuring access and meeting the nutritional needs of all your animals)

According to the National Farm Animal Care Council's [*Code of Practice for the Care and Handling of Pigs*](#), "Pigs must be provided with daily access to feed that maintains their health and meets their physiological requirements." Regardless of the type of trough used (manual, automatic, hand-crafted, dry or liquid), feeders must be appropriate for the size, age and production phase of the animals.



Feeders should:

- Prevent excessive competition and promote equitable access for all animals.
- Protect against weather and pests, such as birds and rodents. This principle also applies to storage areas and on-farm feed mills.
- Be managed to ensure proper access to feed.

Prevent fecal contamination of both feeders and waterers

Refer to *Appendix F* of the [*Code of Practice*](#) for more information.

It is **illegal in Canada** to feed meat or meat by-products to pigs without the approval of the Canadian Food Inspection Agency's (CFIA) Animal Feed Division. Please contact Alberta Pork or the CFIA for more information.

5. Biosecurity (Keeping your animals disease-free)

Biosecurity refers to the procedures intended to protect humans and animals against disease or harmful biological agents. It includes the measures taken to prevent diseases on farms and preventing the spread of pathogens if a disease is present. To complete a biosecurity risk assessment, refer to *Appendix 2*.

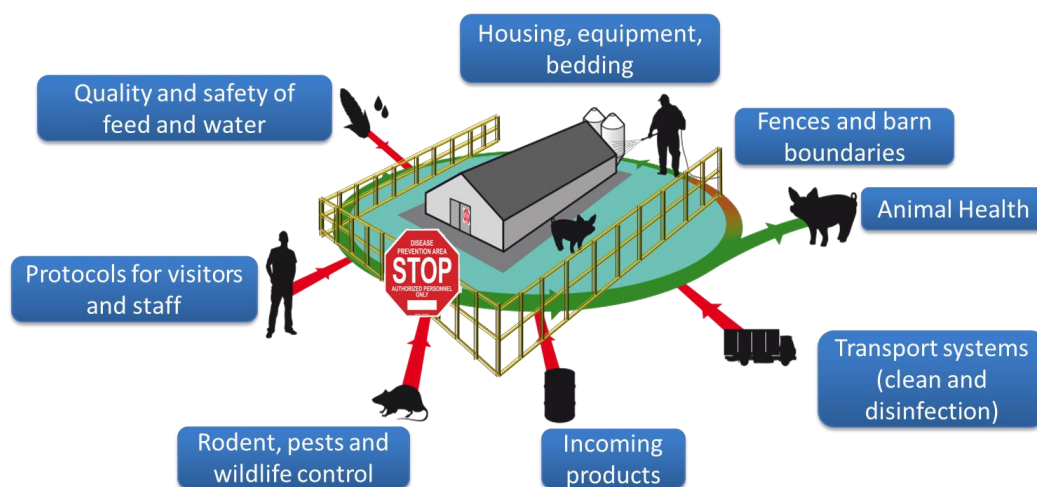


Image adapted from: <http://www.cidlines.com/en-UK/biosecurity>

A sound biosecurity plan for your barn should include:

- Housing and equipment: Recommended to clean, disinfect and dry all pens and all equipment between batches of pigs or at least once a year.
- Fences: These are the first barrier between your farm and the outside. Proper fences keep wildlife and non-authorized people off your farm.
- Bedding: If you are using bedding material, check with your supplier and store this material properly to avoid contamination with feces of other animals. Remove soiled manure and bedding material as necessary to keep the pen clean.
- Animal health: If possible, obtain a health certificate for your new stock, and avoid bringing in animals if they appear unhealthy. Monitor your herd daily and talk to your veterinarian if you see any signs of disease or sudden changes in mortality.
- Transport systems: Vehicles that go from farm to farm should not get too near your barn. Use signs to re-direct them. Incoming and outgoing pig transport vehicles should be washed, disinfected and dried to avoid contamination.
- Incoming products: Consider asking for the quality control programs used by your feed suppliers. Any product used for your operation (vaccines, disinfectants, needles) must come from reliable providers.
- Rodent and pest control:
 - If housing animals in a barn, keep areas around your barn free of debris and keep grass short.
 - Dispose of pig carcasses in a way that discourages the presence of flies or scavengers. Acceptable methods include burial, compost and incineration.
 - Keep feed ingredients in proper storage areas and clean up any spilled feed.
 - Use traps and baits, keeping record of bait consumption and dead rodents.
- Protocols for visitors and staff: If possible, limit the access of people to your operation. Visitors and staff should wear clean boots and coveralls. Depending on the size of your barn, staff should use foot baths or change their boots as they move from one area to another within the barn.

The Canadian Food Inspection Agency (CFIA) has [National Biosecurity Standards](#) for most livestock commodities. These guidelines are a good place to start when developing a biosecurity plan for your farm. *Animal Handling and Transportation (The benefits of understanding your pigs)*

6. Animal Handling and Transportation (The benefits of understanding your pigs)

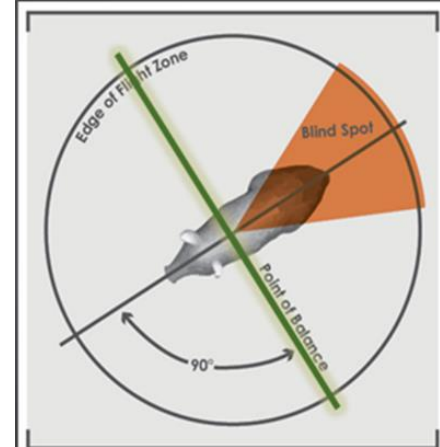


Acceptable equipment to use when handling pigs, including a sorting board, rattle/paddle, nylon flag and a plastic ribbon on a stick. Source: TQA Handbook version 6.

Adequate animal handling starts with the understanding of pig behavior and the appropriate use of suitable tools.

In nature, pigs are prey, and they have a herd mentality to protect themselves. Familiarize yourself with their bubble space and how to properly approach them.

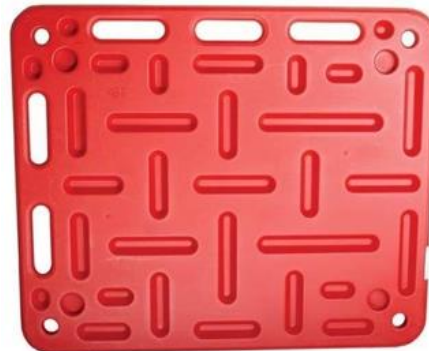
Below are some basic tools that you may require.



Rattle paddles: plastic sticks containing noise-making pellets to capture the attention of a pig. They can be used also to tap pigs gently, but contact should not be made with pigs' heads.



Boards: provide a physical and visual barrier for pigs. You should not use this tool to restrain a pig. Boards should be supported on the ground or barn floor, not by using your legs or knees.



Nylon flags: an effective visual stimulus, particularly with larger pigs.



Source: www.grandin.com

7. Code of Practice for the Care and Handling of Pigs



“The *Codes of Practice* are nationally developed guidelines for the care and handling of farm animals. They serve as our national understanding of animal care **requirements** and **recommended practices** and have been developed for virtually all farm animal species in Canada”

Requirements

- Outline acceptable and unacceptable practices and are fundamental obligations relating to the care of animals.

Recommended practices

- Encourage adoption of practices for continuous improvement in animal welfare.

Review the [Code of Practice](#) online or ask Alberta Pork for a hard copy at no cost.

8. Traceability (Ensuring pig movements are recorded)

Swine Traceability is an important animal health and food safety system that enables precise and rapid emergency response to protect livestock, producers and consumers. Any person in custody of or in care and control of swine or deadstock of swine is required to comply with both federal and provincial legislations when moving swine.

Requirements in Alberta’s regulation meet or exceed those in the federal *Health of Animals Act*. The Canadian Pork Council (CPC) therefore advises persons in Alberta to comply with Alberta’s regulation. Alberta Pork is the delegated authority for administration of the Swine Traceability Regulation on behalf of Alberta Agriculture and Forestry.

Under the provincial *Marketing of Agricultural Products Act*, anyone in Alberta who has pigs, regardless of whether for food production or as a companion, must be registered with Alberta Pork.

Swine manifests are to be submitted to Alberta Pork within 48 hours of receipt. If shipping outside of Alberta, submit within 48 hours of shipping. Upon submission to Alberta Pork, required information will be uploaded to the national PigTrace system.

Most swine require identification prior to movement. Herd marks (tattoo numbers) are assigned by Alberta Pork upon registration. The herd mark is associated with specific premises and your Alberta Pork producer number. See *Table 2* below to understand what kind of identification is required for each type of pig.

Table 2: Herd mark requirements

Movement type	No ID	Herd mark tattoo	Herd mark spray paint	Herd mark PigTrace tag	Individual ID PigTrace tag
<i>Deadstock</i>	✓	X	X	✓	X
<i>Direct to slaughter</i>	X	✓	✓	X	✓
<i>Farm to farm</i>	✓	X	X	X	✓
<i>Assembly yard to farm</i>	X	X	X	X	✓
<i>Auction mart/other</i>	X	X	X	✓	✓
<i>Imports</i>	X	X	X	X	✓
<i>Exports</i>	X	✓	X	✓	✓

See *Appendix 3* for Alberta Pork's producer and premise registration forms. If you require blank swine manifests or identification tags, contact **Christina Quinn**, Traceability Coordinator, Alberta Pork by email at christina.quinn@albertapork.com or phone 780-440-8461.

9. Additional training and certification

Canadian Quality Assurance (CQA®) program and Animal Care Assessment guide (ACA™):

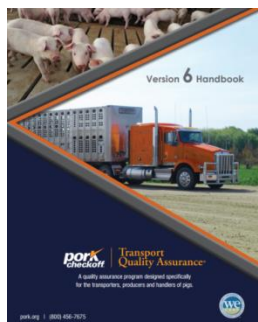


If you want to increase the scale of your production and get a certification in food safety and good practices, you may be eligible to be part of the [Canadian Quality Assurance program](#) (CQA®) and Animal Care Assessment guide (ACA™).

CQA® is an on-farm program that assists producers in creating flexible, effective food safety procedures that relate to their specific operation. CQA® is based on the seven basic principles of the internationally recognized HACCP (Hazard Prevention Critical Control Point) model.

While the Canadian Quality Assurance (CQA®) manual addresses food safety protocols, the ACA™ guide focuses on animal care practices. contact us at Alberta Pork.

Transport Quality Assurance (TQA) program



The [Transport Quality Assurance](#) (TQA) program is designed specifically for those who transport, produce and handle pigs. Most of its principles apply to both large and small hog operations.

TQA certification requires official training and evaluation, but you can use the program handbook for the most important information. If you want to be certified in TQA, Alberta Pork can provide you with the training. For more information on quality assurance programs, contact Alberta Pork by email at info@albertapork.com or phone 1-877-247-PORK (7675).

PORCINE EPIDEMIC DIARRHEA

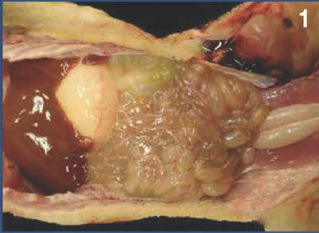
WHAT IS PORCINE EPIDEMIC DIARRHEA?



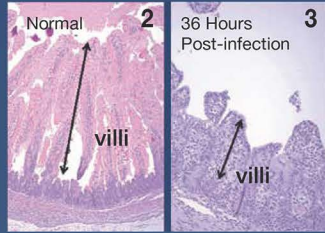
Porcine Epidemic Diarrhea (PED) is a disease produced by a coronavirus that causes severe diarrhea and dehydration in pigs but older animals usually recover. It is not transmitted to humans or other animals, nor is it a food safety risk. PED looks similar to Transmissible Gastroenteritis (TGE), and diarrhea caused by Porcine Delta Coronavirus (PoDCoV).

MAIN LESIONS

PED virus damages the villi in the gut reducing the absorptive surface, causing the loss of fluids and nutrients resulting in dehydration



Macroscopic
Thin-walled and dilated small intestine with fluid contents



Microscopic
Figure shows decrease in the height of villi (villous atrophy), and loss of absorptive epithelium (surface)

KEY FACTS

- Virus was first reported in the US in 2013, and spread to Canada and Mexico in 2014
- PED incubation period is 24 hours to 3 days
- PED, TGE and PoDCoV are provincially reportable diseases. These three are also known as Swine Enteric Coronaviruses

CLINICAL SIGNS IN NAÏVE HERDS



High mortality in neonatal piglets



Yellow watery diarrhea



Piglets covered with brown blotches



Yellow watery diarrhea



Runt, emaciated piglets



Diarrhea

SOWS

- From “cow-pat” feces to watery diarrhea

PIGLETS

- Diarrhea
- Vomiting
- Dehydration
- High mortality (80-100%)

WEANERS AND GROWERS

- Watery diarrhea (no mucus or blood)
- Low mortality (1 to 3%)
- Vomiting

TRANSMISSION



Fecal – Oral



Contaminated trailers



Contaminated equipment, clothes, boots, etc.



Contaminated feed

- PED is highly infectious and easily spread through manure
- Only one gram of manure is needed to transmit the disease
- Some feed animal by-products have been suspected as potential sources of infection
- There is no human health risk associated with PED, TGE, or PoDCoV

BIOSECURITY

- Ensure that incoming trucks and equipment are free of contamination (cleaned, disinfected and dried)
- Make sure all visitors and barn staff use secure systems for movement in and out of the barn (i.e. Danish system) at every exit. Shower in and out if possible
- Have designated coveralls and boots at each barn site
- Provide hand cleaning stations
- Work with your veterinarian or Alberta Pork to develop biosecurity protocols for your herd

RECOMMENDATIONS

- Any sudden onset of unusual diarrhea must be investigated by your veterinarian and reported to Alberta Agriculture and Alberta Pork
- Laboratory tests are essential to confirm the diagnosis of this disease. Please contact Alberta Pork for more information

PORCINE REPRODUCTIVE RESPIRATORY SYNDROME (PRRS)

PRRS is a viral disease that causes reproductive failure, respiratory disease and increased mortality. It is a major economic threat for the swine industry that can affect all stages of production.

PRRS - TWO OVERLAPPING CLINICAL PRESENTATIONS

REPRODUCTIVE SYMPTOMS (SOWS)



Late term abortions



Stillbirths (different stages of development)

- Fever, loss of appetite
- Decline in milk yield in sows / Low libido in boars
- Mix of live piglets (low viability / PRRS infected), mummies and stillborn piglets may occur
- Abortion
- Neurologic signs

The severity of symptoms depends on the strain of the virus, immune status of the herd and barn management.

RESPIRATORY SYMPTOMS (ALL AGES)



Infected pig showing lethargy, and significant decrease in weight gain

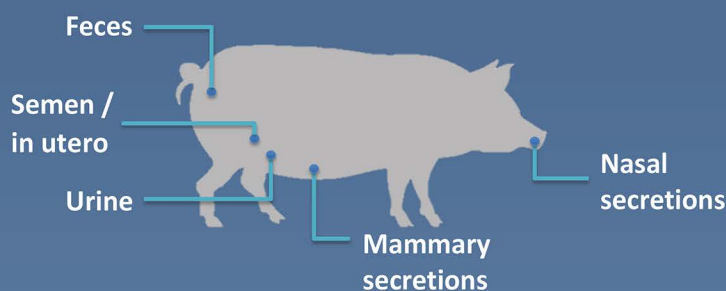


Lobular pattern of reddening. Lungs with rubbery texture

- Loss of appetite, fever, and lethargy
- Rapid breathing or shortness of breath
- Blue colored areas on body extremities (i.e. blue ear)

PRRS virus interacts with other microorganisms (Porcine Circovirus, Pasteurella, Bordetella, etc.) to cause severe respiratory symptoms.

TRANSMISSION



- Long-term carrier pigs (without symptoms) are probably the most common means of virus introduction to a barn, along with semen
- Economic losses are due to increased use of vaccines and medications, increased mortality, poor reproductive and growth performance, and increased losses due to other diseases
- Indirect transmission sources include needles, transport vehicles and fomites (tools, equipment and supplies)

Laboratory tests are needed to confirm the diagnosis.

CONTROL

All in/All out pig flow or unidirectional flow of animals during the nursery and grower phases is needed



Mainly based on vaccination



Develop a control plan in consultation with your veterinarian



Biosecurity to prevent / control infection

RECOMMENDATIONS

- Breeding stock and semen should be purchased from negative herds and boar studs
- Prevent the introduction of infected stock
- Producers should regularly monitor the health of their animals
- Report any suspicion of illness to your veterinarian and to Alberta Pork
- Follow good biosecurity and sanitation practices to prevent introduction and reduce transmission
- Work with your herd veterinarian for control, elimination and prevention strategies

PHOTO SOURCES

Photo 1: "Changed PRRS viral strain in China" www.landwirt.com

Photo 2: Guillamon and Garcia, Guide of diagnosis of necropsy in swine pathology, ELANCO.

Photo 3: <https://www.prrs.com/en/prrs/symptoms/respiratory/>

Photo 4: Pig333. https://www.pig333.com/pathology-atlas/interstitial-pneumonia_32
Routes of transmission: Adapted from: <http://www.prrsresource.com/about-prrs>

FEDERALLY REPORTABLE DISEASES

(Currently none of these diseases occur in Canada. Some do occur in the USA)

VIRAL DISEASES

AFRICAN SWINE FEVER (ASF) & CLASSICAL SWINE FEVER or HOG CHOLERA (CSF)



Bloody, mucoid, foamy nasal discharge



Redness of distal limbs



Redness of perineal skin

ASF & CSF share similar clinical signs as:

- Sudden death / high mortality
- High fever (40.5 – 42°C)
- Loss of appetite
- Vomiting
- Diarrhea (could be bloody)
- Redness of the skin (ears, abdomen, legs)
- Respiratory difficulty, coughing
- Abortion, stillbirths, weak piglets (in CSF)



SWINE VESICULAR DISEASE, VESICULAR STOMATITIS (VS) & FOOT-AND-MOUTH DISEASE (FMD)



Ruptured vesicle of skin-hoof junction



Vesicular lesion on the nose



Erosion (ruptured vesicle) on the teat

The clinical signs of these vesicular diseases are identical

- Vesicles and vesicle ruptures, ulcers/erosions on the snout, feet, mouth, tongue and teats
- Loss of appetite, fever and lameness
- Little or no mortality
- Sudden appearance of lameness
- Sloughing of claws/hoof
- Any vesicular disease lesion must be immediately reported to CFIA, Alberta Agriculture and Alberta Pork
- Seneca Virus A will cause identical lesions.



PSEUDORABIES or AUJESZKY'S DISEASE



Mummified fetuses



Crusting around eyes and nose. Watery exudate surrounding the eyes



Pig with nerve disorders (unable to move, shivering movements)

Clinical signs

- Affects many wild and domestic species
- Abortion, embryonic mortality
- Central nervous signs (tremors, paralysis) and high mortality in piglets
- Respiratory disease (laboured breathing, sneezing, coughing) and low mortality in growing animals



BACTERIAL DISEASES

BRUCELLOSIS



Unilateral inflammation of testicles

Clinical Signs

- Reproductive failure (abortion, stillbirths, perinatal mortality)
- Embryonic mortality, and irregular return to estrus (heat)
- Reduced fertility, swollen and painful testicles



PARASITIC DISEASES

TRICHINELLOSIS



Larvae infection in boar muscle (microscopic image)

- Trichinellosis can cause severe illness in people if they eat infected meat that is undercooked
- Pigs get infected by eating infected meat, waste, wildlife or rodents
- Trichinellosis is not found in commercial pig herds in Canada



TRANSMISSION

- Direct contact between sick and healthy pigs
- Eating contaminated or undercooked food scraps
- Contamination of objects (equipment, clothes, feed, facilities, vehicles, etc.)
- Soft ticks
- Contact with contaminated wild pigs / wildlife
- Airborne transmission
- Breeding or artificial insemination (contaminated semen)
- In utero / consumption of contaminated milk

ADDITIONAL INFORMATION

- Lack of effective or practical treatments
- Vaccination used to alleviate signs and as a part of eradication programs
- Potential risk for human health

RECOMMENDATIONS

- All animals should be checked daily. Immediately report any suspicion of a reportable disease first to your veterinarian and to Alberta Pork
- Laboratory tests are needed to confirm the diagnosis of any of these diseases
- All suspected and confirmed cases must be reported to the Canadian Food Inspection Agency (CFIA)

SOURCES

Canadian Food and Inspection Agency (CFIA) <http://www.inspection.gc.ca/>
 Zimmerman et al., 2012. Diseases of Swine, 10th Edition
 Photos 1, 2, 3, 4, 6 and 8: The Center for Food Security & Public Health (CFSPH), Iowa State University <http://www.cfsph.iastate.edu/DiseaseInfo/index.php>
 Photo 5: CABI <http://www.cabi.org/isc/datasheet/62450>
 Photos 7 and 10: PIG333 Atlas of pathology <https://www.pig333.com/pathology-atlas/>
 Photo 9: Pig progress <http://www.pigprogress.net/Health/Health-Tool/diseases/Aujeszky-Disease/>
 Photo 11: Gamito et al., 2009. Histopathology of trichinellosis in wild boar. Vet. Parasitol. 165:165-169.

PORCINE CIRCOVIRUS (PCV)

Porcine circovirus (PCV) is a virus widely spread all over the world. PCV type 2 (PCV2) infection causes several different diseases referred to as porcine circovirus associated diseases (PCVADs).

PORCINE CIRCOVIRUS ASSOCIATED DISEASES (PCVADs)

Post-weaning Multi-systemic Wasting Syndrome (PMWS)



Thin pig with marked dorsal spine



Thinning, long and rough hair



Enlarged lymph nodes

- Clinical signs start at 6 - 8 weeks of age
- Weight loss/unthrifty pigs
- Pale and/or yellowish skin
- Rough hair coat
- Difficulty breathing
- May have diarrhea
- Incoordination

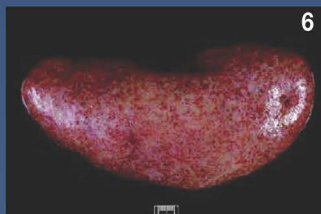
Porcine Dermatitis and Nephropathy Syndrome (PDNS) – Affects the skin and kidneys



Numerous lesions on skin



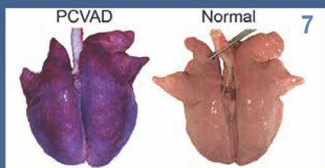
Detail of the skin lesions



Swollen kidney with spots

- Red/purple, blotchy slightly raised skin lesions, especially over the hind legs, groin and belly. These can cover the whole body in severe cases
- Fever, depression
- Loss of appetite and weight
- PCV2 is linked to PDNS. However, the cause of PDNS is undetermined
- Other factors may be involved with PDNS

Porcine Respiratory Disease Complex (PRDC) – Co-infection with PCV2 likely increases the severity of respiratory disease



Inflammation of lungs (left) compared to normal (right)

- Panting, coughing, nasal discharge
- Virus acts as a “door opener” for bacterial pathogens
- Swine influenza, PRRS, and bacterial agents may be involved



Different stages of stillbirth

- Reproductive failure: decreased farrowing rate, embryonic death (return to estrous), increased mummies and stillbirths
- Runt and normal piglets (infected)
- The outcome depends on the stage of gestation

PCV2 infects swine worldwide, and yet only a small proportion of pigs develop the associated diseases described above.

Clinical signs are strongly suggestive. Post mortem examinations, and laboratory tests are needed to confirm a PCV2 diagnosis.

TRANSMISSION (Several routes)



Direct contact between sick and healthy pigs (body secretions)



In utero / consumption of contaminated milk



Breeding or artificial insemination (contaminated semen)

CONTROL

- There is no specific treatment for pigs with porcine circovirus associated diseases



Vaccination to reduce severity and incidence rate



Develop a control program in consultation with a veterinarian



Biosecurity to prevent / control infection

RECOMMENDATIONS

- Early recognition of sick pigs and segregation are essential
- Treatment to control secondary infections
- Minimize the impact of PCV2 infection by reducing stress, ensuring good nutrition, adequate space, proper ventilation, and controlling other diseases
- Work with your veterinarian to develop a control plan

BIOSECURITY SELF ASSESSMENT						
1	Biosecurity Level	Level of Risk	BIOSECURITY ZONES	Please check the choice that applies the most to these premises.		
1.1	1	0	Is there a gate and signage at entry to the CAZ that prevents unauthorized access if needed?	Yes	No	Signs, no gates
1.2	4	0	Are there signage and locked doors to prevent unauthorized entry to the RAZ?	Yes	No	No defined RAZ
Total	5	0				No defined CAZ
2 -A	Biosecurity Level	Level of Risk	DOMESTIC LIVE PIGS	Please circle choice that applies the most to your premises		
2.1	5	0	In the past 12 months, how many premises have you received pigs from?	0	1	2 - 5
2.2	5	0	Do you have a written agreement with your supplier to inform you or your veterinarian of any health status changes prior to each purchase?	Yes	No	N/A
2.3	5	0	If your source of animals changes, do you inform your veterinarian prior to the first animal movement?	Yes	No	N/A
2.4	5	0	Do you quarantine incoming animals ?	Yes	No	Never
2.5	5	0	If yes, how long do you quarantine your incoming animals?	0-3 weeks	3-6 weeks	6 + weeks
2.6	5	0	What type of quarantine do you use?	Attached	Detached	N/A
2.7	5	0	What is the distance to RAZ?	10 to 200 m	200 to 1000 m	1 km +
2.8	5	0	Do you acclimatize incoming animals to prevent naïve animals from incubating and spreading disease when introduced into the RAZ?	Yes	No	N/A
2.9	5	0	What type of acclimatizing method do you use?	Natural exposure	Targeted Immunization	Other
2.10	5	0	Are you testing animals prior to moving them into the RAZ?	Yes	No	Other
2.11	5	0	Are you doing clinical assessments of the animals prior to moving animals into the RAZ?	Yes	No	Other
2.12	5	0	Are you following entry protocols (Danish entry) for the quarantine area?	Yes	No	N/A
Total	60	0				
2 -B	Biosecurity Level	Level of Risk	SEMEN OR EMBRYOS (DOMESTIC AND/OR FOREIGN COUNTRY)	Please check the choice that applies the most to these premises.		
2.13	5	0	Do you have a veterinary assessment of the health status of the boar studs prior to having semen shipped?	Once a year	Twice a year	Quarterly
2.14	5	0	Do you have a written agreement with your supplier to inform you or your veterinarian of any health status changes prior to each purchase?	Yes	No	N/A
2.15	5	0	Do your boar studs use boars sourced from outside Canada?	Yes	No	N/A
Total	15	0				

3 - A	Biosecurity Level	Level of Risk	INCOMING PIG TRANSPORT	Please check the choice that applies the most to these premises.		
3.1	4	0	Are the vehicles used to bring pigs to your premises dedicated to your farm or production system?	Yes	No	N/A
3.2	5	0	Do you have a written protocol for washing, disinfecting and drying for trucks and trailers loading and/or delivering pigs to the RAZ?	Yes	No	N/A
3.3	5	0	If yes, is it validated by your veterinarian?	Yes	No	N/A
3.4	5	0	Do trucks & trailers that deliver pigs to your premises have a requirement that they have been washed?	Yes	No	N/A
3.5	5	0	Do trucks & trailers that deliver pigs to your premises have a requirement that they have been disinfected?	Yes	No	N/A
3.6	5	0	Do trucks & trailers that deliver pigs to your premises have a requirement that they have been dried?	Yes	No	N/A
3.7	5	0	Do vehicles back up to the RAZ to deliver pigs?	Yes	No	N/A
3.8	5	0	Do you unload outside the CAZ and use a farm-specific shuttle to go to the RAZ?	Yes	No	N/A
3.9	5	0	Do you routinely review and verify cleaning and transportation records to verify that trailers are clean prior to delivery?	Yes	No	N/A
3.10	5	0	Do you audit cleaning protocols?	Yes	No	N/A
3.11	5	0	Do you test/sample your trucks and trailers for different diseases?	Yes	No	N/A
3.12	5	0	If yes, what are the diseases are you sampling for?			
3.13	5	0	During a delivery of pigs to your premises, do the truck and trailer stop at another pig premise to deliver pigs?	Yes	No	N/A
3.14	5	0	During a delivery of pigs to your premises, are there other sources of pigs onboard the same trailer that are being or have been delivered to other premises?	Yes	No	N/A
Total	69	0				
3 - B	Biosecurity Level	Level of Risk	OUTGOING PIG TRANSPORT	Please check the choice that applies the most to these premises.		
3.15	5	0	Are trucks arriving to haul pigs away from your premises required to be cleaned, disinfected and dried before arrival?	Yes	No	N/A
3.16	5	0	Do you inspect the cleanliness of the truck and trailer when it arrives to haul pigs away?	Yes	No	N/A
3.17	5	0	Are there BBQ pigs/sows from other premises already on the trailer when loading to haul pigs away from your premises?	Yes	No	N/A
3.18	5	0	Are there market hogs from other premises already on the trailer when loading to haul pigs away from your premises?	Yes	No	N/A
Total	20	0				

4 -A	Biosecurity Level	Level of Risk	PERSONNEL and VISITORS	Please check the choice that applies the most to these premises.		
4.1	5	0	Do you have a policy for downtime and decontamination if staff or visitors have been in a country outside Canada?	Yes	No	N/A
4.2	3	0	Are there protocols and facilities for all traffic (family, staff, visitors and service providers) to change their footwear before entering the CAZ?	Yes	No	N/A
4.3	4	0	Are there protocols and facilities (Danish Entry defined by CSHB) to ensure visitors (including truckers) change into RAZ specific clothing and boots prior to entering the RAZ?	Yes	No	N/A
4.4	4	0	Are there protocols and facilities (at minimum - Danish Entry) to ensure staff change into RAZ specific clothing and boots prior to entry/re-entry to the RAZ?	Yes	No	N/A
4.5	4	0	Do you train staff on proper entry procedures and exit protocols for moving in and out of the RAZ?	Yes	No	N/A
4.6	4	0	Do you audit to ensure all staff & visitors are following proper entry procedures?	Yes	No	N/A
4.7	4	0	Do you have a policy to prevent visitors or staff from entering the RAZ if they are sick?	Yes	No	N/A
4.8	1	0	Do you have a dedicated parking zone for vehicles and visitors arriving on-farm?	Yes	No	N/A
4.9	1	0	Do you have dedicated and unidirectional vehicle flows on-farm?	Yes	No	N/A
Total	30	0				
4 -B	Biosecurity Level	Level of Risk	MEAT PRODUCTS ENTERING THE BARN	Please check the choice that applies the most to these premises.		
4.10	4	0	Do you have a policy on uncooked or dry cured meats entering the RAZ?	Yes	No	N/A
Total	4	0				
5	Biosecurity Level	Level of Risk	PESTS, ANIMAL/INSECTS VECTORS	Please check the choice that applies the most to these premises.		
5.1	3	0	Please indicate if any of the following farm animals are on the premises:	Ruminants	Horses/ Donkeys	Poultry
5.2	3	0	Is the barn designed to limit pests and birds entering the RAZ?	Yes	No	N/A
5.3	3	0	Do you have a rodent and fly control program?	Yes	No	N/A
5.4	4	0	Are farm/house pets allowed in and out of the RAZ?	Yes	No	N/A
5.5	3	0	Are there cats in the RAZ?	Yes	No	N/A
5.6	3	0	Do you have fencing to keep large wildlife (deer, moose) outside the CAZ?	Yes	No	N/A
5.7	3	0	Are there wild or feral pigs in the region (within 10 km)?	Yes	No	N/A
5.8	3	0	Is the RAZ designed to prevent wild or feral pigs from entering?	Yes	No	N/A
Total	25	0				

6	Biosecurity Level	Level of Risk	FOMITES (Tools, equipment and supplies), PHARMACEUTICALS	Please check the choice that applies the most to these premises.		
6.1	3	0	Are tools, equipment and supplies cleaned and disinfected prior to entry into the RAZ?	Yes	No	N/A
6.2	3	0	If contractors are used for on-farm services, do you verify that all equipment brought on-farm is clean and disinfected prior to arrival?	Yes	No	N/A
6.3	3	0	Are medication stored in a manner that prevents contamination and maintains shelf life?	Yes	No	N/A
6.4	3	0	Do you move/exchange medications, vaccines or syringes between this and other premises housing pigs?	Yes	No	N/A
6.5	3	0	Can barn clothing and textiles be cleaned without leaving the RAZ?	Yes	No	N/A
6.6	3	0	Do you bring clothing/textiles from outside of the RAZ to be washed in the RAZ?	Yes	No	N/A
6.7	1	0	Do you have dedicated equipment/tools to be used in each barn or age group?	Yes	No	N/A
Total	19	0				
7	Biosecurity Level	Level of Risk	FEED AND BEDDING	Please check the choice that applies the most to these premises.		
7.1	3	0	Do feed suppliers follow a Quality Assurance Program?	Yes	No	N/A
7.2	3	0	Do bedding suppliers follow a Quality Assurance Program?	Yes	No	N/A
7.3	3	0	Do feed delivery trucks drive into the CAZ to unload?	Never	Some bins	All bins are in the CAZ
7.4	3	0	If feed deliveries are in the CAZ, do they park/drive in a separate zone that is not normally used by people that move in and out of the RAZ?	Yes for all bins	For some bins	Never
7.5	3	0	Is all feed stored to prevent contamination from biological or foreign materials?	Yes	No	N/A
7.6	5	0	Do you feed porcine protein plasma products to your pigs?	Yes	No	N/A
7.7	5	0	Do you feed other animal byproducts?	Yes	No	N/A
7.8	4	0	Are you using straw for bedding?	Yes	No	N/A
7.9	4	0	If yes, are you moving it from another farm site?	Yes	No	N/A
7.10	1	0	Do you have dedicated equipment/tools to be used in each barn or age group?	Yes	No	N/A
Total	34	0				

8	Biosecurity Level	Level of Risk	SOLID/LIQUID MANURE / BARN WASTE	Please check the choice that applies the most to these premises.			
8.1	4	0	Are your pigs routinely exposed to manure from a flush gutter system?	Yes	No	N/A	
8.2	4	0	Is manure stored in a way that doesn't contaminate the RAZ and CAZ?	Yes	No	N/A	
8.3	4	0	Is barn waste stored in a way that doesn't attract scavengers to the RAZ and CAZ?	Yes	No	N/A	
8.4	4	0	When contractors or employees are removing manure from storage, do they work in a separate zone in the CAZ that is not accessed by visitors and staff that move in and out of the RAZ?	Yes	No	N/A	
8.5	4	0	If contractors are removing manure, is there a requirement that they clean (wash, disinfect, & dry) their equipment prior to entering the CAZ after being in contact with other pigs or their manure?	Yes	No	N/A	
8.6	4	0	Do you have your own dedicated manure handling equipment?	Yes	No	N/A	
Total	24	0					
9	Biosecurity Level	Level of Risk	DEAD STOCK	Please check the choice that applies the most to these premises.			
9.1	5	0	How do you dispose of pig mortalities?	Compost/ burial/ incineration within CAZ	Compost/ burial/ incineration outside CAZ	Third Party (Non-Staff) pickup	Own pickup to rendering
9.2	5	0	Are all farm mortalities stored in a container that doesn't allow scavengers to access the carcasses and carcasses do not contaminate feed or water used on your premises?	Yes	No	N/A	
9.3	5	0	Are vehicles used to pick up dead stock at your premises dedicated to your farm or production system?	Yes	No	N/A	
9.4	4	0	If it's a third party pickup, is the pickup location within the CAZ?	Yes	No	N/A	
Total	19	0					
10	Biosecurity Level	Level of Risk	AEROSOL CONTAMINATION	Please check the choice that applies the most to these premises.			
10.1	5	0	How far away is the closest swine site?	Less than 1 km	Between 1-5 km	More than 5 km	
Total	5	0					

11 - A	Biosecurity Level	Level of Risk	VETERINARY INPUT	Please check the choice that applies the most to these premises.		
			Does a licensed veterinarian recommend and evaluate the swine health risk of all vaccines and medications used?	Yes, for all products	For some products only	No veterinary input
11.1	4	0				
Total	4	0				
11- B	Biosecurity Level	Level of Risk	HEALTH MANAGEMENT (DISEASE)	Please check the choice that applies the most to these premises.		
				Always	Most of the time	Sometimes
11.2	4	0	Do you place sick pigs in hospital pen(s)?	Always	Most of the time	Sometimes
11.3	5	0	Do you move sick or smaller pigs into another room, barn or pen that contains younger growing pigs?	Always	Most of the time	Sometimes
11.4	4	0	Do you have a mortality log?	Yes	No	N/A
11.5	5	0	If yes, do you investigate and inform your veterinarian when mortality exceeds acceptable levels of production?	Yes	No	N/A
11.6	5	0	Do rooms run with an all-in/all-out in farrowing?	Yes	No	N/A
11.7	5	0	Do rooms run with an all-in/all-out in nursery?	Yes	No	N/A
11.8	5	0	Do rooms run with an all-in/all-out in growers?	Yes	No	N/A
11.9	5	0	Do buildings run all in/all out in finishers?	Yes	No	N/A
11.1	5	0	Are rooms or buildings washed with hot water?	Yes	No	N/A
11.11	5	0	Are rooms or buildings washed with detergent/degreaser?	Yes	No	N/A
11.12	5	0	Are rooms or buildings disinfected with disinfectant approved by your herd veterinarian?	Yes	No	N/A
11.13	5	0	Are rooms or buildings dried?	Yes	No	N/A
11.14	1	0	Do you have dedicated equipment/pressure washer to be used in each barn or age group?	Yes	No	N/A
Total	59	0				

RISK ASSESSMENT

Section	Level of Risk Total	Total Points - Biosecurity Levels
1	0.00	392
2A	0.00	Level of Risk
2B	0.00	0.00
3A	0.00	
3B	0.00	
4A	0.00	
4B	0.00	
5	0.00	
6	0.00	
7	0.00	
8	0.00	
9	0.00	
10	0.00	
11A	0.00	
11B	0.00	

LOW <120

MEDIUM <=> 120-260

HIGH >260

Action undertaken from last Producer's Self-Assessment			
Date	Action	Description	Comments
		Growing Forward Funding	

Proposed Action

Producer Declaration

Name	Farm Name	Signature	Date
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Producer Registration Form

Registrant

*Business or Farm Name	Date
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This Producer Registration Status ☐ New ☐ Update of Information ☐ De-activation

This Producer Registration is ☐ Hobby ☐ Independent ☐ Producer Group ☐ Colony

Primary Contact

*Name	Municipal District
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*Address

*City or Town	*Province Alberta	*Postal Code
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*Business Phone	*Cell Phone	Home Phone
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Fax	*E-mail
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Would you like to receive (check all that apply): ☐ Industry Communications ☐ Canadian Hog Journal

Additional Contact

Name	Municipal District
------	--------------------

Address

City or Town	Province Alberta	Postal Code
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Business Phone	Cell Phone	Home Phone
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Fax	E-mail
-----	--------

Would you like to receive (check all that apply): ☐ Industry Communications ☐ Canadian Hog Journal

Premises Identification

☐ I am Registering the Attached Premises

OR

☐ The Premises Registration will be Provided by: _____

Registration Agreement

I certify the above information to be accurate and complete and hereby submit this information as required by the Alberta Pork Producers' Plan Regulation. I agree to notify Alberta Pork of changes to any of this information and to supply production information as required by Alberta Pork under the Regulation. Fields marked with an (*) indicate which pieces of information will be provided to the Swine Movement Application (SMA) and the PigTrace database in accordance with the *Alberta Swine Traceability Regulation* and the *Health of Animals Act*. About your privacy: Alberta Pork and its agents retain the information contained in this form in accordance with Alberta Pork's Privacy Policy and the applicable privacy laws.

Primary Contact Signature	Date
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IN OFFICE USE ONLY	*Alberta Pork Producer Number Assigned:	
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Was the account created in?: <input type="checkbox"/> AB Pork Database (CRM) <input type="checkbox"/> PigTrace Database <input type="checkbox"/> Alberta Pork Emanifest	Items Mailed to Producers? <input type="checkbox"/> Producer Package <input type="checkbox"/> Tag Order	
	CP Tracking # of Package:	
	Date Package was mailed: YYYY/MM/DD	
	Number of Tags:	Tags From:
		Tags To:



Premises Registration Form

Registrant

*Name

Date

This Premises Registration is:

☐ New

☐ Update of Information

☐ De-activation

Premises Identification

*Premises Name

Municipal District:

*Premises Identification Number (issued by AAF):

Premises Location

Legal Land Description

Quarter

Section

Township

Range

Meridian

Premises Details

*This Premises is:

☐ Hog Farm

☐ Mixed Livestock Farm

☐ Other: _____

☐ Assembly Yard

☐ Processor/Abattoir

The Premises Facilities are:

☐ Farrow to Finish (Farrow to 80+ Kg)

☐ Farrow to Wean (Market within 1 week of weaning)

☐ Farrow to Grow (Farrow to 30 Kg)

☐ Nursery (6 Kg to 40 Kg or Wean to Grower)

☐ Wean to Finish (6 Kg to 80+ Kg)

☐ Grow to Finish (30Kg to 80+ Kg)

☐ Other: _____

Other Livestock and Poultry Species on Premises:

☐ Cattle (Beef or Dairy)

☐ Poultry

☐ Horses

☐ llamas

☐ Goats

☐ Sheep

☐ Other: _____

Production Information

Premises Relationships (indicate all three)

Operator/Producer: ☐ Self OR: _____

Hog Inventory Owner: ☐ Self OR: _____

Land/Barn Owner: ☐ Self OR: _____

Current Number of animals on site:

Total Sow(s):	Total Weaner(s):	Total Grower(s):	Total Finisher(s):	Total Boar(s):
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Capacities:

Total Sow(s):	Total Weaner(s):	Total Grower(s):	Total Finisher(s):	Total Boar(s):
---------------	------------------	------------------	--------------------	----------------

Registration Agreement

I certify the above information to be accurate and complete and hereby submit this information as required by the Alberta Pork Producers' Plan Regulation. I agree to notify Alberta Pork of changes to any of this information and to supply production information as required by Alberta Pork under the Regulation. Fields marked with an (*) indicate which pieces of information will be provided to the Swine Movement Application (SMA) and the PigTrace database in accordance with the Alberta Swine Traceability Regulation and the Health of Animals Act.

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Primary Contact Signature

Date

Only Complete if an update to Pre-existing Tattoos

Please List all Tattoo Numbers Used at this Premises and the Associated Producer Number moving forward :

*Tattoo	*Producer Number	*Tattoo	*Producer Number
*Tattoo	*Producer Number	*Tattoo	*Producer Number

IN OFFICE USE ONLY

*Alberta Pork Tattoos Assigned:

Was the account created in?: ☐ AB Pork Database (CRM) ☐ PigTrace ☐ Alberta Pork Emanifest