

SECTION 10: MARKETING HOGS

This section will review marketing your pigs. When your animal is ready to be marketed, there are many things to consider including:

- Types of slaughter plants,
- How to prepare for the slaughter plant,
- Understanding the biosecurity risks associated when visiting a slaughter establishment, and
- Understanding food safety (ensuring the animal you raised will be safe for consumption).

TAKE HOME MESSAGES:

1. **Biosecurity at the slaughter plant is CRITICAL.** This is a high-risk place.
2. There are **different classes of slaughter plants**. Not all of them slaughter, process, and pack meat. Do your homework.
3. **CALL AHEAD** to organize with the slaughter plant. Do not do this last minute.
4. **Healthy pigs make healthy pork.**
5. Meet all **medication withdrawal times** prior to slaughter.
6. **Food safety** involves pre- and post-slaughter preparation as well as safe food handling.

There are a few definitions on marketing pigs to be familiar with:

| WORD | DEFINITION |
|-------------------------------|--|
| Slaughter | Killing an animal intended for food. |
| Butcher | A person whose trade is focused on cutting up and selling meat. |
| Processing | In respect of a meat product, means to substantially change the appearance or nature of a meat product by any means and includes to debone, slice, comminute, thermally process, preserve, dehydrate, ferment, render, fractionate, defibrinate, cook, smoke, salt, or can. But does not include to dress, trim, refrigerate, freeze or defrost. |
| Ante-mortem Inspection | Inspecting of a live animal prior to slaughter. This inspection is focused on overall health of the animal and detection of diseases and conditions not detectable during a traditional post-mortem inspection (e.g., neurological conditions). An animal's health is critical to food safety. |
| Post-mortem Inspection | Inspecting the carcass and viscera of a freshly slaughtered animal. This inspection is looking for any signs of illness that we can only identify once the animal is slaughtered and thoroughly examined. |
| Meat Inspection | The combination of ante-mortem and post-mortem inspection to detect the presence of human health concerns associated with the carcass. |

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| WORD | DEFINITION |
|---|---|
| Meat Inspector | A person appointed as an inspector under Section 8 of the B.C. <i>Food Safety Act</i> . |
| Stunning | The process of rendering animals insensible, with or without killing the animal, when or immediately prior to slaughtering them for food. |
| Sticking & Bleeding | The process of lacerating a major blood vessel immediately after stunning with the intention of draining the carcass of blood. |
| Eviscerating | The process of removing the inside organs of a carcass. |
| Skinning | The process of removing the skin (by use of a knife) after the animal has been slaughtered. |
| Scalding | The process of removing hair and cleaning the skin of a hog by placing a freshly slaughtered (confirmed dead) and fully bled out carcass into clean, hot water under specific conditions. |
| Carcass Splitting | The process of splitting the carcass down the middle of the spinal column from neck to tail. |
| Trimming | The process of removing damaged or contaminated parts of the carcass with a knife. Must be done prior to carcass washing. |
| Carcass Washing | A final wash of the carcass is performed to remove any incidental contamination while trimming. This is NOT to replace good hygiene practices throughout the process. |
| Chilling | The process of cooling down a carcass quickly after slaughter to reduce bacterial growth. |
| Cross Contamination | The unintended act of contaminating something by touching something unclean to the something clean. |
| Withdrawal Times | The amount of time that you must wait AFTER medicating an animal before sending an animal to slaughter. |
| Live Weight | The weight of an animal before it has been slaughtered and prepared as a carcass. |
| Market Weight | The target weight for pigs to go to the slaughterhouse. |
| Hanging Weight/Carcass Weight/Dressed Weight | The weight of the carcass after it has been dressed (e.g., guts removed, blood drained), before butchering. |
| Cut Weight | The weight of the final product after butchering. This will be the carcass weight minus some bone weight, trimmings, moisture, etc. |

10.1 SLAUGHTER PLANT BIOSECURITY

KEY POINT CHECKLIST

Slaughter plants are HIGH RISK sites for disease spread due to multiple sources mixing at the same place. Biosecurity at the slaughter plant cannot be stressed enough!

Consider the following biosecurity recommendations when visiting a slaughter plant:

DO:

- Wash your vehicle/trailer/animal crates prior to going to the slaughter plant.
- Wear boot covers and gloves at the slaughter plant (*without wearing this, anything you walk on at the slaughter plant could be brought back to your pigs via your boots... this may include contagious diseases*).
- Keep hand sanitizer in your vehicle – use it!
- When you leave the slaughter plant, ALWAYS wash and disinfect your vehicle/trailer/animal crate prior to going back to your farm! You DO NOT want to bring back potentially contagious diseases to your pigs.
- When you get home, change your clothes and footwear prior to visiting your pigs (*ideally, do not visit your pigs on the same day as going to the slaughter plant*).
- Clothes worn to the slaughter plant should be washed and dried (*the dryer should kill most potential pathogens*).
- Consider the slaughter plant and the surrounding area as potential contamination – anything you touch at the plant can be brought back to YOUR pigs, and anything you bring to the plant could be picked up and transferred to someone else's farm!
- Call ahead to the slaughter plant to ask them about any biosecurity rules and follow them.

AVOID:

- Going from the slaughter plant directly home without first washing and disinfecting your vehicle/trailer/animal crate.
- Wearing clothes/boots to the slaughter plant, then not washing them before wearing and working with your pigs.
- Walking around the slaughter plant without boot covers.
- Transporting pigs who are sick to the slaughter plant (*you don't want to transfer potential contagious diseases to other pigs*).

10.2 WHEN IS MY PIG READY FOR MARKET?

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Bringing an animal to market can vary widely in time and market weights. Type of feed, weather, housing conditions, and health can all influence the time it takes to get a pig to market.

| COMPARE: | COMMERCIAL PRODUCTION | OUTDOOR PRODUCTION |
|----------------|-----------------------|--------------------|
| TIME TO MARKET | 5.5 to 7.5 months | Can be over 1 year |
| MARKET WEIGHTS | 95–110 kg | 75–85 kg |

Source: Pork Nova Scotia. Introduction to Small Scale Pig Production, 2016⁽¹⁾

- The hanging or carcass weight of a pig will be approximately 72–75% of the live weight (with the skin left on).
- The cut weight will be approximately 75–82% of the hanging weight. This percentage can vary greatly depending on how cuts are trimmed and how much bone is removed. For example, the percentage will be less if mainly boneless cuts are chosen.
- All weights will vary depending on breed, body conditioning, diet, as well as the presence of dirt and hair on the animal at the time of slaughter.
- Aging or further processing, such as smoking, will reduce the cut weight of the animal.
- A carcass that is aged in the cooler will lose moisture and will therefore be lighter than a fresh cut carcass.

Source: Pork Nova Scotia. Introduction To Small Scale Pig Production, 2016⁽¹⁾

Hitting market weight is only the beginning. You have a lot to do before sending your pig to slaughter. Complete the rest of Section 10 to learn more about slaughter plants and preparation.

10.3 SLAUGHTER PLANT CLASSES/LICENCES

There are different types of slaughter plants in B.C.:

- They are either federally registered by the Canadian Food Inspection Agency (CFIA) or are provincially licensed.
- Slaughter establishments that are provincially licensed are **only permitted to sell their product within B.C. (This applies to you.)**
- Federally registered establishments are permitted to export their product outside the province.

10.3 SLAUGHTER PLANT CLASSES/LICENCES

B.C. slaughter and meat processing plants are regulated under the *Food Safety Act: Meat Inspection Regulation*. This Act ensures:

- Animals are humanely handled and slaughtered,
- Carcasses are processed in a clean environment, and
- Meat is packaged and stored in ways that reduce contamination risks.

Not all slaughter plants will take “custom kill” hogs. Check with the establishment beforehand.

Provincial licences available under the Graduated Licensing System:

| LICENCE TYPE | ACTIVITIES PERMITTED | SALES PERMITTED | GEOGRAPHIC SCOPE | # OF ANIMAL UNITS | OVERSIGHT |
|---|---|-------------------------------|--|-------------------|--|
| CLASS A | Slaughter, and cut and wrap | Retail and direct to consumer | B.C. | Unlimited | Pre and post slaughter inspection of each animal |
| CLASS B | Slaughter only | Retail and direct to consumer | B.C. | Unlimited | Pre and post slaughter inspection of each animal |
| CLASS D | Slaughter only (own animals and other peoples' animals) | Retail and direct to consumer | Sales restricted within regional district where meat is produced | 1–25 | Periodic site assessments and audit of operational slaughter records |
| CLASS E | Slaughter only (own animals only) | Direct to consumer only | Sales restricted within the regional district where meat is produced | 1–10 | Periodic site assessments and audit of operational slaughter records |
| PERSONAL USE NO LICENCE REQUIRED | Slaughter only | None | For producer only | Unlimited | None |

Note: One animal unit means: combined weight, when measured alive, of 1000 lbs (454 kg) of meat (e.g., beef, poultry, bison, pork).

Source. British Columbia. Meat Inspection and Licensing. 2019⁽²⁾
<https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/food-safety/meat-inspection-licensing>

The above website **also provides a complete list of provincially licensed slaughter establishments** for B.C. by region, by telephone number, by alphabetical order and on an interactive map.

10.4 SLAUGHTER PLANT PREPARATION

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Prior to any anticipated slaughter event, you need to consider the following:

- Intended consumer
- Slaughter plant class
- Carcass goals
- Scheduling slaughter AND processing AND packaging
- Transportation
- Animal health and readiness

Here is a suggested checklist that you should review each and every time you plan to slaughter an animal.

1. INTENDED CONSUMER

- Identify who the consumer is.
 - i. “I am the consumer”.
 - ii. “I am selling this to a food premise located outside my regional district”.
 - iii. “I am selling this directly to a consumer outside my regional district”.
 - iv. “I am selling this within a designated regional district in which my farm is located with no provincial plants nearby”.
 - v. “I am selling this to consumers directly at a temporary food market, or to consumers directly from food premise located on my property, within my regional district in a non-designated zone area with no provincial plants nearby”.
- Set arrangements with the consumer.
 - i. Discuss well in advance when they would like the product and what they are looking for.

The 10 designated regional districts are: Central Coast, Kitimat-Stikine, Mount Waddington, Northern Rockies, Powell River, Skeena-Queen-Charlotte, Squamish-Lillooet, Stikine, Strathcona (Mainland and Discovery Islands portion only) and Sunshine Coast.

2. SLAUGHTER PLANT CLASS



- Once you establish the consumer, determine which class of plant you require.
 - i. “I am the consumer” = if you are slaughtering your own animals for your own personal consumption = no licence needed.
 - ii. “I am selling this to a food premise located outside my regional district”. = CLASS A, B
 - iii. “I am selling this directly to a consumer outside my regional district”. = CLASS A, B
 - iv. “I am selling this within a designated regional district in which my farm is located with no provincial plants nearby” = CLASS D
 - v. “I am selling this to consumers directly at a temporary food market, or to consumers directly from food premises located on my property within my regional district in a non-designated area with no provincial plants nearby” = CLASS E
- Search for a suitable plant in your area.

3. CARCASS GOALS



- Based on what the consumer wants, understand carcass goals:
 - i. Do you want a BBQ weight pig?
 - ii. Do you want a heavy market hog?
 - iii. Do you want high fat percentage?
 - iv. Are you making sausage, or do you want specific meat cuts?
- Based on your goal, understand the animal you are slaughtering:
 - i. BBQ pigs (also known as round hogs) are pigs weighing 40–45 kgs (breed specific).
 - ii. Market hogs usually weight around 95–110 kgs (breed specific).
 - iii. High fat percentage might require feeding for longer or selecting a different breed.
 - iv. Cull sows are suitable for making sausage, but typically a meat pig is raised for more specific cuts of meat.
- If you are not sure, call the slaughter plant – they can advise you what is common for slaughter.
 - i. Tell them what breed of pig you have.
 - ii. Tell them the age of your pigs.
 - iii. Ask about desired weights or ages for slaughter.

10.4 SLAUGHTER PLANT PREPARATION

4. SCHEDULING SLAUGHTER, PROCESSING & PACKAGING



- Once you establish the required slaughter plant class, contact them MONTHS in advance:
 - i. Book a slaughter date.
 - ii. Review their protocols on transportation, arrival procedures, and cost.
 - iii. Review their expectations on incoming animal quality.
 - iv. Review and respect biosecurity procedures for both your operation and the plant (you do not want to bring infectious diseases back onto your farm from the plant).
- ***If this is not a class A plant, you will need to book a processing/packing plant as well.***
- Organize and plan how you will move the carcass from the slaughter plant to the processing/packing plant.
- Ensure the packing plant has enough freezer space to store your product.
- **DO NOT MAKE SLAUGHTER ARRANGEMENTS LAST MINUTE!**

5. TRANSPORTATION



- Organize transportation to the slaughter plant WELL IN ADVANCE.
- Plan for your PigTRACE swine movement records.
- See Section 11: TRANSPORTING PIGS for more information.
 - i. You need to consider feed withdrawal, time of transportation, fit-to-transport guidelines, how you will safely contain animals during transport, proper bedding, time of day, outdoor temperature, low-stress transport, loading densities, animal separation, and appropriate transport conveyances.

6. ANIMAL HEALTH & READINESS



- Ensure all animals are free of obvious disease.
- Prepare to meet all medication withdrawal times.
- Ensure animal meets the “fit-to-transport” requirements (see Section 11.3 FIT TO TRANSPORT).
- Take appropriate measures to reduce animal stress.
- Clean heavily soiled animals a few days before planning to transport them.
- Remove feed 6–24 hours prior to slaughter (continue access to water).
- Consider the transport time and holding time at the plant when making these feed removal arrangements.
- See Section 10.5 FOOD SAFETY for more details on animal preparation.

10.5 FOOD SAFETY





KEY POINT CHECKLIST

An animal entering the food chain must be considered safe for human consumption. Consider the key areas for safe food production:

- Healthy pre-slaughter conditions,
- Pre-slaughter evaluation and preparation,
- Post-slaughter evaluation, and
- Safe pork preparation.

PRE-SLAUGHTER CONDITIONS:

Healthy pigs make healthy pork. Here are specific items to consider when raising pigs for pork:

| ITEM | HEALTH CONCERN | WHAT YOU CAN DO |
|--|--|---|
| Water Quality  | Water may contain bacteria and viruses including Salmonella, Leptospira, and E. coli. This can lead to a salmonella infection in your herd (a pig and human health concern). | <ul style="list-style-type: none"> • See Section 5.3 WATER. • Have water tested annually. • Have water treated (chlorination or other) if necessary. |
| Bedding  | Wood shavings can contain wood-preserving agents (PCPs, chromated copper arsenate). These can accumulate in the tissue of pigs and reside in the meat, making it unsafe for human consumption. | <ul style="list-style-type: none"> • Don't use wood shavings for bedding. • If using wood shavings, get a letter of guarantee they do not have these preservatives. |
| Rodents & Cats  | Rodents and cats can pass along diseases to pigs, some of which can create food safety issues. | <ul style="list-style-type: none"> • Have a rodent control plan. • Keep cats away from pig feed. |
| Barn Sanitation  | Unsanitary housing conditions can become reservoirs for pathogens like bacteria and viruses. | <ul style="list-style-type: none"> • Have a barn cleaning and disinfection program. |



Sources:



Guide to Slaughter Hygiene – For Class D & E Slaughter Facilities – B.C. Food Processors Association, 2019⁽³⁾
 Canadian Pork Excellence. Canadian Pork Council, 2020⁽⁴⁾

10.5 FOOD SAFETY

PRE-SLAUGHTER EVALUATION & PREPARATION:

YOU are responsible for part of or all of this preparation depending on where you are having your pig slaughtered.

| ITEM | HEALTH CONCERN | WHAT YOU CAN DO |
|--|--|--|
| <p>Medication Withdrawals</p>  | <ul style="list-style-type: none"> • Medications can reside in the tissue of pigs. To prevent this from being consumed in pork, all medications prescribed by a veterinarian require a set time that one must wait AFTER the final dose of medication has been given before slaughtering an animal. • Medication can be given through feed, water, or injection. Any of these methods of delivery may require withdrawal times. | <ul style="list-style-type: none"> • Any medication used should be on veterinary advice and on a veterinary prescription. • All medication administered should be recorded and the withdrawal time should be recorded and followed. • E.g., if it is Dec 1, and you give medicine-X for 3 days, and the withdrawal time is 10 days, then: <ul style="list-style-type: none"> – Dec 1 = Day 1 – Dec 2 = Day 2 – Dec 3 = Day 3 (last day) – + 10 days of withdrawal • Do not slaughter until Dec 13 |
| <p>Safe Injection Protocols</p>  | <ul style="list-style-type: none"> • When injecting pigs, there is always a risk of a needle breaking in the muscle. • Do NOT let broken needles get into the food chain. <i>Can you imagine this as a consumer? Would you buy this product again if you found a broken needle in your pork chop? This is a HUGE deal in commercial production.</i> • When injecting pigs, there is always a risk of creating an injection site abscess – this results in additional meat trimming and meat loss. | <p>Reduce the risk of a broken needle and of an abscess:</p> <ul style="list-style-type: none"> • Restrain animals when giving an injection. • Use correct needle size (see Section 7.8 DISEASE MANAGEMENT). • Use clean and new needles. • Change needles every 10 injections. • NEVER straighten out a bent needle. • Do not use dirty/rusted needles. • Inject ONLY in the neck muscle (see Section 7.8 DISEASE MANAGEMENT). • Inject in clean areas on the skin. |

| ITEM | HEALTH CONCERN | WHAT YOU CAN DO |
|--|---|---|
| <p>Animal Health (Ante-Mortem Exam)</p>  | <ul style="list-style-type: none"> • General overall health of the animal affects food safety and quality and examining them prior to slaughter is critical. • Ante-mortem inspection will be performed by the assigned Provincial Meat Inspector at Class A and B licensed facilities. | <ul style="list-style-type: none"> • Identify any animals that have evidence of disease that could be unfit for human consumption. • Identify signs of disease that are a risk to personnel handling the carcass (e.g., ringworm, erysipelas). • Identify heavily contaminated animals that could cause sanitation issues in the preparation of the carcass. • Identify any animals you suspect may have a foreign animal disease. • Identify animals requiring special handling for humane reasons. • Contact your veterinarian if you have questions about whether your animal is suitable to be slaughtered for human consumption. • Ante-mortem inspection will be performed by the assigned provincial meat inspector at Class A and B licensed facilities. |
| <p>Animal Stress</p>  | <ul style="list-style-type: none"> • Stress is bad for animal welfare AND for meat quality. Reduce stress! • Stress can cause the pH of the meat to be out of balance resulting in a better growth environment for bacteria and a shorter shelf-life. • Stress affects the body's immune system (and therefore, health). • Stress can facilitate the shedding of enteric pathogens (e.g., E. coli O157:H7). • Bruises (from a stressed animal trampling, piling, or injuring itself) will have a higher pH and if not properly removed, can be a growth environment for bacteria. • Excessive fecal contamination on the hide/skin affects the ability to keep the carcass clean. | <ul style="list-style-type: none"> • Feed must be withdrawn correctly to reduce contamination of the carcass with ingesta and feces during transportation. • Keep animals clean. • Keep calm when transporting animals. • Reduce stress of animals. |

Sources:
 Guide to Slaughter Hygiene – For Class D & E Slaughter Facilities – B.C. Food Processors Association, 2019⁽³⁾
 Canadian Pork Excellence. Canadian Pork Council, 2020⁽⁴⁾



10.5 FOOD SAFETY

POST-SLAUGHTER EVALUATION:

- Involves a post-mortem examination which includes inspection of the viscera, carcass, and portions of the lymphatic system to evaluate the suitability of the animals for human consumption.
- Class A and B licensed slaughter plants have provincial meat inspectors assigned to them to perform the ante-mortem and post-mortem inspection.
- Class D and E licensed slaughter plants do not have provincial meat inspectors assigned to them.

Source: Guide to Slaughter Hygiene – For Class D & E Slaughter Facilities – B.C. Food Processors Association, 2019⁽³⁾

SAFE PORK PREPARATION:

| ITEM | HEALTH CONCERN | WHAT YOU CAN DO |
|---|---|---|
| <p>Toxoplasma</p>  | <ul style="list-style-type: none"> • Toxoplasma gondii is a parasite that can cause the disease toxoplasmosis in humans. The parasite can be transmitted from affected animals to humans and pigs. • It can cause illness in humans ranging from flu-like symptoms to death, miscarriage, congenital birth defects and blindness. | <ul style="list-style-type: none"> • Do not let cats near food storage areas. • Have good rodent control. • Cooking pork to the recommended end internal temperature of 71°C (160°F) ensures pork safety even in the presence of toxoplasma. |
| <p>Trichinella</p>  | <ul style="list-style-type: none"> • Trichinella is a parasite that can cause the disease trichinellosis in humans. The parasite can be transmitted from affected animals to humans and pigs. • Trichinella is a food safety and public health risk, and the presence of trichinella is a barrier to trade. • Outdoor pigs have more access to potential sources of contamination. <i>"Pig livers RARELY pass inspection due to parasite infection."</i> | <ul style="list-style-type: none"> • Have strong fencing that prevents wildlife from having access to pig housing facilities as wildlife can transmit this. • Have good rodent control. • Cooking pork to the recommended end internal temperature of 71°C (160°F) ensures it is safe to eat, even in the presence of Trichinella. |

Source: Guide to Slaughter Hygiene – For Class D & E Slaughter Facilities – B.C. Food Processors Association, 2019⁽³⁾

10.6 EMERGENCY EUTHANASIA



Hogs Being Processed into Primal Cuts –
Pork Bellies



Hogs Being Processed into Primal Cuts –
Pork Loins

Source: B.C. AGRI. Food Safety and Inspection Branch, Meat Inspection Program 2020⁽⁵⁾

10.6 EMERGENCY EUTHANASIA

Situations may arise on-farm where an animal becomes unsuitable for transport and highly unlikely to respond to treatment. Emergency on-farm euthanasia may be necessary to ensure that no undue suffering occurs to the animal(s) or that there is no significant hazard to humans.

To learn more about recommended humane euthanasia procedures, please see Section 12: HUMANE EUTHANASIA.

10.7 ATTAINING REGISTERED COMMERCIAL PRODUCER STATUS IN B.C.

The B.C. pork sector is represented by two organizations: the British Columbia Pork Producers Association (BCPPA) and the British Columbia Hog Marketing Commission (BCHMC).

The BCPPA is a registered society and was incorporated in 1929. Its objectives include: promoting and supporting swine production, marketing and research, encouraging the exchange of information between value chain stakeholders (e.g., producers, processors, service industries and retail), representing producers in a liaison capacity with municipal, provincial and federal government agencies, and promoting a positive public image of the industry's sustainability in terms of environmental stewardship, animal welfare, food safety, economic growth, and support for food security.

The BCHMC was started in 1980 and is authorized under the *Natural Products Marketing (B.C.) Act*. The Commission regulates all registered producers. It is responsible for orderly production and marketing through promoting and regulating the production, transportation, packaging, storage, and marketing of hogs. For example, the Commission collects levies and plays a marketing role. The levies are used to fund programs and the daily operations of both the BCHMC and the BCPPA.

Any individual, partnership or corporation engaged in pork production in B.C. that would like to become a member of the BCPPA must first apply to the BCHMC to become a 'registered commercial producer'. To qualify as a 'registered commercial producer' under the B.C. Hog Marketing Scheme (a regulation under the *Natural Products Marketing (B.C.) Act*), a farmer must sell a minimum of 300 market hogs annually for processing. Once registered as a commercial producer with BCHMC and a member of the BCPPA, licence fees and levies are collected from the farm to support the activities of the BCHMC and BCPPA.

For further information, you are encouraged to visit B.C. Pork's website at www.bcpork.ca, 2020⁽⁶⁾

SECTION 10 REFERENCE LIST

1. Pork Nova Scotia. Introduction to Small Scale Pig Production (2016)
2. British Columbia. Meat Inspection and Licensing (2019)
3. Guide to Slaughter Hygiene – For Class D & E Slaughter Facilities – B.C. Food Processors Association (2019)
4. Canadian Pork Excellence. Canadian Pork Council (2020)
5. B.C. AGRI. Food Safety and Inspection Branch, Meat Inspection Program (2020)
6. B.C. Pork. Welcome to the B.C. Pork website (2020)