

# INTRODUCTION

## CANADIAN PORK EXCELLENCE

---

### 1 CANADIAN PORK EXCELLENCE (CPE) PLATFORM

The Canadian Quality Assurance (CQA) program was launched in 1998 and is continuously updated to meet the pork markets' requirements. The CQA program has been reviewed, restructured, given a new look and a new name. The new name of the on-farm programs platform is Canadian Pork Excellence (CPE).

The Canadian Pork Excellence (CPE) is a national platform that allows registered pork producers to demonstrate compliance with food safety, animal care, and traceability requirements. The CPE registration also allows pork producers to ship their hogs to federal abattoirs.

The Canadian Pork Excellence platform has three components:

- **PigSAFE** is the food safety and biosecurity component of CPE. It contains the same food safety components that were in the CQA program, which are based on the Hazard Analysis and Critical Control Points (HACCP) Model recognized internationally. PigSAFE modules are required components of the CPE platform. The Biosecurity module is based on the National Biosecurity Standard developed by the Canadian Swine Health Board in 2011 and is a highly recommended component of the CPE platform.
- **PigCARE** is the animal care component of CPE. It is based on the 2014 Code of Practice for the Care and Handling of Pigs. The PigCARE program is a required component of the CPE Program.
- **PigTRACE** is the traceability component of CPE. PigTRACE improves emergency management and mitigates risks. In the event of a food safety issue or foreign animal disease outbreak in the pork sector, traceability gives animal health officials the tools to quickly and effectively contain and deal with the situation. PigTRACE is required under Canadian legislation.

### 2 OBJECTIVES OF THE PigSAFE AND PigCARE PROGRAMS

This Producer Manual includes the PigSAFE and PigCARE modules of the CPE platform:

1. **PigSAFE Canada objectives are to:**
  - a. Prevent and control hazards affecting the safety of pork and promote the production of safe food;
  - b. Meet consumers' quality and food safety needs; and
  - c. Meet and enhance local, provincial, national and international market demands.
2. **PigCARE Canada objectives are to:**
  - a. Promote and demonstrate ethical responsibility in meeting animal care needs; and
  - b. Ensure producers say what they do, do what they say, are able to prove it, and improve it.
3. The PigSAFE | PigCARE Programs will encourage the hog industry including: producers, feed manufacturers, researchers, and processors, to work together to accumulate new knowledge and techniques that ensure the safety of pork products and promote positive animal welfare outcomes.

### 3 KEY CONCEPTS FOUND IN THIS PRODUCER MANUAL

#### 3.1 HACCP BASED PROGRAM

Say what you do, do what you say, prove it and improve it!

HACCP stands for Hazard Analysis and Critical Control Points. It is a preventive approach to food safety from biological, chemical, and physical hazards in production processes that can cause the finished product to be unsafe. Quality assurance programs, based on HACCP principles, can be put in place on any type of agricultural operation. To develop a HACCP based program on-farm, the following steps must be implemented:

- a. **Understand biological, chemical and physical risks that can be found on-farm.**
  - i. Biological risks include, *Salmonella*, introduced by rodents or birds, or *Trichinella*, passed on through the improper use of food by-products.
  - ii. Chemical risks might include those posed by antibiotics, pesticides, herbicides, moulds and toxins.
  - iii. Physical risks include, metal objects, plastics and wood.
- b. **Say what you do:** develop standard operating procedures to demonstrate how to minimize or eliminate these risks.
- c. **Do what you say:** adequately implement the standard operating procedures developed.
- d. **Prove it:** use records to demonstrate that the standard operating procedures have been adequately implemented.
- e. **Improve it:** identify areas for enhancement.

#### 3.2 GOOD PRODUCTION PRACTICES (GPP)

Good Production Practices (GPP) are considered a prerequisite to all components of the food processing industry. In hog production, Good Production Practices are the overall conditions necessary to implement and manage the PigSAFE | PigCARE programs, both from the food safety and animal care perspectives.

The PigSAFE | PigCARE programs count 9 Good Production Practices.

#	Good Production Practices
1	Personnel Training
2	Barn Maintenance and Sanitation
3	Inputs
4	Feed and Water
5	Pharmaceuticals and Medical Supplies
6	Pests, Domesticated Animals and Dead Stock Controls
7	PigCARE
8	Biosecurity
9	Transportation

### 3.3 STANDARD OPERATING PROCEDURE (SOP)

A SOP is a set of step by step instructions that help workers minimize specific hazards while completing routine operations. SOPs are designed to help minimize the level of risks associated with each Critical Control Point and Good Production Practices.

SOP templates have been developed and can be found in the PigSAFE | PigCARE Producer Manual. The templates are designed to help producers create their own SOPs to meet requirements. The templates clearly indicate the mandatory elements that must be found in the SOPs. Producers are free to add other measures or good production practices (GPP) as they apply to their respective operation.

### 3.4 RECORDS

A Record is a form the producer must fill and keep up-to-date to demonstrate that Good Production Practices, Critical Control Points and SOPs are adequately implemented on-farm. A record can also serve as a receipt for the producer to clearly demonstrate that a task has been accomplished. It allows the producer to prove that he implements what he says he does.

## 4 FOOD SAFETY CRITICAL CONTROL POINTS (CCP)

A Critical Control Point (CCP) is a step or a specific procedure in the production process where an action can be taken to manage a risk.

In order to manage a Critical Control Point, Standard Operating Procedures (SOPs) must be developed, records must be complete and kept on file and a yearly verification must be completed.

CCP#	Critical Control Point	PigSAFE Program
1	Medicated Water	4.2 – Medicated Water
2	Medicated Feed	4.4 – On-Farm Feed Mill 4.5 – Feed Distribution
3	Broken Needles	5.3 – Risk Management of Broken Needles
4	Medication Withdrawal	5.4 – Medication Withdrawal

## 5 ANIMAL CARE CRITICAL POINTS

The development of the PigCARE program involved the identification of animal care critical points which can be measured at the farm level. Animal care critical points can be divided into three categories: the vulnerability of pigs; the interaction between pigs and their environment; and the interaction between pigs and people. The critical limits for each identified animal care critical point are based on defining when the welfare of an animal may be at risk throughout its lifecycle and must involve a measurable parameter. The PigCARE program identified four critical points:

CP#	Critical Point	PigSAFE Modules
1	Feed and Water	7.2 – Management Strategies for Feed and Water
2	Sick and Injured pigs	7.6 – Care of Sick and Injured Pigs
3	Handling	7.9 – Handling Practices
4	Euthanasia	7.10 – Euthanasia

## 6 VERIFICATION MEASURE

The Verification measure was included in the CQA program and remains an important requirement of the PigSAFE | PigCARE programs. Verification is conducted periodically, to ensure that SOPs are implemented adequately.

The objectives of the verification measure are to verify that:

- a. practices in place comply with the written SOP
- b. personnel correctly carry out the tasks
- c. records are properly completed.

Verification measures must be completed and recorded at least once a year

a. **Who can complete verification measures?**

It can be carried out by someone other than the person responsible for the SOP. This includes other staff members, other family members or consultants familiar with the written SOP.

b. **Reviewing written SOPs**

The review of written SOPs must be completed yearly and when equipment is changed, when applicable. This requires producers to consider whether the written SOPs are working effectively or whether they need to be modified.

c. **Reviewing Records**

Reviewing records ensures that they are being completed and kept accurately. The following records must be reviewed:

- i. R-B: Training Record
- ii. R-P: Medication and Vaccine Usage Plan
- iii. R-R: Rations Used On-Farm
- iv. R-S: Feed Sequencing, Mixing and Distribution Record
- v. R-T: Treatment Record

d. **Observing staff carrying out the SOP**

The person who conducts the verification needs to observe the personnel responsible for the SOP performing their various tasks.

e. **Keeping a Verification Record (R-1)**

Verification records must be maintained and include: the date, what was verified (SOP, Record, observation of personnel), the description of any problems or deviations and the signature of the verifier.

## 7 REGISTRATION AND VALIDATION PROCESS

'Registration' is the term used for the process of validating and recognizing a site on the PigSAFE | PigCARE programs. The term validation will continue to refer to the review of SOPs, records and facilities by a program Validator. When a site has successfully completed a validation and earns its recognition by the program, that site will be referred to as a 'PigSAFE | PigCARE Registered Site'.

### 7.1 VALIDATION CYCLE

The validation cycle of the PigSAFE | PigCARE programs is three years. To maintain a valid Registration, a Full Validation must be completed at least once every three years as shown in the table below. A site can decide to complete a Full Validation every year if desired.

Cycle	Validation Type
Year #1	Initial Validation
Year #2	Partial Validation
Year #3	Partial Validation
Year #4	Full Validation

Validation Type	Description
<b>Implementation</b>	The day a site starts to implement the requirements included in the PigSAFE   PigCARE programs.
<b>Initial Validation</b>	<p>An Initial Validation is based on an on-site assessment of all PigSAFE   PigCARE programs requirements to verify that they are adequately implemented.</p> <p>The site can be registered within 90 days after implementation of the PigSAFE   PigCARE programs, as long as all mandatory SOPs are completed and at least 90 days of records have been maintained.</p> <p>The validator will also complete the Animal Based Measures (Section 7.1) according to the Validation Sampling Plan.</p>
<b>Full Validation</b>	<p>A Full Validation is based on an on-site assessment of all PigSAFE   PigCARE programs requirements to verify that they are adequately implemented.</p> <p>The site manager must demonstrate that required SOPs have been completed and records have been maintained for a minimum of 12 months or since the last validation.</p> <p>The validator will also complete the Animal Based Measures (Section 7.1) according to the Validation Sampling Plan.</p> <p><b>During a Full Validation:</b></p> <ol style="list-style-type: none"> <li>i. Each site and barn is visited, and</li> <li>ii. A sample of records from each barn is reviewed.</li> </ol>
<b>Partial Validation</b>	<p>Partial Validation is based on an assessment of the entire written portion of the PigSAFE   PigCARE programs including a review of all the mandatory written SOPs and Records. An on-site assessment is not a requirement of a Partial Validation.</p> <p>The site manager must demonstrate that mandatory Records have been maintained for a minimum of 12 months or since the last validation.</p>

## 7.2 LEVELS OF NON-COMPLIANCE

When a requirement is not met and there is a non-compliance, a Corrective Action Request will be issued. The table below describes the three levels of non-compliance and identify the timeline for resolution of a Corrective Action Request:

Definition of levels of non-compliance	Timeline for resolution	
	Critical Control Points	Good Production Practices
Minor Non-Compliance	Maximum of 60 days	Maximum of 12 months
Food Safety or Animal Care requirement that, if not met, may lead to a risk to food safety or animal welfare. <i>*The Minor non-compliance Corrective Action Request detailed Action Plan must be completed within 30 days.            The Action Plan must include the dates the corrective actions will be completed and must be approved by the Validator.</i>		
Major Non-Compliance	Maximum of 30 days	Maximum of 60 days
Food Safety or Animal Care requirement that, if not met, is most likely to lead to a risk to food safety or animal welfare and where safety of the product and welfare of pigs might be compromised.		
Critical Non-Compliance	Maximum of 24 hours	–
An omission or deficiency of Food Safety requirements with proof that the product was compromised. The contaminated product has reached the slaughter establishment or the consumers. There is evidence that the pig welfare has been compromised.		

A revocation of PigSAFE | PigCARE registration will occur when a Critical non-compliance is not rectified within 24 hours.

## 7.3 CORRECTIVE ACTION REQUEST (CAR)

When a non-compliance is observed, the validator will issue a Corrective Action Request (CAR) (Record R-3).

The producer has the responsibility to complete the CAR according to the Validator's request within the specified timeframe. In some cases, Minor or Major non-compliance can be rectified, and the proof can be sent to the Validator electronically.

When a Minor non-compliance Corrective Action Request is not completed within the required timeframe, it will become a Major non-compliance. If the Major non-compliance is not completed within the required timeframe, it will turn into a Critical non-compliance and the CAR must then be completed within 24 hours, otherwise the PigSAFE | PigCARE registration of the site will be withdrawn.

## 7.4 PROGRAM AUDITS

A number of registered sites in each province are selected at random to be part of an audit process every year. These site audits are being conducted to ensure that validations are occurring as required by the PigSAFE | PigCARE programs and consistently across the country. This activity will allow the Canadian Pork Council to evaluate and improve the registration process.

Sites selected for the program audit process will be contacted to notify them of their selection, to arrange for the audit visit and to ensure that the auditor is aware of any necessary biosecurity requirements. The audit will be conducted by either a Provincial Coordinator or person assigned by the provincial organization. Producers may not refuse to participate in an audit.

Refusal to participate in an audit will result in the loss of PigSAFE | PigCARE registration status for the site. There will be no monetary cost to the producer, but the site manager and staff assistance will be required during the audit, similar to a validation.

## 8 GLOSSARY OF TERMS

### 8.1 TERMINOLOGY SPECIFIC TO THE CPE PROGRAM

Terminology	Description
PigSAFE	The food safety component based on the internationally recognized HACCP Model.
PigCARE	The animal care component based on the 2014 Code of Practice for the Care and Handling of Pigs.
Premise Identification (PID) Number	A Premises Identification Number provides a unique identifier to a parcel of land where livestock or poultry may be located. Premise identification traces animal to geographic locations.
Pig Barn	A building holding pigs. Multiple barns can be found on one PID site. Multiple stages of production can be found in one barn.
Site	A production site with an assigned Premise Identification (PID) Number. A site can have a single or multiple barns.
Site Manager	The person in charge of the daily management and maintenance of the PigSAFE   PigCARE programs on-farm, who ensures the records are properly kept. The Site Manager must have completed the PigSAFE   PigCARE training.
Pig Owner	The owner of the animals (livestock owner), the Pig Owner can also be the Site Manager.
Personnel	All individuals (family members or hired help) working full or part-time.
Certified Trainer	The Certified Trainer is registered with the PigSAFE   PigCARE programs and recognized by the Canadian Pork Council (CPC) to teach the PigSAFE   PigCARE programs to the Site Managers and barn personnel, in a group or individual setting.

### 8.2 GENERAL TERMINOLOGY

Terminology	Description
Acceptable Level of a Food Safety Hazard	The level at which the finished product will not cause harm to the consumer when it is prepared and/or consumed according to its intended use.
Action Plan	The implementation of a set of measures, within a specified timeframe, to correct a non-compliance that has been identified when control measures demonstrated that the acceptable limits were not met, and to avoid the reoccurrence of the non-compliance.
Audit	A systematic and objective evidence gathering process where a recognized auditor examines a supplier's activities to determine whether the food safety, sanitation and program management activities and related results comply with the systems' documentation and program requirements. The evidence is evaluated to determine whether the activities are implemented effectively and are suitable to achieve objectives.

Terminology	Description
Creep Area	A creep area is a section of the farrowing crate which is inaccessible to the sow.
Deviation	When a requirement is not met.
Deviation Measure	A set of written instructions that must be carried out when a deviation occurs.
Distress	When an animal can no longer cope with stress (environmental, biological or mental). Exhaustion or difficulty breathing would be obvious signs of distress.
Feed	Edible material(s) such as hay, grain, or other processed, semi-processed or raw food which are consumed by animals and contribute energy and/or nutrients to livestock.
Feed Ingredient	A component, part or constituent of any combinations or mixture making up a livestock feed. An ingredient may or may not provide nutritional value to the animals (e.g. food additive).
Food Safety	A concept that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use.
Food Safety Recall	A food recall is an action by a manufacturer, to remove unsafe food products from the market to help protect the public.
Fomites	Any non-pathogenic substance or inanimate object (e.g. shovel, earth) other than food that is capable of harbouring or mechanically transmitting pathogenic microorganisms.
Good Production Practices (GPP)	Good production practices refer to the general practices that are prerequisites in all food production and processing industry. In the context of hog rearing, GPP dictate production conditions that are conducive to adequate food safety and animal well-being.
Hazard Analysis Critical Control Points (HACCP)	A systematic approach to identifying and assessing hazards and risks associated with a food operation and defining the means of their control.
HACCP Plan	A written document designed in order to control hazards associated with specific processes and/or products within an establishment.
HACCP System	A system that includes prerequisite programs, one or more HACCP plan(s), validation documentation of control measures that have an immediate impact on food safety as well as maintenance and reassessment procedures.
Hazard	A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect.
Health Status	Knowledge of the presence or absence of a specific pathogen within the herd.
Medicated Feed	Any feed containing medication or vaccines.



Terminology	Description
Monitoring	The act, by company personnel, of conducting a planned sequence of observations, tests or measurements to assess whether a CCP, a process control and/or a prerequisite program is under control. This includes recording the results of those observations.
Non-Ambulatory Pig	A pig that is non-ambulatory and/or non-weight bearing on the affected limb when either standing or walking. It is reluctant to walk and exhibits halted movements. It is unable to rise or to remain standing without assistance.
Preventative Measure	A corrective action resulting from an investigation to determine the root cause of a deviation. A preventative measure includes the subsequent steps required to prevent reoccurrence of the deviation.
Procedure	A set of written rules that specify the methods to carry out an activity or a process.
Protocol	Different from the procedure, a protocol is a detailed or technical instruction specific to a task. It is the “how to” of a procedure (according to ISO, a protocol relates to the know-how and the work instructions).
Regulatory Requirements	All pertinent acts, regulations and directives. An obligation that is specified by an authority which gets its mandate from a legislative body.
Risk	An estimate of the likely occurrence of a hazard and the severity of possible adverse health effects.
Sanitize	A physical or chemical treatment to adequately treat surfaces by a process that is effective in destroying undesirable microorganisms.
Standard	Criteria or specifications that can be judged or evaluated and that defines the limit of acceptability associated with prerequisite programs and process controls.
Standard Operating Procedure (SOP)	A detailed set of instructions describing how to carry out tasks, perform the duties or lay out product formulation.
Task	Operational activities that are carried out by designated employees to prevent a food safety hazard. For example, the equipment maintenance program describes the tasks to be performed by the maintenance staff at a predetermined frequency.
Veterinary Drugs	Any substance or mixture of substances for use in the diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or for use in restoring, correcting or modifying organic functions in animals, such as in milk or meat-producing animals, fowl, fish or bees.
Veterinary Health Product	Products used to maintain or promote the health and welfare of companion or food-producing animals. They are not used to treat, prevent or cure disease. They contain ingredients such as: vitamins, minerals and traditional medicine.
Validation	Obtaining evidence that a control measure, if properly implemented, is capable of controlling the hazard to a specified outcome.
Validator	A trained veterinarian or professional agronomist responsible for conducting validation on sites to determine if all CPE program requirements are met.

Terminology	Description
Verification	A company's use of methods, procedures, tests and other evaluations, in addition to monitoring, to determine its compliance to, and the effectiveness of its HACCP system.
Vermin	Any mammal, bird or insect that harbour diseases which can be transmitted to livestock and which can lead to an increased risk of disease in the herd.
Withdrawal Period	Time that must elapse after a medication treatment before an animal can be slaughtered and its meat be safe for human consumption. Withdrawal times are specific to each medication and are required to ensure pigs are safely marketed as residue free and meet transportation and other pre-slaughter requirements.
Zoonotic Disease	An infectious disease that can be transmitted from animals to humans either directly, indirectly or by a vector.

### 8.3 ABBREVIATIONS

Abbreviations	
ABM	animal based measures
CCP	critical control point
CFIA	Canadian Food Inspection Agency
CP	critical point
ELDU	extra-label drug use
HR	highly recommended
MD	mandatory
PID number	premises identification number
PID Site	production site with a PID number
SOP	standard operating procedure

## 9 PROGRAMS POLICIES

The following sections include the Vaccine and Drug Use Policy (Tab #1) as well as the Animal Welfare Policy (Tab #2). The Vaccine and Drug Use Policy reflects the pork industry's commitment to the responsible and proper use of veterinary pharmaceuticals in food animals. The Animal Welfare Policy reflects pork producers' moral and ethical commitment to provide humane treatment to animals in their care. The policies are assessed through programs requirements.