

NEW FARMERS & FOOD SAFETY



WHAT YOU NEED TO KNOW BEFORE YOU START

On farm food safety is not just for the commercial farms. More and more small scale and diversified growers are being asked by provincial inspectors, retail, and their customers for food safety reassurances. Having a well-documented and implemented food safety program is the means to do this.

You have to start somewhere so it is best to be proactive and organized. Begin the development and implementation of your food safety practices, provide training for yourself and your employees, and then work to maintain good practices throughout the year, not just during visits by regulators or potential retail customers.

We'll start with a few things you should know as new primary producers/packers.

KNOW YOUR MARKET

Know your target market. What is your plan starting out, six months, and a year to five years from now? Where do you plan on selling your products – farm gate, online, farm markets, and/or local retailers, only in Nova Scotia or outside the province? Are you selling fresh, frozen, or thinking of venturing into value added products? The answers to these questions are what determine the food safety requirements and regulations you need to follow and when. It is easier to begin making changes to your food safety practices early on, that way when and if you decide to grow your business you will be better prepared to successfully meet food safety requirements.

GOOD AGRICULTURAL/ MANUFACTURING PRACTICES

Premises

It is important to consider what your fields and existing buildings were used for the last five years and where they are located. Here are some things to think about when you are preparing to grow, pack, and store produce.

In the Field

- If fields are adjacent to roadways, locations where livestock are kept, and/or near non-agricultural activities you should be aware that dust, excrement, and foreign objects may make its way onto your property and potentially cause a problem for your crops. If you cannot avoid the area ensure that you create an adequate buffer zone or implement measures to prevent these activities from affecting your fields such as a wooded area, or ditch or that animal waste is incorporated into the adjacent field.
- Be aware of the potential food safety risk to your produce grown in fields located where there is a high level of migratory birds or animal activity (nesting, burrows, etc.). When harvesting avoid picking product that has evidence of excrement or other animal activity near it.
- Avoid areas that are prone to flooding. If flood water enters your field, the crop that is affected must not be harvested. If you unable to avoid the area, have a plan in place to deal with the situation before it happens.

Buildings

(greenhouses, storage, pack house, chemical storage)

- Buildings must be free of pest activity such as birds roosting, rodents and/or insects.
- Domestic animals and wildlife should never be permitted to enter the buildings.
- Areas immediately surrounding the buildings should be free of equipment, have weeds and shrubs cut back in order to discourage animal and bird activity.
- Building walls, floors and roof must be in good condition with no gaps or holes, windows must be screened, and shatter proofed, doors well sealed and kept closed to prevent birds, water, and animals from entering. If ventilation is a concern and doors are left open to help with air flow, they should be screened.
- Restrict access to buildings.
- Lighting must be adequate and shatterproof. Nova Scotia lighting requirements are as follows: typically, 110 LUX for coolers and storages; 220 LUX for general areas where equipment is stored and washed, handwashing, washrooms; 540 LUX for inspection areas and where worker safety is a factor. Consult the regulations in your area to ensure you comply.
- Ensure that overhead pipes and cooling units do not produce condensation that could drip onto product, packaging, or equipment.
- Provide ventilation that is adequate to remove excessive heat, condensation, dust, etc.
- If required, ensure adequate drainage to prevent pooling of water both inside and outside the building.
- Be aware of activities that may be occurring in the same building as your produce activities. Take action to prevent cross contamination by implementing practices to prevent the hazards from occurring such as barriers, space, and time separation, cover your equipment or packaging, mark employee and equipment pathways.
- Chemical storages must be locked and have signage. Ensure you are storing your chemicals safely.
- All storages should be checked to ensure the above-mentioned items are acceptable prior to use and at least monthly while in use.

SOIL AMENDMENTS

Here are a few things to consider when applying and choosing soil amendments:

- Sewage sludge should never be used on your fields, even in a field rotation. Applying sludge could affect your eligibility in future food safety certifications.
- Manure must be applied no later than 121 days before harvest (greater than 120 days).
- If you do not generate and manage compost including compost teas on your own, you need to know what they are made of and where they are coming from. Compost must undergo a thermophilic phase to kill pathogens and weed seeds (55°C for 14 days).

Know your soil amendments sources, what they contain, and how were they handled. Ensure what you are putting on your fields does not have biological, chemical, or physical hazards that could affect your crops.

WATER QUALITY

Water and ice used on produce, and water used for hand washing and cleaning of equipment must be potable and comply with provincial and Health Canada regulations. There are a number of local laboratories that will do water testing for you. Follow the sampling and storage guidelines they give you to ensure a clean sample is taken.

<https://novascotia.ca/nse/water/waterlabs.asp>

Here is the link to Health Canada's Guidelines for Canadian Drinking Water Quality <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Here is a link to Nova Scotia's guidelines <http://novascotia.ca/agri/documents/food-safety/factsheet-water-quality.pdf>

Water storages such as a cistern used for collecting or holding water must be cleaned prior to and after each use and maintained in good condition.

If you choose to treat your water, ensure that your water treatment equipment is maintained on a preventative basis. Treatment methods such as using filters, reverse osmosis, UV lights, chlorine dosage meters all require routine maintenance to ensure it doesn't break.

Assess water sources such as rivers, lakes, and ponds which might typically be used for agricultural purposes such as irrigation and application of chemicals and fertilizers. Sources should be assessed to ensure that any hazards that exist are addressed. There is a high risk to your product if you use agricultural water that is contaminated with livestock or bird waste, run off or recreational use. There are agricultural water standards, and it is best to consult the two links below for information on how to protect agricultural water sources and ensure your agricultural water meets requirements.

Canadian Water Quality Guidelines for the Protection of Agricultural Water Uses:

https://www.ccme.ca/en/resources/canadian_environmental_quality_guidelines/index.html

Nova Scotia:

<https://novascotia.ca/agri/documents/food-safety/factsheet-water-quality.pdf>

HARVESTING/PACKING

Before harvesting, be it field or greenhouse, the site must be surveyed for weed or trap crops to avoid harvesting toxic plants. The site must also be surveyed for signs of unusual animal or bird activity such as excrement, the presence of animals, as well as other potential contaminants such as biological controls that have been used (predatory/parasitic insects etc.).

The pre-harvest interval (PHI) must be checked and met and the minimum 120 days waiting period between applying manure and harvesting must be observed. Packaging materials such as reusable harvest and storage bins or new market ready packaging, must be clean and free of debris such as protruding nails and splinters. Avoid stacking muddy or dirty containers on top of one another. Where practical, packaging should not be placed on the ground, keep it off the ground by using items such as clean cardboard, cart, wagon, or clean pallet. Packaging materials, whether they are for harvested product or market ready should never be used for other non-food purposes such as storing tools, chemicals, or personal items.

Avoid packing small fruit (except cranberries), tree fruit and or vine fruit, that has fallen to the ground. Vines and tree fruit that touch the ground from low hanging branches should also not be harvested.

During any sorting or grading of product in the production site or pack house, employees must separate any foreign materials such as stones, glass, and any rotten or damaged

product as well as stems and leaves. Bins that hold culls must be labelled, emptied frequently, and cull piles must be located well away from production sites (i.e., towards the back, away from the harvest area).

PERSONAL HYGIENE PRACTICES

Basic personal hygiene and food handling practices (i.e., storage, receiving, shipping, and allergens) must be followed in order to have a safe, quality product. Everyone must follow the requirements you put in place at your operation; this includes visitors, contractors, owners, and family as well as farm managers. Lead by example. Here are a few key practices you should put in place at your farm.

As an employer you need to provide adequate facilities for yourself and your employees both on and off the field. These include:

- Handwashing stations, either on site or in a building in close proximity to the field or facility such as a residence.
 - » Packing/Production Areas: Handwashing stations should have both hot and cold running water, adequate drainage in place for wastewater, soap and sanitizer, signage with directions as well as disposable paper towels and a covered garbage can.
 - » In the field: You can set up a handwashing area away from the field and have any of the options listed above or at the very least supply hand wipes (such as unscented baby wipes, NOT Lysol or Clorox wipes), sanitizer, signage with directions in the appropriate language(s), and a covered garbage container. These must be independent of any port-a-potties in place.
- Washrooms must be supplied either close to the field site (not directly in the field or bordering on a field) and at the packing/production building. Washrooms should not open into packing/production areas if at all possible. Gas station or local restaurant restrooms are not a means of supplying adequate handwashing or washroom facilities.
- Lunchroom and break areas must be supplied. All work effects should be left in the production area or field. This prevents them from being in contact with allergens or other contaminants. Employees can eat their lunches in their cars or outside as long as garbage is controlled, and hands are washed prior to returning to the field or packing building.

Proper handwashing is the most important thing you and your workers can do to protect your product from contamination thus protecting your customers. Here are the proper handwashing steps that everyone should follow:

WHERE POTABLE RUNNING WATER IS AVAILABLE	IN THE FIELD (WHEN POTABLE RUNNING WATER IS NOT READILY AVAILABLE)
<ol style="list-style-type: none"> 1. Wet your hands (water should be a comfortable temperature, too cold or hot and people will rush through the process). 2. Apply soap (liquid or foam soaps should be used, not soap bars). 3. Lather your hands thoroughly. Scrub for 20 seconds or the amount of time it takes to sing the alphabet song or happy birthday. 4. Rinse hands thoroughly. 5. Dry your hands with disposable paper towel. Air driers are not ideal as they can spread bacteria and viruses throughout the room. If you must use an air dryer then source the type with a Hepa filter that is maintained. 6. Apply an alcohol-based sanitizer and rub your hands thoroughly until sanitizer dries (usually 30 secs). 	<ol style="list-style-type: none"> 1. Take a hand wipe and wipe your hands thoroughly, to ensure all visible dirt is removed. Don't forget between your fingers, back of your hands, wrists, and fingernails. More than one hand wipe may be needed. 2. Dispose of hand wipes in the garbage container. 3. Apply an alcohol-based sanitizer and rub your hands thoroughly (don't forget the back of your hands, fingernails, and wrists) until sanitizer dries (usually 30 seconds).

You must wash your hands:

- Before beginning work
- After breaks
- After smoking, eating, or drinking
- After using the washroom
- After coughing or sneezing
- Each time you enter the harvesting, packing/production area
- After touching your face or adjusting hair covering or beard net
- After handling anything dirty and going back to handle product (i.e., picking something up off the ground, floor, tools, garbage, pallets, etc.)

Here is a list of basic personal hygiene practices that you can put in place at your operation.

- Employees who are sick or known to be carriers of an infectious disease should not come to work or handle product or packaging.
- Employees who have exposed cuts should not handle product or packaging. Minor cuts must be covered with a suitable waterproof and coloured band aid/dressing.
- Keep fingernails clean and trimmed. No fingernail polish or fake fingernails should be worn.
- Keep jewelry out of food harvest, packing, production, and storage areas. This includes watches, necklaces/ chains, earrings, rings, and any visible piercings. If piercings cannot be removed, a band aid must be worn over the piercing. All band aids should be a different colour than the product being handled. Prescribed medical alert jewelry is the only exception you should have in place. Ideally a medical alert necklace would be worn and tucked into the shirt. Some food safety programs also allow wearing of plain smooth wedding bands (i.e., no stones). It is up to the operation on whether to allow them.

- Smoking, vaping, chewing gum or tobacco, candies/ cough drops, eating or drinking must be prohibited in harvest, packing, and storage areas. Drinking water may be permitted depending on the environment and should be controlled (i.e., dispenser, company issued water bottles, guidelines as to when to use, where to store, using away from open product, hand washing after drinking).
- Employees should come to work clean and ensure their clothes are clean, in good repair and suitable for the environment i.e., no loose threads, buttons, fuzzy sweaters, sequins, etc.
- If disposable gloves are used, they must be changed whenever re-entering the packing area, whenever damaged or after non-food contact items are touched. Non-disposable gloves and aprons are to be cleaned daily. Whenever they are removed, they are to be placed in areas provided prior to leaving the packing or harvest area and not left on equipment, packaging, etc.
- Hairnets need to be worn in packing and storage areas and worn properly (i.e., down over ears to cover all hair). If hats are permitted in packing/storage areas, hair nets must cover the entire hat. For harvesting out in the field long hair must be tied back and all hair should be covered with a hair covering such as a hat. A beard net should be worn by those persons having a beard/ goatee or mustache that extends below the corner of the mouth.
- Suitable footwear needs to be worn. This may include sneakers, waterproof boots, steel toed boots, etc. depending on the environment. Open toed shoes should not be permitted in any food packing/ production environments and non-slip footwear is recommended. To prevent cross-contamination, footwear should remain on farm/at the pack house/ production facility and not be worn home by employees. Depending on the type of operation you have, visitors to the facility may need to wear protective booties over their footwear.
- Personal items (medications, etc.) must not to be taken into harvest and production areas.
- There should be designated places such as hooks/ shelves for employees to leave work effects (if required) when leaving production/packing facilities. If work effects such as reusable gloves or clothing are provided, they must be cleaned daily.

STORAGE AND TRANSPORT

You work hard to grow the best possible produce, ensure you have continuing quality with transporting and storing it correctly. In the field, produce should be transported in a covered vehicle to prevent bird droppings and large amounts of dust from coming in contact with the product. When transporting it to the market, ensure your vehicle is clean, in good condition, and there are no animals or pests, antifreeze, windshield washer, oil or other incompatible items present in the vehicle with your product. Transport your product under the correct temperature that it requires. If you use coolers or freezers make sure they are temperature monitored and maintained.

Refrigeration units, in vehicles and storage areas, must be regularly maintained to ensure that they are functioning properly and are clean. Condensation drip trays and drains can be a major source of contamination if not properly maintained.

Agricultural chemicals and the like must be stored separately from seeds, transplants, row covers, harvested and market ready product, and packaging.

When storing production site equipment, it should be kept separate from packaging, product, and harvest containers. Fuel, gas fumes and oil could leak and potentially contaminate these items.

Store produce, product, and packaging off the ground, away from walls in a clean location. Keep doors closed and windows that open screened. Ensure appropriate stock rotation is implemented to ensure older products are used or sold first and all products are used with their shelf-life.

Keep any invoices and receipts as records of the items you receive or ship. These records are great for product traceability.

PREVENTATIVE MAINTENANCE AND EQUIPMENT

Equipment must be constructed and maintained properly so it does not become a risk to the product. In many cases, product directly contacts equipment so can become a significant risk to your process if not controlled.

When selecting harvesting and packaging equipment or even for building your operation, ensure that it is constructed for its purpose and has surfaces that are easy to clean, in good repair, as well as accessible for sanitation and maintenance. When installing equipment make sure that you leave enough space around it for cleaning and maintenance.

Some things to keep in mind for equipment design:

- Smooth, impervious, and cleanable
- No rust, lead, flaking paint, or exposed wood
- Stainless steel is recommended (300 or 18/8 is common) for its resistance to corrosion and durable surface. Welds must be smooth and continuous, no tack/spot or “bubble gum” welding.
- Food grade plastic, rubber, and Teflon
- Constructed and installed so that all areas are reachable for inspection and effective cleaning
- No cracks, crevices, angles, or ledges where food or water can get trapped and build up
- No open ends, table legs should be sealed

Walls and/or food contact equipment should be made of non-porous materials such as metal, stainless steel, or hard plastic.

Forklifts and pallet jacks must be operated and maintained as to not cause a food safety risk.

Equipment must be regularly inspected and maintained to ensure parts are in good repair and not missing. Use food grade grease and oils for moving parts of packing lines and harvest equipment. Temporary repairs must not become permanent, and they must not introduce a source of contamination.

If equipment requires calibration, such as scales and chlorinators, make sure it is completed per the manufacturer’s recommendations or local regulations. Keep records of calibrations or calibration certificates on file.

SANITATION

There are two types of surfaces that you need to keep clean: food contact and non-food contact surfaces. Food contact surfaces are surfaces that have direct contact with food and food contact materials (packaging) e.g., conveyors, trimming and cutting tools, bins, harvesters. Non-food contact surfaces are surfaces that do not or should not have contact with food or food materials e.g., floors, equipment legs, walls.

Only potable water may be used to clean food contact equipment and surfaces.

Pre-season as well as post-season cleaning must occur on all equipment. Inspect equipment before use to ensure it is clean and ready to use. Knives, cutting and trimming tools must be cleaned daily and checked for wear. All equipment must be cleaned at least weekly; depending on dirt build up and use, you may have to do this more often. Equipment should not be stored dirty.

Cleaning vs. Sanitizing

Cleaning is the removal of soil/residue/dirt from a surface. Detergents are typically used and react with soil components chemically or physically which loosens and removes them from surfaces.

Sanitizing is the treatment of a cleaned surface with heat (steam or hot water) or chemicals to reduce the number of microorganisms. Sanitizing is not a substitute for cleaning and should only be used on clean surfaces otherwise it may be ineffective.

After harvesting or packing is done for the day, you should clean up using the following procedure:

1. Pre-rinse with water to remove large amounts of dirt and debris
2. Wash with a detergent
3. Post-rinse with water to remove detergent and loosened dirt and debris
4. Inspect to ensure you did not miss any spots
5. Sanitize to kill any remaining microorganisms
6. Rinse (if sanitizer requires a rinse – some sanitizers are no-rinse)
7. Re-inspect to ensure everything is clean and rinsed properly
8. Document the cleaning activity including the date, who cleaned it, and the item

Do not use Lysol or Clorox wipes when wiping down food equipment. They are currently not approved by CFIA for food contact surfaces in a food facility. If they were used, the equipment must be rinsed well with clean potable water after use. If mixing detergents and/or sanitizers, ensure the appropriate concentration is used as per the manufacturer's instructions.

Like equipment, storages should be cleaned and checked at a regular frequency, as well as before use and at the end of the season.

PEST MANAGEMENT

Have a pest control program in place. You can either do it yourself or hire a reputable pest control company. Here are some guidelines to follow when implementing a pest control program:

In the field

- Wildlife is a concern in fields and can be hard to control. There are a few things you can do to discourage them from staying or minimize wildlife in cropping areas: fencing, bird deterrents such as netting or bird scares, and bare ground buffers can be created to help identify if there have been animals entering into the field.
- If you have a mixed farm, keep in mind any spilled grain will attract wildlife to the area so you will need to minimize that attraction.
- If possible, avoid growing in an area known to be in a migratory path.
- Fields with fruit and vegetables need to be surveyed prior to harvest. Pickers need to be on the lookout for bird and animal droppings. Avoid picking those areas, typically a minimum 5-foot radius around the affected produce is sufficient.

At the pack house and storages

- Bait outside, do not bait inside. Rodents can escape traps and could track bait throughout your facility.
- Enclosed traps should be used inside, such as tin cats. Avoid using snap traps.
- Traps should at minimum be placed on either side of outside opening doors.

If flying insects are an issue fly lights can be used, however they must not be located over/near food and food equipment and cannot be the bug zapper type. They must have a glue board in place and be checked at minimum monthly. Domestic animals should not be permitted in the field or in any buildings used for food packing or storage.

If biological controls such as predatory and parasitic insects, nematodes or disease organisms are used to suppress pest populations then care must be taken when harvesting to avoid contamination of products. A visual inspection of the product must be done before and during harvest. If product has been contaminated then the product and contaminants must be discarded.

EMPLOYEE TRAINING

When it comes to training, the best approach is to be proactive. Educate yourself and your workers. Your local provincial food handling course is a good start and a requirement for some markets.

In order for employees to follow the personal hygiene and good agricultural practices, procedures, or any other requirements you have put in place, they must be trained to know what those requirements are and how they should be following them. Some level of training needs to be provided before the employee starts work and the employee should be closely supervised for the first several weeks to ensure they understand and are following your requirements. Everyone who enters a harvesting, packing or storage area must follow the personal hygiene and good agricultural practices that have been put in place. Training must be made available in languages understood by all employees.

Refresher training must be done at least annually. You may find that over time your practices, procedures, policies and produce types grow and equipment changes so the need to train employees increases as a result. Several local operations find that starting the shift with a quick toolbox talk or tailgate meeting is a great way to keep employees informed and engaged.

TRACEABILITY & RECALL

Having a crisis management plan in place is also key to having your business continue to grow after an incident, be it a fire, flood, or product recall. A crisis management plan consists of traceability, recall, and business continuity plans. How you deal with the situation and how organized you are to respond quickly determines if your business stumbles or gains customers. Remember all eyes are on you.

A recall can be a large undertaking that should not be done by one person. There are many aspects where Management, Supervisors, and Employees can play a role in locating and communicating about recalled products. If you are a small operation, you can bring friends and family members on board to help or partner with another local company. Practice your recall plan so that you are prepared for a recall to occur. Recalls can happen on a Friday of a long weekend when the most important member is on vacation. So make sure everyone knows their roles and there is a backup in place for your team members.

Product traceability is not only about your own finished product. You need to be able to find all of the components that are used to package your product. Record the lot numbers for incoming shipments on your receiving record or on the bill of lading/invoices. Better yet, if you receive large quantities of certain products from your suppliers, you can request that they record the lot numbers they send you on the bill of lading. Then all your receiver has to do is confirm that the codes listed are the ones received. This prevents errors in copying over lengthy codes.

Help your customers identify affected product by coding your own product. If you do not want to stick a best before or production date on your package or if it is not feasible, such as it is with some fresh fruit and vegetables that have a short shelf life or if you have packaging such as wooden boxes that are hard to attach labels to, you can send the information with the shipment to the stores. However, it is encouraged that you apply or attach the lot code directly to the label of your finished product so there is question as to who's product and what code is affected should there be an issue. Keep a record of what your coding system means and how to break it down. It doesn't need to be complicated and ideally it is much better for the consumer if you make it easy to read and decipher.

Here's an example of how some fresh produce farms code their products.

LOT CODE	BREAKDOWN
15031	yyddd (2015, Julian calendar date of Jan 31)
June 21 B1	Date harvested and field number

Other lot code options for fresh fruit and vegetables can be the harvest date, grower identification number, GPS coordinates, or growing region (may be a village, county or province but cannot be the country of origin).

To learn more about how CFIA handles recall or to learn more about product traceability check out these links:

<http://www.inspection.gc.ca/about-the-cfia/newsroom/food-safety-system/food-recalls/eng/1332206599275/1332207914673>

<http://www.inspection.gc.ca/about-the-cfia/acts-and-regulations/regulatory-initiatives/sfca/proposed-sfcr/learn/traceability/eng/1427310329573/1427310330167>

<https://inspection.canada.ca/food-safety-for-industry/traceability/traceability/eng/1522294721005/1522294781171>

<https://inspection.canada.ca/food-safety-for-industry/traceability/lot-code/eng/1607618442777/1607618443168>

For more information on fresh fruit and vegetable labelling and traceability, check out the Canadian Produce Marketing Association, Traceability Guidance Document: https://cpma.ca/docs/default-source/industry/2021/Traceability_SFRC_Guidance_Document_V2-1_June2021.pdf

ALLERGENS

What exactly is an Allergen? The Health Canada definitions are as follows:

Food sensitivity is an adverse reaction to a food that other people can safely eat, and includes food allergies, food intolerances, and chemical sensitivities.

Food allergies are sensitivities caused by a reaction of the body's immune system to specific proteins in a food.

Food intolerance is a food sensitivity that does not involve the individual's immune system. Unlike food allergies, or chemical sensitivities, where a small amount of food can cause a reaction, it generally takes a more normal sized portion to produce symptoms of food intolerance. While the symptoms of food intolerance vary and can be mistaken for those of a food allergy, food intolerances are more likely to originate in the gastrointestinal system and are usually caused by an inability to digest or absorb certain foods, or components of those foods.

Chemical sensitivities occur when a person has an adverse reaction to chemicals that occur naturally in, or are added to, foods. Examples of chemical sensitivities are reactions to caffeine in coffee, Tyramine in aged cheese, and the flavour enhancer monosodium glutamate.

Celiac disease is a genetic disease, and the symptoms are triggered by the consumption of gluten. The main sources of gluten in the diet are cereal grains and the only current treatment for celiac disease is to continually maintain a strict gluten-free diet.

Allergen Management is a key part of preventing mistakes that can affect how your company/ products are viewed. If a mistake is made the following can be affected:

- Consumer perceptions, attitudes, and trust
- Product, brand and franchise image
- Adverse media coverage
- Regulatory attitudes and trust

Some potential sources of food allergens are:

- Improper clean-up/storage
- Cross contamination by dust or piece of the allergen (harvester, equipment, employees, lubricants)
- Mislabelling (incorrect label)

Canada's Priority Allergens (2022)

The Canadian Food Inspection Agency has identified priority allergens for Canada that must be included on the label when included in a product. This list accounts for 90 to 95% of all food allergies:

- Eggs
- Milk
- Mustard
- Peanuts
- Crustaceans and molluscs
- Fish
- Sesame seeds
- Soy
- Sulphites, 10ppm or greater
- Tree nuts
- Wheat and triticale

Note: Priority allergens differ by country. You must know the allergens and labelling requirements for any countries you are exporting to. For example, celery is considered an allergen in Europe but not in North America.

Cross Contamination

Allergen cross contamination risks must be controlled. For a farm that does not produce allergens or only has one allergen, cross contamination risks can be easily controlled through scheduling, sanitation, and training. The risk in cases where there are no allergens produced are what people bring on-site, such as a peanut butter sandwich for lunch. If the facility has good agricultural practices and an employee hygiene policy in place, risks are virtually eliminated by eating in a separate lunch area and washing hands before entering the field or packing areas.

For more information about Allergens in Canada see: <https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/food-allergies-intolerances/food-allergies.html>

U-PICK CONSIDERATIONS

If you have a U-Pick on your farm, you need to be aware that if not properly controlled your customers could be a source of contamination of both your produce and packaging.

Here are some guidelines that you need to consider prior to setting up and advertising a U-Pick.

- Provide instructions either verbal, written or visual (photos or diagrams) on what they can and should not do when in the U-Pick area.
- Do not allow animals in the U-Pick area. To counter the potential backlash from customers about not letting their pet in the U-Pick with them, some farms have provided kennels or places to tie the animals so they are not left in the car. This is not mandatory but is a nice thing to offer as an alternative.
- Advise your customers to wash and sanitize their hands prior to picking product.
- They should harvest into clean containers, either provided from you or supplied on their own. Resist the temptation to recycle used berry boxes. You do not know where they were stored or how they were kept when off your farm.
- Pick fruit only off the tree or vine. If fruit falls to the ground, leave it.
- They should only touch product they plan to purchase.
- Customers must stay in the U-Pick area and not wander off to other areas of the farm.

RECORD KEEPING

Record keeping, keep it simple and easy to follow. Sometimes point form is best, you can also combine records where you can if one person does all the recording. Use existing records such as invoices, bill of lading to track incoming inspections and traceability information (pack/pick dates, lot numbers of packaging). If you like paper, use it, if you prefer working electronically that is fine too. Just remember to store everything in a safe secure area and keep a backup in case technology fails you or you have a fire/flood. A number of local farms have had great success with programs such as Farm Credit Canada's AgExpert Field. There are lots of options out there – use the one that works for your operation.

Well written policies and procedures are great, but you need to train those that work with you on those practices. Make sure you document that the training has happened and what they were trained on. Make sure you send yourself for training as well, it is always good to keep current.

If you think you are ready to test the waters of the whole sale and retail markets, make sure you contact them directly and ask specifically what they are looking for in regard to food safety requirements. Ask early, give yourself the time to

ensure you have everything documented and implemented well before you require an inspection or audit. Food safety programs take time; you cannot do it over night. At minimum, a basic food safety program can take at least 2 months to develop and implement and 6 months or more for a complex food safety standard. You do not want to be rushed, that's when mistakes happen.

If you have delays getting a program documented and implemented, make sure you check back with your vendor to ensure there haven't been any changes or additional requirements added.

Be prepared for an auditor or inspector visit. Make sure you review all audit schemes and regulations and perform a pre-audit or self-assessment to ensure you have all your bases covered. Be honest, if you catch anything before an audit it saves you time and money in the long run in making corrections or even potentially failing an audit. Make sure you are ready. No one wants to do an audit twice, including the auditor.

VALUE ADDED PRODUCTS

Before you venture into developing your own value-added products such as jams, jellies, or sauces, there are a few things you need to know in addition to the information above.

- Know the source of any ingredients or packaging you use and how they are treated. Much like your fresh produce, you need to know where and when you used these items in case your supplier has a recall; and if the products are clean and safe to use.
- Label your product and its contents. To ensure you are labelling your product correctly consult the following CFIA links before you print the labels and sell your products.

<https://inspection.canada.ca/food-label-requirements/labelling/consumers/eng/1400426541985/1400455563893>

<https://inspection.canada.ca/food-label-requirements/labelling/industry/eng/1383607266489/1383607344939>

- Use a commercial kitchen; household kitchens are not ideal when producing products for sale. The presence of allergens, pets, and other contaminants in the home put your product and potential customers at risk.

For more information on Food Safety visit www.perennia.ca/quality-food-safety/training/ or Perennia's Food Safety Fundamentals e-learning options.