

Use of pesticides in agriculture: Information from Health Canada



Health Canada's Pesticide Compliance Program (PCP) is responsible for promoting, monitoring and enforcing the [Pest Control Products Act](#) (PCPA). The primary objective of the PCPA is to prevent unacceptable risks to human health and the environment from the use of pest control products, also known as pesticides, which can also be further regulated by provinces, territories, and municipalities in Canada.

This document offers guidance and resources for **all agricultural pesticide users**, including a section outlining key requirements that are specific to **greenhouse** operations.

Be informed – Regulatory requirements applicable to you

All activities involving pesticides are subject to the requirements of the PCPA. Understanding your roles and responsibilities is essential to protect your health and the environment. This section summarizes the Act's key requirements and provides examples of non-compliance.

- Unregistered pest control products - PCPA 6 (1):** *No person shall manufacture, possess, handle, store, transport, import, distribute or use a pest control product that is not registered under this Act (...).*

Examples of non-compliance:

- Using, possessing, or storing pesticides that are not registered in Canada, including those whose registration has been discontinued, cancelled or not renewed.
 - ✓ **Did you know?** You can access Health Canada's [Pesticide Product Information Database](#) to get the most up-to-date information on a pesticide registration status.
- Importing unregistered pesticides into Canada.
 - ✓ **Did you know?** Health Canada works in collaboration with the Canada Border Services Agency (CBSA) to prevent entry of pesticides **not allowed** in Canada. Consult the [Commercial import of pesticides into Canada](#) fact sheet.

- Misuse of pest control products - PCPA 6 (5):** *No person shall handle, store, transport, use or dispose of a pest control product in a way that is inconsistent with (a) the regulations; or (b) if the product is registered, the directions on the label (...).*

Examples of non-compliance: Using a pesticide contrary to the label directions, such as not adhering to:

- Targeted pests, crops or sites specified on the label.
- Application equipment, method, and rate requirements.
- Personal protective equipment (PPE) requirements.
 - ✓ **Did you know?** Different PPE requirements may be specified for mixing, loading, and applying as well as for cleaning and repairing equipment.
- Number of applications allowed in a given period of time.
- Weather conditions requirements.

- Buffer zones and vegetative filter strips requirements.
- Storage requirements.
 - ✓ **Did you know?** Pesticides have to be stored in their original labelled container.
- Unauthorized tank mix.
- Disposal of pesticides in a way that is contrary to the label directions.
 - ✓ **Did you know?** Pesticides must be disposed of properly to avoid accidents and to protect the environment. Follow the label directions, provincial regulations, or refer to your supplier for more information on how to dispose of pesticides safely.

Activities that endanger health, etc. - PCPA 6 (8): *No person shall manufacture, possess, handle, store, transport, distribute, use or dispose of a pest control product in a way that endangers human health or safety or the environment.*

Examples of non-compliance:

- Storing a pesticide in a location accessible to children or pets, or in conditions that may allow leaks to contaminate soil or groundwater.
- Applying a pesticide outdoors without respecting the periods required to protect bees.

Stay informed - Regulatory updates

Pesticides are periodically re-evaluated by Health Canada to ensure that they continue to meet current health and environmental requirements. Re-evaluation decisions (RVDs) or special review decisions (SRDs) may result in the cancellation of products or specific uses. Health Canada may also require changes to a product's label, including adding, removing or modifying risk-reduction measures, use sites and application methods.

To stay up-to-date on decisions which may affect your operations, consult the [Decisions and updates](#) and [Pesticides compliance and enforcement resources](#) webpages, and search for active ingredients listed on the labels of products you use.

Stay safe - Read and follow the label

In Canada, registered pesticides have a Health Canada-approved label with a registration number:

- Reg. No. XXXXX P.C.P. Act
- Registration No. XXXXX *Pest Control Products Act*

Always read and follow product label instructions and implement risk reduction measures such as:

❖ **Personal protective equipment (PPE)**

Personal protective equipment (PPE) includes any clothing or equipment worn to minimize pesticide exposure and protect health. PPE can be as simple as chemical-resistant gloves and footwear worn with a long-sleeved shirt and long pants; or may involve using a respirator and protective suit. Consult the [Personal protective equipment](#) and [Pesticide gloves](#) fact sheets.

❖ **Restricted-entry (REI) and re-entry interval**

Restricted entry interval (REI) is a period of time during which agricultural workers, or anyone else, **must not do** hand labour in treated areas. Consult the [Understanding Restricted-Entry Intervals for Pesticides](#) fact sheet.

Re-entry interval is a period of time that must be respected by anyone **before** entering an area treated with pesticides. Re-entry intervals may be expressed quantitatively (in hours or days) or qualitatively, e.g., “until residues are dry”. Consult the [For everyone's safety, be patient after pesticides have been applied](#) fact sheet.

❖ **Preharvest interval (PHI)**

Preharvest interval is a minimum period of time **between** the last application of a pesticide and when the crop can be harvested to ensure that residues will not exceed the maximum residue limit (MRL). Consult the [Understanding preharvest intervals for pesticides](#) fact sheet.

Additional resources: Health Canada has developed a multilingual [Stay safe when using pesticides](#) fact sheet that provides key basic information and practical tips for the safe use of pesticides. Versions in Spanish, Vietnamese, Thai, Tagalog, Hindi, and Korean are available [upon request](#).

❖ **Spray drift reduction**

Spray drifts are airborne movements of droplets or particles of pesticides outside of a target area. It can occur during or shortly after pesticide spraying. Minimizing spray drift is essential to protect human health and the environment. Risk reduction measures, including spray droplet size, may be specified on pesticide labels to help reduce the drift. Consult the [Management of pesticides spray drift: applicator’s summary guide](#) fact sheet.

Additional resource: To enhance public understanding of spray drift and to provide clear guidance on appropriate actions should concerns arise, the following fact sheet is available: [Living in a farming environment: Understanding pesticide spray drift](#).

❖ **Vegetative filter strips (VFS) and Spray buffer zone**

A **vegetative filter strip (VFS)** is a strip of land with permanent vegetation located between a cultivated field and the bank of a surface water body. It helps protect surface water located at the bottom of a slope by limiting the quantities of pesticides that enter it, as the VFS slows down runoff and filters transported pesticides.

A **spray buffer zone** is an area adjacent to a sensitive environment to which the applicator is not allowed to apply a pesticide. It aims to reduce spray drift that would otherwise infiltrate non-target habitats.

Vegetative filter strips and spray buffer zones may be specified on labels to help protect sensitive habitats. Consult the [Vegetative filter strips](#) fact sheet.

❖ **Tank mixing**

Tank mixing of pesticides is permitted under the PCPA if the labels of each product expressly allow for tank-mixing. Consult the [Health Canada guidance for tank mixes](#) fact sheet.

❖ **Malathion-based pesticides**

Malathion-based pesticides are widely used in agriculture to manage insect infestations and protect crops. Over time, these products degrade in their containers and form isomalathion, which is more toxic than malathion and can cause adverse effects. To mitigate that, the labels of malathion-based pesticides display an expiry date after which the product **should not** be used. If the label **does not** display an expiry date, **do not use it**.

Protect pollinators – Important information

Insect pollinators are vital to agricultural production and the environment. By carrying pollen between flowers, they help crops produce fruits, vegetables, and seeds, while also supporting biodiversity. As a pesticide user, it is important to remain conscientious about protecting them when applying pesticides.

Consult Health Canada's best management practices on [Protecting pollinators during pesticide spraying](#) and [Protecting pollinators when using treated seed](#) or review information on neonicotinoid insecticides commonly used on crops that are attractive to bees. These fact sheets highlight key information summarizing the Pest Management Regulatory Agency's (PMRA) recent re-evaluation and special review decisions on these types of products:

- [Changes to the registration of clothianidin pesticides](#)
- [Changes to the registration of thiamethoxam pesticides](#)
- [Changes to the registration of imidacloprid pesticides \(agricultural uses\)](#)
- [Changes to the registration of imidacloprid pesticides \(seed treatments\)](#)

By consulting these resources, you can learn how to prevent harm and protect pollinators from pesticide exposure.

Pesticide information – Specific to greenhouse operations

On pesticide labels, there may be requirements that are **specific** to greenhouse operations and to which greenhouse operators **must adhere to**:

❖ Prohibition of releases

Product labels may include statements that prohibit the release of pesticides into the environment. These instructions are legally binding and are designed to prevent contamination of soil, water, and non-target organisms.

❖ Effluent or runoff

Greenhouse effluent or runoff may carry pesticide residues into natural water bodies, such as lakes, streams, ponds, posing risks to ecosystems and human health. To avoid contamination, operators are required to adopt preventive measures. Failure to do so may result in environmental damage and enforcement actions under the PCPA.

❖ Third-party audit for closed recirculation systems

Closed recirculation systems are designed to prevent pesticide discharge into the environment and may require a third-party audit to verify the integrity of the system.

Stay compliant – Possible consequence of non-compliance

When a contravention of the PCPA is identified during an inspection, sample analysis or record verification, Health Canada's Pesticide Compliance and Enforcement Officers take enforcement actions in accordance with Health Canada's [Pesticide compliance and enforcement policy](#). These actions can include warning letters, compliance orders, and administrative monetary penalties of up to \$10,000 per violation.

Canadian agricultural exporters are often requested to meet the phytosanitary standards of importing countries. Following label instructions is a good way to reduce trade risks.

Pesticide problems – Contact information

Suspected non-compliance

If you become aware of suspected non-compliance with the PCPA, please report it to Health Canada's Pesticide Compliance Program by consulting the [contact us](#) webpage. You can request anonymity.

Pesticide incident

A pesticide incident is a negative effect (adverse reaction) on humans, animals or the environment that can result from exposure to a pesticide. If you or someone else has been exposed to pesticides and experiences symptoms such as a skin rash, headache and nausea:

- **Call 911** if immediate medical attention is needed.
- **Go see a doctor.** Bring the pesticide label information with you.
- **Follow the first aid statements on the label.**

Incidents should also be reported directly to Health Canada at **1-800-267-6315**, consult the [Report a pesticide incident](#) webpage for more information. If you are an employee, you should also report any incident to your employer.

For more information

Regulatory framework

Document or web page	Link
<i>Pest Control Products Act</i> (PCPA)	https://laws-lois.justice.gc.ca/eng/acts/p-9.01/
Health Canada compliance and enforcement policy for pesticides	https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/policies-guidelines/compliance-enforcement-policy-pesticides.html

The above documents are the official Health Canada documents. In the event of any discrepancy with the contents of this information package, they shall prevail.

Pesticide compliance

Document or web page	Link
Pesticide Product Information Database	https://pest-control.canada.ca/pesticide-registry/en/product-search.html
Commercial import of pesticides into Canada	https://www.canada.ca/en/health-canada/services/publications/product-safety/commercial-import-pesticides-canada.html
Decisions and updates	https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/decisions-updates.html
Pesticides compliance and enforcement resources	https://www.canada.ca/en/health-canada/services/pest-control-products/pesticides-compliance-enforcement/resources.html

Personal protective equipment	https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/fact-sheets-other-resources/personal-protective-equipment.html
Pesticide gloves	https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/fact-sheets-other-resources/pesticide-gloves.html
Understanding Restricted-Entry Intervals for Pesticides	https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/fact-sheets-other-resources/restricted-entry-intervals.html
For everyone's safety, be patient after pesticides have been applied	https://www.canada.ca/en/health-canada/services/publications/product-safety/everyone-safety-patient-after-pesticides-applied.html
Understanding preharvest intervals for pesticides	https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/fact-sheets-other-resources/preharvest-intervals.html
Stay safe when using pesticides	https://www.canada.ca/en/health-canada/services/publications/product-safety/stay-safe-using-pesticides.html
Management of pesticides spray drift: applicator's summary guide	https://www.canada.ca/en/health-canada/services/publications/product-safety/management-pesticide-spray-drift-applicators-summary-guide.html
Living in a farming environment: Understanding pesticide spray drift	https://www.canada.ca/en/health-canada/services/publications/product-safety/living-farming-environment-understanding-pesticide-spray-drift.html
Vegetative filter strips	https://www.canada.ca/en/health-canada/services/publications/product-safety/vegetative-filter-strips.html
Health Canada guidance for tank mixes	https://www.canada.ca/en/health-canada/services/publications/product-safety/tank-mixes-guidance.html
Protecting pollinators during pesticide spraying	https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/fact-sheets-other-resources/pollinator-treated-seed/pesticide-spraying.html
Protecting pollinators when using treated seed	https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/fact-sheets-other-resources/pollinator-treated-seed/best-management-practices.html
Changes to the registration of clothianidin pesticides	https://www.canada.ca/en/health-canada/services/publications/product-safety/changes-registration-clothianidin-pesticides.html

Changes to the registration of thiamethoxam pesticides	https://www.canada.ca/en/health-canada/services/publications/product-safety/changes-registration-thiamethoxam-pesticides.html
Changes to the registration of imidacloprid pesticides (agricultural uses)	https://www.canada.ca/en/health-canada/services/publications/product-safety/changes-registration-imidacloprid-pesticides-agricultural-uses.html
Changes to the registration of imidacloprid pesticides (seed treatments)	https://www.canada.ca/en/health-canada/services/publications/product-safety/changes-registration-imidacloprid-pesticides-seed-treatments.html
Report a pesticide incident	https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pest-management/public/protecting-your-health-environment/report-pesticide-incident.html

Ce document est aussi disponible en français.

Health Canada's Pesticide Compliance Program (PCP) is responsible for the enforcement of the *Pest Control Products Act* (PCPA). Visit [canada.ca/pesticide-compliance](https://www.canada.ca/pesticide-compliance) or contact pcp-pcp@hc-sc.gc.ca.