



Using Remotely Piloted Aircraft Systems (RPAS) for Pesticide Application in Canada

What you need to know

Remotely piloted aircraft systems (RPAS) consist of an uncrewed aircraft that is operated by a pilot on the ground, a control station, and command and control links.

They are commonly known as drones or sometimes as Unmanned Aircraft Systems (UAS).

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Provincial and Territorial regulators

For training, certification, permissions, and permits.



Government
of Canada

Gouvernement
du Canada

Canada



You must be Certified and Trained

Before anyone applies pesticides by an **RPAS**, both **aviation** and **pesticide** requirements must be met.

Aviation requirements:

- The pilot must obtain a **valid and appropriate Drone Pilot Certificate** from Transport Canada and complete all the required trainings.
- A visual observer (a person who assists the pilot in maintaining visual line-of-sight), if needed, must hold at least a **basic Drone Pilot Certificate**.
- The drone must be **registered** with Transport Canada.

Pesticide requirements:

- Contact your **provincial or territorial regulator** to confirm requirements for training, certification, permissions and pesticide use.
- Complete the training and certification required by your province or territory, if any.
- Obtain any applicable permits or certificates.
- Requirements are administered within each jurisdiction and may vary across provinces and territories.



Always follow the Pesticide Label

Always read and understand the label before using a pesticide.

If the label mentions RPAS:

- Follow those specific directions exactly.

If the label does not mention RPAS:

- Confirm if aerial application is allowed.
- If it is, follow all aerial directions exactly, with no changes to spray volume, application rate, spray buffer zones, droplet size, or any other conditions.
- Pilots and visual observers must follow PPE recommendations for ground application.

If the label says “DO NOT apply by air” or “DO NOT apply by Remotely Piloted Aircraft Systems (RPAS)”, or does not mention aerial application:

- You cannot use an **RPAS**.

Be aware of restrictions

- Aerial (including **RPAS**) pesticide applications to certain sites are restricted. They are only permitted where explicitly allowed on the product label, with additional provincial/territorial authorization required.



Use the Right Gear and Equipment

All crew members, including the pilot, visual observer, mixer and loader, and **anyone** handling equipment or batteries must, at a minimum, wear:

- long-sleeved shirt and long pants
- chemical-resistant gloves
- socks and shoes

If the label mentions RPAS:

- All crew members must follow the personal protective equipment (PPE) specified on the label.
- If the pesticide label requires additional engineering controls or limit amounts, these requirements must also be followed.

If the label does not mention RPAS:

- The pilot and the visual observer must follow the PPE requirements for **ground application** (either groundboom or airblast depending on the crop/site being treated).
- If a closed cab is required for ground application **do not** apply this product by RPAS unless equivalent protection, designed for RPAS, is available.
- All *other* crew members must follow the PPE specified for **aerial application** for the mixer/loader, clean-up and maintenance (including battery change) activities.



Know Your Role

- The pilot must be familiar with the qualifications of all crew members before the flight.
- Crews typically include two people but may be larger.
- Roles of crew members may vary depending on operational needs.
- To keep everyone safe, some roles must remain separate during the application process.
 - Unless the label says differently, the person mixing and loading the pesticide **must be different** from the person piloting the RPA. This is the same rule used for conventional aerial spraying.
 - If the work setup allows it, the visual observer can take on mixing, loading, or battery change tasks.



Pilot



Mixer/Loader



Visual Observer



Quick Checklist for Safety:

- ☐ The pilot has the appropriate Drone Pilot Certificate, and the visual observer (if required) has a basic Drone Pilot Certificate from Transport Canada.
- ☐ All crew members have completed all requirements outlined by the province or territory where the pesticide will be applied.
- ☐ All crew members have read and understood the pesticide label and the pilot has confirmed RPAS or aerial use is permitted.
- ☐ All crew members are wearing the required PPE and respecting all safety measures.
- ☐ The crew member mixing and loading the pesticide is different from the person piloting the RPA.
- ☐ All crew members performing RPA clean-up and repairs, battery changes, calibration, handling, or any other required tasks are being considerate to not cross contaminate.
- ☐ Everyone on-site is prioritizing safety.



Make sure everyone doing the work has all required training and is using proper PPE and equipment.



To minimize exposure to spray drift, position the pilot, visual observer, and any crew members upwind of the RPAS.



Hands are a common way pesticides can enter the body. Never touch clean surfaces while wearing contaminated gloves.



For more information, visit:

Transport Canada

For flight rules and drone pilot certification.

Health Canada

For the detailed policy.



For additional factsheets about the safe use of pesticides, visit:

Personal Protective Equipment - [Canada.ca](https://www.canada.ca) | Pesticide Gloves - [Canada.ca](https://www.canada.ca)

Questions?

Contact us at the **Pest Management Information Service**
1-800-267-6315 or pesticides-info@hc-sc.gc.ca