BeDriftAware
Best practices to reduce spray drift.

Frequently Asked Questions

What is spray drift?

Spray drift is the unintended aerial movement of plant protection products (pesticides) away from the intended target. Spray drift is often also referred to as off-target movement.

What causes spray drift?

Drift happens when crop protection products don't stay where they are applied. There are several factors that contribute to drift including weather, the speed of the sprayer and the droplet size (spray quality) employed. Some products can also be more likely to drift because of their chemical composition, and this form of drift can take place after the application. Read more

Can spray drift be prevented?

Not entirely. Every time you spray, there is the potential for drift. The good news is there are best practices to follow to reduce the chance for spray drift. Here are the top three:

1. Use the largest droplet size you can, without compromising coverage.
2. Lower the boom to the lowest practical height for the field, and drive slowly. Think low and slow.
3. Adjust spraying practices to match weather conditions. Spray when wind speeds are between 3-10 km/h.

Read more

Why does spray drift matter?

Spray drift can have a negative impact on unintended targets. Those include neighbouring fields and residences, livestock, and sensitive natural habitats like trees, water and pollinators.

Does night spraying reduce the possibility of drift?

Not necessarily. It can be tempting on a calm, clear night to catch up on field work, including spraying. But spraying in low or no wind conditions can represent the highest potential for strong thermal inversions. In these situations, spray particles don't fall to the ground but hang in a layer of undisturbed air and eventually move in an unpredictable direction when the wind picks up.

However, spraying at night – if conditions are favourable – can reduce the potential impact on pollinators when they are less active.

Do buffer zones help reduce drift?

Absolutely. Buffer zones provide a no-spray area between the area being sprayed and the closest downwind edge of a sensitive field or aquatic habitat. Sprayer buffer zones reduce the amount of spray drift that enters non-drift areas. Vegetative filter strips (VFS) are similar to buffer zones and provide the same potential to reduce drift. Always read product label directions as many products require the use of a buffer zone and/or VFS.

Read more

Can spray drift into residential areas?

It's possible. If spray operators aren't following best practices to reduce drift – and there are residential areas beside the fields being sprayed – there is the possibility that spray can drift to neighbouring areas.

How do I know if I've had some spray drift while spraying?

Depending on what you were spraying, you might notice spray damage on fields beside where you sprayed, or other vegetation. If spray has affected neighbours in your area, you may also hear from them about unexpected damage to vegetation or other habitat areas.

What do I do if I think spray has drifted to my field or onto a neighbour's field?

If you are a sprayer operator and suspect drift has occurred while you were spraying, you could talk to neighbours who may have been impacted. You can also report the incident to the Pest Management Regulatory Agency (PMRA) using the voluntary incident reporting system. Read more

What do I do if I suspect drift?

If you suspect spray has drifted to your property, start by talking to the farmer or sprayer operator. It's helpful to collect information on what was sprayed, as well as when and who applied it. If you can't resolve it with your neighbour, check the link below on how to report suspected spray drift. It is important to photograph the damage (that includes a time stamp and geographical location) to monitor any potential damage for some time after drift was initially suspected.

To report suspected spray drift, contact your local office of the Ministry of the Environment, Conservation and Parks District Office – a list can be found here or contact the Spills Actions Centre (SAC) at 1.866.663.8477. SAC is available 24/7 and can contact you with the appropriate environmental office or pesticide specialist in your area. Read more

Is spray drift associated with specific crops?

No. Drift can happen any time a crop protection product is applied to row crops or specialty crops because it is based on physics (droplet size, sprayer speed and weather). Read more on spraying speciality crops.

Does the type of sprayer affect the possibility of spray?

Not entirely. Sprayer design and drift-reducing technologies can certainly reduce the possibility of drift. However, the type of sprayer doesn't change the need for following best practices – speed, nozzle size and wind conditions – to reduce the chance of spray drift happening.

For more information, visit

BeDriftAware.ca

Be Drift Aware is a collaborative effort that was created to raise awareness and promote best practices that will help reduce spray drift in Ontario.

Grain Farmers of Ontario · OFA Ontario Federation of Agriculture · Ontario Fruit & Vegetable Growers' Association · Ontario · CropLife Canada · Sprayers 101