



## Spray Drift

### Background

For decades, EPA and state pesticide policies have acknowledged that some small level of pesticide drift is unavoidable and, when used according to the product label, does not pose an “unreasonable adverse effect.” When it is determined that certain uses of a product could cause an unreasonable adverse effect, restrictions are placed on the use of the product to meet the standard. Unlike this FIFRA risk standard set and repeatedly confirmed by Congress, EPA’s newly proposed spray drift policy, “Do not apply this product in a manner that results in spray [or dust] drift that *could cause* an adverse effect to people or any other non-target organism,” adopts a precautionary principle approach and effectively replaces FIFRA’s risk-benefit standard with a new zero-risk standard. EPA is planning to apply this new spray drift language to both noncommercial and commercial pesticide uses commonly performed by hired personnel, including those for orchards, vineyards, farms, forests, golf courses, parks, roadway and other rights-of-way, and residential lawns and gardens. EPA’s enforcement guidance for the new spray drift FIFRA label language would force states to become assessors of theoretical risks, and applicators to risk lawsuits every time they go to work. State agencies generally do not have the toxicology endpoints, or risk assessments at their fingertips to make these types of decisions. Even forcing state regulators to become assessors of actual risks, let alone theoretical risks, is a stretch without the necessary data to make the decisions. Major private-sector advances have been made in drift-reduction technology including Global Positioning System guided shutoff nozzles, low drift spray tips and product formulations, foaming agents and adjuvants. Congress should ask EPA why it doesn’t make the development of additional drift-reduction technologies and their implementation a requirement of pesticide labels – before moving forward with this controversial spray drift notice.

### Talking Points

- EPA’s Office of Pesticide Programs should:
  - Maintain FIFRA’s risk-based standard of “no unreasonable adverse effects” and remove the vague, unenforceable, and unmanageable concepts of “could cause” or “may cause” adverse effects or “harm” from the Drift PRN;
  - Continue to acknowledge that some small level of pesticide drift is unavoidable in many common situations, and does not pose an “unreasonable adverse effect”;
  - Acknowledge that simply detecting an off-target pesticide does not necessarily pose an unreasonable adverse effect and is not a violation of FIFRA that requires an enforcement action;
  - Remove the new hazard-based standard of “harm” from the Drift Pesticide Registration Notice;
  - NOT impose unnecessary buffers that would reduce cropland available for American agriculture;
  - Develop a bystander risk assessment exposure scenario for the pesticide registration process; and
  - Develop risk-based tolerances for non-target property.
- Spray drift is already accounted for in EPA’s registration restrictions: In meeting FIFRA’s requirement that pesticide use not pose an “unreasonable adverse effect” on people, wildlife or the environment, EPA’s registration process evaluates the results of 120 different scientific



environmental and safety research studies that take up to nine years and \$184 million dollars to conduct. In the process, effects of potential spray drift are taken into account in EPA's risk assessment and assignment of registration restrictions and product label language. This rigorous process is data-rich, and, on average, only one chemical in 139,000 candidates makes it from development to commercialization as an EPA-registered product.

- EPA's new drift language would move spray drift policy from a basis of scientific risk assessment to speculative vagueness: EPA would overlook the safety risk factors already built into product use during the registration process, and add vague speculative label language requirements. These would require applicators to apply **no** registered pesticides if spray or dust drifts results that **could** cause an adverse effect to people or any other non-target organism. Thus, applicators must anticipate and avoid potential situations, and be ready to promptly shut down operations if any meteorological or ecological situation changes (e.g., the wind gusts, or birds fly nearby). And the pesticides they use could only affect the specific weeds, insect pests or diseases targeted on the pesticide label and *none other*, even if such other species are also pests. If labels aren't long enough now, they certainly will be under EPA's proposed spray drift label language requirements.
- EPA's proposed spray drift label language will do nothing but spawn lawsuits: Despite the care and anti-drift technology that applicators use, small amounts of spray drift often cannot be prevented and are not unreasonable under FIFRA's "no unreasonable adverse effect" standard. EPA's proposed label language is unachievable, both for the applicator and the regulator. It would force state regulators to become assessors of theoretical risks, and applicators to risk lawsuits every time they go to work. No one can meet EPA's proposed standard in every conceivable situation, and rather than improve pesticide policy, it encourages frivolous lawsuits.

## FAQs

- What causes spray drift? Most chemical crop protection products are applied as aerial sprays from ground sprayers or airplanes, and consist of small droplets that are by nature light weight. Occasionally, swirling wind or an unexpected gust causes droplets to drift to places other than their anticipated settling points while they are still suspended in the air.
- How is spray drift reduced? Years of research have produced application methods and tools that can minimize chances of spray drift and such precautions are part of every-day pesticide use. They include using the right spraying techniques, drift-reduction technologies, and chemical adjuvants to stabilize droplets and enhance targeted deposition, taking account of weather conditions, consideration of neighbors' interests, and protection of the public, wildlife and the environment. Applications made during low wind speeds, with low release heights, when wind direction is away from sensitive areas, and using large droplet or particle sizes result in substantially lower levels of drift. Despite all of these advances, some trace level of spray drift may be unavoidable.
- Is spray drift unavoidable? Governments are aware that a trace level of pesticide drift may be unavoidable. For example, EPA has routinely stated: "EPA recognizes that some *de minimus* level of drift would occur from most or all applications as a result of the uses of pesticides."<sup>1</sup> The website of Health Canada states: "Under normal use conditions specified on the label, pesticide residues from

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<sup>1</sup> [http://www.epa.gov/PR\\_Notices/prdraft-spraydrift801.htm](http://www.epa.gov/PR_Notices/prdraft-spraydrift801.htm)



spray drift are not a concern for users or bystanders.”<sup>2</sup> Washington State’s Department of Health confirmed in 2009 that risks to bystanders from pesticide drift are well below levels that would pose a health concern.<sup>3</sup>

- What is EPA’s role in development of advanced Drift Reduction Technologies (DRTs)? CropLife America supports innovation and advocates for EPA’s adoption of scientifically-based and validated spray drift reduction technologies. CLA recognizes EPA’s announced efforts to move forward with its DRT testing and validation program. However much more work needs to be done and EPA could play a stronger role in encouraging innovation and supporting development of new DRT technology. CLA urges EPA to work with industry and USDA to promote the use of DRTs, and give credit to farmers and applicators for using DRTs. Pesticide registrants could then incorporate those technologies on pesticide product labels for drift mitigation. CLA also urges EPA to incorporate DRTs into the risk assessment process and risk management decisions for the registration of pesticide products.

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<sup>2</sup> [http://www.hc-sc.gc.ca/cps-spc/pubs/pest/\\_fact-fiche/drift-pulverisation/index-eng.php](http://www.hc-sc.gc.ca/cps-spc/pubs/pest/_fact-fiche/drift-pulverisation/index-eng.php)

<sup>3</sup> Fenske, et al., June 2009, Department of Health Pesticide Program, Washington State, Organophosphorus Pesticide Air Monitoring Project.