Pesticide Spray Drift Stats and Facts

FACTS

1. **Inconsistent Formulations** – Homemade pesticides use untested household ingredients, so concentration, efficacy, and toxicity are unpredictable—even ingredients like garlic or chili may become harmful.
2. **Fire or Chemical Risks** – Recipes involving boiling tobacco, chrysanthemums, gasoline, or kerosene can release flammable vapors or toxic emissions.
3. **Environmental Contamination** – Misuse may pollute soil, water, and harm non-target organisms like pets or beneficial insects.
4. **Accidental Mislabeling** – Lack of proper labeling, storage, or documentation leads to accidental ingestion or misuse by others.
5. **Lack of PPE Usage** – Homemade solutions often make users skip gloves or respiratory protection, increasing dermal or inhalation risks.
6. **Regulatory Non-Compliance** – Homemade concoctions bypass regulations, ensuring safety and environmental impact control.

STATS

- In 2024, OSHA recorded 5,190 workplace fatalities, with landscaping and agriculture accounting for ~150 cases (3%). Pesticide drift-related fatalities are rare (<1%), but secondary injuries (e.g., falls from disorientation) highlight the need for PPE and drift controls.
- In 2024, PPE violations (29 CFR 1910.132) ranked 6th in outdoor industries (1,876 citations), including inadequate respirators or gloves during pesticide application. Hazard Communication violations (29 CFR 1910.1200) ranked 2nd

(3,200 citations), often due to improper drift management training.

- A 2022 EPA report noted that 10% of pesticide applications resulted in off-target drift, with 20% of incidents causing worker exposure due to inadequate PPE or poor application practices.
- WorkSafeBC reported 25–30 annual fatalities in outdoor occupations in British Columbia (2020–2023), with pesticide drift incidents rare but contributing to secondary injuries like falls (15%). PPE and drift controls are critical.
- CCOHS 2023 data showed that workplaces enforcing respirators and chemical-resistant PPE reduced pesticide-related injuries by 20%, particularly during spraying tasks.
- In 2024, Ontario introduced fines up to $500,000 for repeat OHS violations, including PPE non-compliance, impacting firms failing to provide proper safety gear for pesticide applicators.