

Protective clothing when using pesticides

Stats and Facts

FACTS

1. **Skin Absorption:** Failing to wear chemical-resistant gloves or coveralls can lead to direct pesticide absorption through the skin, increasing toxic exposure.
2. **Eye Exposure:** Without sealed goggles or face shields, workers handling sprays or concentrates may suffer from eye irritation, blurred vision, or permanent injury.
3. **Inhalation Risk:** Without proper protective hoods or masks, pesticide fumes or mists can be inhaled, causing respiratory irritation or long-term lung damage.
4. **Contaminated Clothing:** Reusing or improperly laundering work clothing can result in prolonged skin exposure to pesticide residues.
5. **Heat Stress:** Wearing heavy protective gear without proper hydration or breaks during hot weather can lead to dizziness, heat exhaustion, or heat stroke.
6. **Improper Fit:** Loose or torn clothing leaves gaps that allow pesticide contact with the skin, reducing the effectiveness of protective barriers.

STATS

- In 2024, OSHA recorded 5,190 workplace fatalities, with landscaping and agriculture accounting for ~150 cases (3%). Pesticide-related fatalities are rare (<1%), but secondary injuries (e.g., falls due to disorientation) highlight the need for proper clothing.
- In 2024, PPE violations (29 CFR 1910.132) ranked 6th in outdoor industries (1,876 citations), including inadequate chemical-resistant clothing during pesticide application. Hazard Communication violations (29 CFR 1910.1200) ranked 2nd (3,200 citations), often due to improper training.

- A 2022 EPA report noted that 15% of pesticide applications caused off-target drift, with 20% of worker exposures linked to inadequate protective clothing or failure to follow label instructions.
- WorkSafeBC reported 25–30 annual fatalities in outdoor occupations in British Columbia (2020–2023), with pesticide-related incidents rare but contributing to secondary injuries like falls (15%). Proper clothing is critical.
- CCOHS 2023 data showed that chemical-resistant protective clothing 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 landscaping firms failing to provide proper protective clothing.