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Features

3/28/2025

5 Pest Control Best Practices

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Ensuring a culture of safety when using pesticides is essential to maintaining healthy plants, healthy workers and a healthy bottom line. When workers are well-trained and proactive in safety measures, garden businesses benefit in several ways, including increased job satisfaction, higher morale and greater productivity.

Prioritizing safety also reduces workplace accidents, which can lower workers' compensation claims, medical and legal costs. Maintaining a strong safety record enhances your company's reputation, reinforcing trust among workers, customers and the broader community.

Each year, approximately one billion pounds of pesticides are used across the U.S. to protect crops, prevent pest infestations and ensure high-quality yields. Given this widespread use of potentially hazardous materials, businesses must comply with regulatory standards set by OSHA and the EPA.

The EPA oversees pesticide registration, labeling, application and the Worker Protection Standard (WPS) focusing on the safety of pesticide handlers and workers, while OSHA enforces workplace safety regulations, such as the Hazard Communication Standard (HAZCOM), which requires Safety Data Sheets (SDS) for pesticides. Both agencies play vital roles in ensuring pesticide and workplace safety. Greenhouse businesses must align their programs and worker training guidelines to maintain compliance.

Cultivating a culture of safety

The key to mitigating pesticide risks lies in thorough training. Educating workers on pesticide hazards and safety protocols reduces health risks while fostering a safer work environment. Here are five essential elements for creating a culture of safety around pesticide control.

1. Understand hazardous pesticides and labeling.

No matter the type of horticultural business you run, pesticide safety training is essential. Workers should be familiar with what is or is not a pesticide, as well as how to read pesticide labels and SDS that provide critical information about risks and proper handling procedures.

Pesticide labels contain signal words indicating the level of hazard:

- Danger: Extremely harmful
- Warning: Moderately harmful
- · Caution: Slightly harmful, though still potentially hazardous

Under no circumstances should pesticides be transferred to unlabeled containers or taken home for personal use. Clear communication is essential for ensuring workplace safety. Workers should be informed before and during pesticide applications. Treated areas must be clearly marked and restricted until safe for entry. Signs are required to indicate restricted entry intervals to prevent accidental exposure.

2. Establish clear handling protocols.

Proper handling procedures are crucial to minimizing exposure. Handlers and workers should be reminded to avoid touching their faces, mouths or noses while working in areas where pesticides have been applied—especially when wearing gloves, which may be contaminated. Any personal protective equipment (PPE) or clothing used during pesticide application should be considered exposed to chemicals.

After completing pesticide-related tasks, handlers must wash their hands thoroughly with soap and water. Work clothes contaminated with pesticides should either be discarded if for single use or washed separately from household laundry to prevent chemical exposure to family members.

To reinforce safe handling, businesses should conduct internal safety inspections and schedule periodic safety reviews. Establish a dedicated safety committee to help ensure consistent monitoring and improvement. Routine safety meetings provide an opportunity to address concerns, reinforce protocols and allow workers to share feedback on safety practices. Staff are more likely to adhere to safety policies that are clearly communicated and regularly reviewed.

3. Develop leadership in pesticide safety.

A strong safety culture requires leaders to embrace it at all levels of the organization. Designating safety leaders among employees creates peer-to-peer accountability and encourages consistent adherence to safety protocols. Safety leaders ideally will possess experience in leading teams, strong communication skills and a commitment to workplace safety.

Managers and designated safety leaders should lead by example, consistently demonstrating proper pesticide safety practices. This includes wearing required PPE, following application protocols and promptly addressing safety concerns. Encouraging open communication ensures that employees feel comfortable reporting hazards and contributing feedback.

Worker-led safety meetings further strengthen engagement. Sharing the responsibility of hosting meetings

reinforces the importance of safety across the organization, promotes collaboration and empowers staff to take an active role in workplace safety.

4. Follow the EPA's WPS Standard for pesticide safety training.

Workers must receive training before performing tasks in any area where pesticides have been applied and where the restricted-entry interval (REI) has been in effect within the past 30 days, as required by regulation 170.401(a). Similarly, handlers must be trained before engaging in any handler activities.

There's no grace period for worker or handler training, meaning all personnel must complete training before beginning work. Additionally, workers and handlers must be retrained annually to ensure continued compliance with pesticide safety regulations.

Training sessions must use EPA-approved materials and can be presented either orally from written materials or through audio-visual methods. Trainers must be certified applicators, have completed an EPA-approved train-the-trainer program or be designated by the State or Tribal pesticide enforcement agency. Furthermore, training must be delivered in a manner that employees can understand, with the trainer present to address any questions. I recommend checking with your state or tribal pesticide regulatory agency for possible additional requirements.

Employers are required to maintain training records for a minimum of two years from the training date for each worker and handler. In addition to pesticide safety training, employers must also inform workers and handlers about the location of essential safety information on the worksite. This includes the WPS safety poster or an equivalent, pesticide application information, Safety Data Sheets and decontamination supplies.

5. Maintain accurate pesticide application records.

Proper documentation of pesticide use is vital for regulatory compliance and workplace safety. Keeping detailed records helps track usage, identify potential risks, and ensure adherence to EPA and OSHA guidelines. Essential record-keeping includes:

- Applicator's name
- Product names and EPA registration numbers
- Location and description of treated areas
- Plants treated
- Method of application
- Restricted-entry intervals
- Application dates and times
- Application rates and amounts applied

State-specific pesticide regulations may require additional documentation. By maintaining thorough records, greenhouse businesses demonstrate compliance, improve safety measures and identify areas for potential improvement.

Partnering for a safer workplace

Building a strong pesticide safety program requires time, planning and commitment from all levels of a business. Safety cannot be a one-time initiative; it must be continuously reinforced through training, leadership and proactive hazard management.

Business owners can enhance their safety programs by leveraging resources from their insurance providers, who may offer risk management, loss control and safety services tailored to horticultural businesses. Services such as

on-site consultations, thermographic inspections and targeted safety training help identify potential risks and implement effective solutions.

By investing in comprehensive training, developing strong leadership and maintaining rigorous documentation, garden businesses can create a safer, more productive environment for workers while ensuring compliance with pesticide regulations. **GP**

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