



Clinician's Guide to EPA's Worker Protection Standard



The Environmental Protection Agency's (EPA) [Worker Protection Standard \(WPS\)](#) protects agricultural workers from the health risks associated with pesticides. The WPS requires agricultural employers to comply with minimum safety precautions when using pesticides on farms and in nurseries, greenhouses or forests. Requirements include: training of workers handling pesticides or working in treated areas, provision of adequate personal protective equipment (PPE), communication of information about work areas recently treated with pesticides and when it is safe to re-enter these areas, and in case of emergency, availability of decontamination facilities and provision of medical assistance. The following guide reflects the WPS provisions currently in effect, which were last updated in 2015.

Important Considerations for Migrant Clinicians

Workers may be unaware that health effects or symptoms they are experiencing may be related to exposure to pesticides. They may not initiate a discussion regarding their occupational exposures with their healthcare provider. For this reason, clinicians should always ask patients about their occupation and ask agricultural workers about pesticide-related symptoms. Migrant Clinicians Network (MCN) has a [simple screening tool](#) to quickly ascertain occupational and environmental exposures.

Additionally, workers often do not know the names of the pesticides they have been exposed to at work. Even though the WPS requires that this information be accessible to workers in a central location, workers often do not know where to find the information and are reluctant or unable, due to language barriers or fear of retaliation, to ask their employer for the information. Under the WPS, employers have a responsibility to provide clinicians and patients with information on any product whose use they suspect may have led to poisoning. Clinicians can and should call employers to ask for pesticide use information in order to make accurate diagnoses and plan treatments.

Basic Protections of the WPS

The goal of the WPS is to minimize the harmful effects of pesticide exposure to both workers and their families. The law applies to workers who are involved in the production of crops and to “handlers” who mix, load, or apply pesticides. The WPS requires agricultural employers to take the following steps:

- Provide annual pesticide safety training and posters
- Inform workers about where and when pesticides have been sprayed
- Keep workers out of pesticide-treated areas during application until re-entry into these areas are deemed safe
- Provide protective equipment for all workers coming into contact with pesticides or pesticide-treated areas within the time periods when re-entry is restricted
- Provide facilities for decontamination (including clean water, soap, & towels)
- Facilitate emergency medical treatment if necessary

Pesticide Safety Trainings

- Employers must provide training on pesticide safety to all workers and handlers before they enter any fields that have been treated with pesticides. They must also inform workers about where and when pesticides have been sprayed.
- No worker may enter an area where a pesticide has been used without receiving a safety training. Similarly, all handlers must be trained before performing any handler activity. There is no grace period for worker or handler training.
- An employer must provide this training for their workers annually and keep a record of the trainings provided.
- Employers must display in a central location a poster with basic safety information and the name and address of a nearby health facility.

Information about Recent Pesticide Applications

- When an agricultural worker seeks medical assistance due to pesticide exposure, employers must promptly make available [safety data sheets \(SDS\)](#), product information, and application information to medical personnel upon request to better facilitate diagnosis and treatment. Safety data sheets contain information regarding toxicity, health effects, first aid procedures, storage, disposal, and necessary protective equipment for handling.
- Employers must inform workers about where and when pesticides were sprayed to avoid accidental exposures. Information about each pesticide and application (including name, location of field, SDS, and re-entry interval) must be posted in an easily accessible central location.

- The pesticide label will indicate if notifications from employers must be either written or oral, or both. If both written and oral notifications are required, employers must post warning signs around the field informing people not to enter. These warning signs must have a specific format and content detailed in the regulation, including key words in English and Spanish (or an alternative language spoken by a significant number of non-English speaking workers). Warning signs must also be erected when the product used has a re-entry interval (REI) greater than 48 hours. Oral notifications should include the location of the treated area and the length of the REI.
- Workers may designate another individual to access information about the pesticides used in their worksites. Medical personnel also have the right to request this information independently.

Protections during Applications and during Restricted Entry Intervals

- Children under the age of 18 are prohibited from handling pesticides and from early entry into restricted areas.
- Workers must be excluded from areas while pesticides are being applied and they cannot enter a pesticide treated area during the REI unless they are given protective equipment.
- During pesticide application in outdoor areas, only properly trained and equipped pesticide handlers involved in the application may enter areas up to 100 feet around the application equipment. An applicator must suspend application if a worker or another person is in the application area.ⁱ
- Workers who must enter a treated area during an REI must receive detailed information about the pesticides used and the personal protective equipment required by the pesticide's label. An REI can last anywhere between 4 hours and 30 days, depending on the crop, the pesticide used, and the location. Specific REIs are found on pesticide labels, and employers should also post REIs in a central location accessible to all workers.

Personal Protective Equipment

- An employer must provide and maintain personal protective equipment (PPE) for handlers and workers who work in treated areas before the REI has ended. PPE includes clothing and equipment that must be used to protect a worker from contact with pesticides, such as gloves, respirators, or coveralls.
- Employers must provide training, fit testing, and medical evaluations for pesticide handlers using products that require the use of respirators.

ⁱIn 2019, the EPA published proposed changes to this provision, called the "Application Exclusion Zone" or AEZ. The AEZ establishes a protective buffer zone during the time of pesticide application. As of May 2020, the AEZ was still in effect as described here, as the EPA still had not published its final rule revising this provision.

Decontamination Supplies

- Handlers and workers must have enough water, soap, and single-use towels to wash their hands on a regular basis and to wash themselves in case of an accidental exposure to pesticides.
- Handlers must have enough water for washing their entire body in case of an emergency and a clean change of clothing to dress in after the contaminated clothing has been removed.
- The minimum amount of water required is 1 gallon for each worker and 3 gallons for each handler and early-entry worker.
- If handlers use products requiring eye protection, they must have access to a system capable of delivering 0.4 gallons of running water per minute for at least 15 minutes for eye flushing.

Emergency Medical Assistance

- If a worker becomes ill due to pesticide exposure, the employer must make available transportation (which can include calling an emergency vehicle) to a medical facility.
- In an emergency situation, an employer must promptly provide information about the pesticide to which the worker may have been exposed, including the SDS, product information (name, EPA registration number, active ingredients, antidote or other emergency information from product labeling, and a description of the way the pesticide was used) and the circumstances of the worker's exposure to the pesticide.

Retaliation

No worker may be prevented or even discouraged from complying or attempting to comply with the WPS. Workers who complain, exercise their rights under the WPS, or provide information in a WPS investigation cannot be targeted by employers for discipline or termination.

Enforcement

State agencies enforce the WPS under cooperative agreements with the EPA. Agencies and inspectors responsible for WPS enforcement will conduct routine WPS inspections to monitor employer compliance with the regulations, as well as some "for cause" inspections that are usually initiated in response to a complaint, damage report, referral, or tip following a pesticide application.ⁱⁱ

ⁱⁱ For more information on WPS enforcement, see <https://www.epa.gov/compliance/worker-protection-standard-compliance-monitoring-program>.

Some States Have Additional Protections for Workers and Requirements Regarding Pesticides

Medical Monitoring: To prevent overexposure to organophosphate and carbamate insecticides by pesticide mixers, loaders and applicators, **California** and **Washington** require employers to pay for blood tests that monitor pesticide handlers' exposure to these types of pesticides.ⁱⁱⁱ When the tests show that the worker is overexposed, he/she must be removed from handling activities to prevent injury. Regardless of state regulations, clinicians can proactively monitor pesticide mixers, loaders and applicators, as described in this [tool developed by MCN](#).

Incident Reporting: Currently, thirty states have laws that require healthcare professionals to report suspected or confirmed pesticide-related illnesses and injuries. Thirteen states (California, Florida, Illinois, Iowa, Louisiana, Michigan, Nebraska, New Mexico, New York, North Carolina, Oregon, Texas, and Washington) currently participate in the [Sentinel Event Notification System for Occupational Risk \(SENSOR\) program](#), which establishes formal reporting and investigation systems. Farmworker Justice (FJ) and MCN developed a [reporting tool](#) with information on reporting requirements and resources. EPA relies heavily on clinicians to report possible pesticide poisonings in order to understand and prevent future pesticide misuse. In the past, clinician reporting has led to tighter regulation and even banning of some pesticides.^{iv}

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ⁱⁱⁱ These pesticides depress the level of the blood enzyme acetylcholinesterase which plays a vital role in the central and peripheral nervous system. Exposure can be detected through plasma or red blood cell cholinesterase tests taken within 24-48 hours. Without baseline levels, however, the test must be repeated weekly for about 6 weeks to see if levels rise.

^{iv} See Farmworker Justice's issue brief on the role of exposure incident reporting in the regulation of pesticides, available at <http://www.farmworkerjustice.org/sites/default/files/Pesticide%20Issue%20Brief%20July%202013.pdf>.