

# EPA's proposed Worker Protection Standard and the burdens of the past

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**Background:** An Environmental Protection Agency (EPA) recommendation for extensive changes to the Agency's 40-year-old Worker Protection Standard is currently stalled in the "proposed rule" stage. The proposal, which was available for public comment until 18 August, would improve safety, training, and hazard communication policies for agricultural pesticides. Exposure to hazards, including high heat, heavy machinery, stoop labor, and pesticides, makes occupational illness uncommonly common among the USA's estimated 2.5 million farm workers.

**Objectives:** To consider the proposed revisions' likelihood of addressing historical gaps in farmworker protection.

**Methods:** The proposal was compared to the existing Worker Protection Standard, and key aspects were analyzed in relation to existing science on farm labor hazards, as well as historic occupational health, labor and immigration policy.

**Results:** US law historically has left farm workers largely unprotected. These exclusions and delays have been tolerated in part thanks to the myth of the independent family farmer, but more significant is the stingy nativism that presumes to benefit from immigrant labor without assuming any responsibility to protect the humans who provide it. In the first half of the 1970s, workers lobbied for robust protections, but rule making was impeded by lack of data and by the disproportionate influence of agricultural employers who sought minimal regulation. In 1974, the EPA passed the first Worker Protection Standard for farm workers. Key aspects of the proposed revision include stronger protections against drift and re-entry exposures, better information provision and training, and increased protections for workers under 16 years.

**Conclusions:** The proposed changes represent an improvement over existing legislation, but do not go far enough. The revision should be strengthened along lines suggested by farm workers themselves, and other labor laws must also be amended to give the men, women, and children who work in the fields of this country full rights and protections.

**Keywords:** Pesticides, Agricultural workers, Immigrants, Occupational health, Environmental Protection Agency, Policy, Young workers

## Introduction

In 2014, US Environmental Protection Agency (EPA) took a historic step toward strengthening regulatory protections for farm workers in the USA. The EPA's proposed revisions to its Worker Protection Standard would improve safety, training, and hazard communication policies for agricultural pesticides, and — for the first time in the USA — set a minimum age for all work with pesticides.<sup>1</sup>

Robust changes to the Worker Protection Standard are long overdue. For many decades, farm workers have received fewer protections than their industrial counterparts. Although the proposal on the table is huge step in the right direction, it must be strengthened to provide true protection to children and adults alike. Most disturbingly, EPA is dragging

its feet on making the proposal into law — although the comment period ended in August, no new rule has been promulgated. The Agency should enact a new, strong Worker Protection Standard immediately to end the inequalities of the past and ensure a safe future for all farm workers in the USA.

Exposure to hazards, including heat, heavy machinery, stoop labor, and pesticides, makes occupational illness uncommonly common among the estimated 2.5 million farm workers in the USA. They are at risk for a number of acute and chronic health problems, including heat stress, traumatic injuries, respiratory conditions, musculoskeletal ailments, reproductive health disorders, dermatitis, and cancer. Pesticide poisoning is also an occupational risk. Owing to underreporting and gaps in oversight, data on farm worker health are hard to come by, but government estimates of acute pesticide poisoning range from 51 to 1400 cases per year per hundred thousand workers.

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That is 1275–35 000 cases annually in the USA.<sup>2,3</sup> If the more conservative figure is correct, farm workers are 39 times more likely than other laborers to face acute pesticide poisoning.<sup>2</sup> This does not include any of the long-term or chronic illnesses — among them numerous cancers, neurological problems, asthma, immune problems, and birth defects — linked to pesticide exposure in adults and children.

Despite these dangers, US law historically has left farm workers largely unprotected. Two foundational pieces of twentieth-century labor legislation explicitly excluded agricultural laborers. The National Labor Relations Act of 1935 omitted farm workers from its promised right to organize unions and bargain collectively. The 1938 Fair Labor Standards Act excluded farm workers from its goal of achieving the “standard of living necessary for health, efficiency, and general well-being of workers.” Revisions of the FLSA have not extended overtime rules to farm workers or ensured that all receive the federal minimum wage. Perhaps most incredibly, it was not until 1987 that federal law required agricultural employers to provide workers with drinking water, hand-washing facilities, and toilets at work.

These exclusions and delays have been tolerated in part thanks to the myth of the independent family farmer, supposedly unable to tolerate basic regulations — a myth that has endured even as agriculture has corporatized, mechanized, and come to rely mainly on wage rather than family labor.

But more significant is the stingy nativism that presumes to benefit from immigrant labor without assuming any responsibility to protect the humans who provide it. This is not a recent phenomenon. In his famous 1935 study of California’s “factories in the field,” the journalist Carey McWilliams observed, “Sources of cheap labor in China, Japan, the Philippine Islands, Puerto Rico, Mexico, the Deep South, and Europe have been generously tapped” to form the “vast army of workers” employed in industrial agriculture.<sup>4</sup> Beginning in 1942, the *bracero* program formalized a system in which the US Government acted as a labor broker, placing Mexican workers in farm employment while maintaining tight control of their movement and trying to guarantee their eventual return to Mexico.<sup>3,4</sup>

Immigrants from Mexico and, to a lesser extent, Central America continued to make up a large proportion of US farm workers after the *bracero* program ended in 1964. Today, immigrants account for a majority of the nation’s farm work force, many of them undocumented and some here as guest workers under the *bracero*-like H2-A visa. Anyone following recent debates on immigration reform knows that immigrants — especially those without documentation — face barriers to political participation, giving a

conspicuously uneven pitch to the field of regulatory debate.

Farm workers were left behind during the late twentieth-century sea change in health and environmental regulation. The year 1970 saw the first Earth Day and, after half a decade of organizing and boycotts, the signing of a major contract between grape growers and the United Farm Workers union. It was also the year President Richard Nixon signed legislation establishing the Occupational Safety and Health Administration (OSHA) to “assure safe and healthful working conditions for working men and women” and secured Congressional approval for a new Environmental Protection Agency. In the first half of the 1970s, the sphere and extent of farm worker safety regulation was up for grabs. While workers lobbied for robust protections, rule making was impeded by the disproportionate influence of agricultural employers who sought minimal regulation. Critics maintained that the EPA’s first pesticide safety recommendations, introduced in 1972, were weakened by industry influence. The Migrant Legal Action Program, a farm workers’ group, prodded OSHA to step in, hoping it would do a better job. The following year, OSHA responded with an emergency rule on pesticide safety. However, after facing opposition from Congress and a lawsuit from growers, OSHA dropped the issue. By 1974, while farm worker advocates were suing the Department of Labor to get OSHA back on the case, the EPA passed the first Worker Protection Standard, effectively asserting its authority over chemical safety on farms.<sup>5,6</sup>

The original Standard has been modified once before, in a conflict-ridden process that stretched from 1983 to 1992. Comments on the 2014 proposal suggest that it, like that earlier revision, pits labor and environmental groups against agricultural employers. Looking at some key aspects of the proposal shows where today’s version improves on history, and where it does not go far enough.

### Don’t Spray Workers

The most basic aspect of the Standard, as the 1974 version put it, is “a prohibition against applying pesticides when unprotected workers are in the area being treated.”<sup>7</sup> In other words, don’t spray, fumigate, or dust workers with toxic chemicals.

This seemingly simple rule is complicated by the phenomenon of drift: pesticides, because of wind or overspray, may end up outside the target application area. Drift is probably the number one culprit of worker poisoning. A recent article by the National Institute for Occupational Safety and Health researcher Geoffrey Calvert and colleagues fingered drift as the largest single source of pesticide poisoning, responsible for 1216 of 3271 acute pesticide

poisoning cases reported between 1998 and 2005.<sup>2</sup> The 1974 Standard acknowledged drift, but included no specific rule to protect workers from it.<sup>7</sup> The 1992 revision made a marginal improvement, instituting buffer zones for some greenhouses and nurseries.<sup>8</sup> Rules for other agricultural workplaces — farms as we usually understand them, as well as forests — have not addressed the dangers of drift.

The proposed revision takes drift seriously, requiring that workers be evacuated not only from land targeted for pesticide application, but also from a buffer zone extending a hundred feet in all directions. This could go a long way toward reducing pesticide exposure and correcting the problems of the previous Standard, especially if the proposal's drift loopholes are closed. Perhaps the most telling loophole shrinks a buffer zone if it crosses a property line, suggesting that bureaucracies of ownership trump health. But danger does not end with property boundaries. The Standard could instead require notification of adjacent property owners and expansion of appropriate buffer zones into neighboring parcels. More simply, it could forbid chemical applications along boundary lines. Doing so is the only way to hew to the central requirement of pesticide safety: don't spray workers.

### *Re-entry risk*

Of course, the hazards posed by pesticides do not disappear immediately after application. Residues on plants, soil, and in the air continue to pose health risks. So another central tenet of pesticide safety is to delay return to recently sprayed areas. During the "re-entry interval," it is illegal to access the treated area. Re-entry intervals are complicated to devise, as the period of danger after application depends on variables including the type of pesticide, mode of application, and weather. The original Standard set a vague interval for most pesticides — allowing re-entry "after sprays have dried or dusts have settled" — along with 24- to 48-hour waiting periods for areas treated with any of 12 highly toxic pesticides.<sup>7</sup> The 1992 revision strengthened some re-entry protections, and today chemical-specific intervals are specified for individual pesticides.<sup>8</sup> However, loopholes and other problems remain, and the intervals have not been effective. According to the Calvert study, early entry after application is the second most common cause of pesticide poisoning.<sup>2</sup>

The proposed revision to the Standard would help ensure workers know when a recently treated field should not be entered. Currently, employers can simply tell workers not to enter an area where a pesticide has been applied, unless the pesticide label itself calls for written notification. However, verbal warnings are ineffective because they are difficult to enforce. Imagine a farm worker — possibly an

undocumented immigrant, worried that a complaint will cost her job or land her in an immigrant detention center — complaining that her boss did not issue an oral warning that a re-entry ban was in effect. Without written notifications and recordkeeping requirements, it is the employer's word against the worker's, making it unlikely that violations will be reported or punished.

The proposed revision would improve safety by requiring posted "no entry" signs at areas treated with the most dangerous chemicals, those with re-entry intervals longer than 48 hours. The signs, with a red hexagon evocative of a stop sign, portray a "stern-faced man with an upraised hand" and the phrase "entry restricted" in English and Spanish.<sup>1</sup>

Posted warnings likely would do more to preserve workers' health, but because pesticides with shorter re-entry intervals are excluded, workers will still be exposed to acute effects from, for example, glyphosate, commonly known under its Monsanto brand name RoundUp. The chemical has a re-entry restriction interval of only 4 hours, yet it is third on Calvert's list of the fifteen most common active ingredients causing poisonings in their study.<sup>2</sup>

The current proposal also would allow workers wearing protective gear to enter recently treated fields as long as bosses explain the specific tasks and required protections, as well as keep a record of that information. Labor and environmental groups, including Farmworker Justice and the United Farm Workers have called for a ban on early entry under any circumstances.

### **Knowledge Is Necessary for Safety**

The "Right to Know" has been at the core of occupational health since the late 1970s. In 1983, OSHA issued a Hazard Communication Standard, which required employers to provide workers with product labels, training, and "Safety Data Sheets" containing toxicity information on every chemical they came into contact with. OSHA's new standard came close to impinging on the EPA's territory, leading to a negotiation that ended with the EPA in charge of farm pesticide rules. This arrangement has not worked in farm workers' favor: more than 30 years after OSHA set its Hazard Communication Standard, EPA has not required employers to give most farm workers any chemical-specific information about the pesticides they come into contact with. Currently, only pesticide "handlers" — those who mix, load, or apply pesticides — must be informed. The proposed revision would change that, finally ensuring all farm workers the same access to information that other workers have benefited from for three decades.

The revision also includes provisions for improved pesticide safety training. Employers would have to

train workers sooner (after two rather than 5 days of work), more frequently (retraining every year instead of every 5 years), and more effectively (by assuring that trainers are well qualified). Employers also would be required to keep records of training content and participants, adding some bite to the currently toothless Standard, which requires training but “does not require agricultural employers to document that they provided the training ... [or] require trainers or employers to record who they trained, what training they provided, or when they provided pesticide safety training.”<sup>1</sup> Trainings under the re-imagined Standard would also show workers how to report safety education requirement violations and employer retribution against whistleblowers.

### Young Workers Deserve Protection

For the 6% of farm workers who are under age 18, pesticide exposure is particularly dangerous. Children and adolescents' growing bodies and age-specific behaviors mean that they are at special risk for learning and developmental disabilities, asthma, cancer, genetic damage, and endocrine disorders. Despite these dangers, even young farm workers get short shrift when it comes to federal protections. The law allows children as young as twelve (and under some circumstances, even younger) to work on farms, while most other jobs have a minimum age of 14. Farm workers under age 16 are prohibited from working any job deemed hazardous, including those that involve handling the most harmful pesticides. But they are allowed to handle other chemicals, including some whose active ingredients have been implicated in a high number of poisonings. In other sectors, workers are not allowed to enter highly hazardous jobs until they are 18; in agriculture, that age is 16.

The proposed revision to the WPS would tighten the rules by establishing 16 as the minimum for handling *any* pesticide, not just those with the highest toxicity ratings. The new Standard would also prohibit the use of young people as early entry workers during the post-application interval. This is a meaningful change because, as the proposal notes, in one study of 531 acute poisonings among child farm workers, in cases where the toxicity category of the responsible pesticide was known, “67% of the illnesses were associated with toxicity category III pesticides, which are not currently prohibited under the hazardous order.”<sup>9</sup> On the EPA's scale of I–IV, with I the most toxic, category III can be plenty dangerous. Again the example of RoundUp is instructive. Currently, there are no age restrictions for handling this category III chemical, but a study published by the American Cancer Society found that

people exposed to it are twice as likely to develop non-Hodgkin's lymphoma.<sup>10</sup>

Why 16? Why not 18, as in other hazardous industries? The EPA estimated that raising the minimum age for pesticide handling to 18 would cost “\$11 per agricultural establishment and \$320 per commercial pesticide handling establishment per year.” This was enough to reject protections for 16 and 18 year olds. Extending the minimum age for re-entry after application to 18 would cost roughly a dollar more per establishment per year, compared to a minimum age of 16. These expenses are minimal compared to the costs — ethical, social, and economic — of poisoning children. How much will it cost to treat cases of disease? The EPA does not try to count.

### Enforcement is Key

Even the best regulations are meaningless without adequate enforcement. In 1999, the General Accounting Office, now the Government Accountability Office, concluded that the “EPA has little assurance that the worker protection standard is being adequately implemented and enforced for farm workers generally.”<sup>11</sup> This is because the agency had been “inconsistent” in its dealings with the states, which are responsible for enforcing the Standard with federal funding. But the EPA had not told states how many inspections they must conduct or even defined what an inspection must include. The GAO found five states that had conducted zero inspections in 1998; 11 others had carried out fewer than five.

The EPA has since developed more thorough inspection policies. In 2013, 3663 inspections found 1342 violations of the Standard. One hundred and ten of these cases resulted in a fine, civil complaint, or referral from the state to federal level. Warnings were given in response to 332 violations, while in 445 instances, alleged violators claimed exemptions because they were operating family farms. Two hundred and sixty-seven led to some “other enforcement action.” The remaining violations presumably went unpunished.<sup>12</sup>

The best way to ensure adequate enforcement is to provide workers — who experience job conditions first hand — with ways to report breaches and ensure that they are not repeated. The proposed Standard makes progress in this regard. It includes training on reporting violations and mandates that required safety information displays include contact information for local enforcement agencies. But workers could have more impact. Occupational health is protected best when laborers, through their own health-and-safety committees, have a significant role in developing training, carrying out inspections, and setting workplace safety priorities.<sup>13</sup>

## Equality for Farm Workers

The Standard alone cannot right more than 75 years of unequal treatment. Other labor laws must also be amended to give the men, women, and children who work in the fields of this country full rights and protections. The National Labor Relations Act still holds that “the term ‘employee’. ... shall not include any individual employed as an agricultural laborer,” depriving even unionized farm workers of typical union and collective bargaining protections. The Fair Labor Standards Act also retains its exceptions, leaving farm workers without overtime pay and without a minimum wage on farms employing few workers. And among the estimated 50% of farm workers who are undocumented immigrants, fears of detention and deportation limit labor organizing, access to health care, and freedom of movement.<sup>14</sup>

Under our current immigration laws, the people who grow the bulk of our food lack human rights protections. Without such protections and a clear path to citizenship for those who wish to stay in the USA, a large portion of the farm workforce will not have the stability and security fundamental to any true definition of health, no matter what the Standard says.

It is only within a larger framework for worker and immigrant rights that a new Worker Protection Standard can succeed in achieving justice for farm workers. However, the proposed revision, especially if strengthened, would make a tangible difference in farm workers' lives. The EPA should act swiftly to enact a Standard that addresses at least some of the injustices of the past.

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## References

- 1 Pesticides; Agricultural Worker Protection Standard Revisions. Federal Register. 2014 Mar 19;79(53):15444–531.
- 2 Calvert GM, Karnik J, Mehler L, Beckman J, Morrissey B, Sievert J, *et al.* Acute pesticide poisoning among agricultural workers in the United States, 1998–2005. *Am J Ind Med.* 2008;51:883–98.
- 3 US Department of Labor. The national agricultural workers survey. Washington, DC: US Department of Labor, 2014. Available from: <http://www.doleta.gov/agworker/naws.cfm>
- 4 McWilliams C, Sackman DC. *Factories in the field: the story of migratory farm labor in California.* Berkeley, CA: University of California Press, 2000.
- 5 Ashford NA. *Crisis in the workplace: occupational disease and injury.* Cambridge, MA: The MIT Press; 1976.
- 6 Nash L. *Inescapable ecologies: a history of environment, disease, and knowledge.* Berkeley, CA: University of California Press; 2007.
- 7 Worker Protection Standard. Federal Register. 1974 May 10;39:16888.
- 8 Worker Protection Standard. Federal Register. 1992 Aug 21;57:38151.
- 9 US Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention & National Institute of Occupational Safety and Health. National Institute for Occupational Safety and Health (NIOSH) recommendations to the U.S. Department of Labor for Changes to Hazardous Orders. Washington, DC: US Department of Health and Human Services; 2002.
- 10 Eriksson M, Hardell L, Carlberg M, Akerman M. Pesticide exposure as risk factor for non-Hodgkin lymphoma including histopathological subgroup analysis. *Int J Cancer.* 2008;123:1657–63.
- 11 Pesticides: improvements needed to ensure the safety of farmworkers and their children. GAO/RCED-00-40 Pesticide Safety for Farmworkers. Washington, DC: US General Accounting Office; 2000.
- 12 US Environmental Protection Agency. National WPS inspection enforcement summary report 2013. Washington, DC: US Environmental Protection Agency; 2014. Available from: <http://www.epa.gov/compliance/resources/reports/monitoring/fifra/2013wpsreport.pdf>
- 13 Brown G. Genuine worker participation — an indispensable key to effective global OHS. *New Solut.* 2009;19:315–33.
- 14 Immigration reform and farmworkers. Washington, DC: Farmworker Justice, 2014. Available from: <http://www.farmworkerjustice.org/advocacy-and-programs/agjobs>