

# The Time is NOW for Strong, Federal Protections for Farmworkers

Farm work is hard and dangerous work. Each year millions of farmworkers, including seasonal and migrant workers, toil in fields across the U.S. to bring food to dinner tables across the country. But in spite of their hard work, farmworkers and their families experience unjust hazards from pesticides utilized in agriculture. This is a serious environmental justice issue that requires urgent attention from consumers, producers, retailers, and policy makers. After an almost 20-year delay, the U.S. Environmental Protection Agency (EPA) released its long-awaited proposal to update the Farm Worker Protection Standard (WPS), which is designed to provide protections from pesticide exposure hazards for more than two million farmworkers and their families across the nation. Historically, farmworker advocates have criticized these protections as woefully inadequate in protecting the health of agricultural workers, but these new revisions attempt to strengthen the standards through increased training for workers handling pesticides, improved notification of pesticide applications, and a higher minimum age requirement for children to work around pesticides.

As described by EPA, “WPS is a regulation intended to reduce the risks of injury or illness resulting from agricultural workers’ and handlers’ use and contact with pesticides on farms, forests, nurseries and greenhouses.” An analysis of EPA’s proposed WPS rule reveals a mixed bag. In many regards, the proposed rule achieves the agency’s stated intention and improves upon the outdated and inadequate standards that have plagued the agricultural industry. However, in far too many instances, the WPS fails by establishing standards that fall short of necessary protections. Farmworkers face disproportionate risks to pesticide exposures, with EPA stating that pesticide exposure incidents are vastly under-reported—in some case by as much as 90 percent. For this reason, we must ensure that WPS is as strong as it could be for workers.



routinely detected in their bodies. As a result of cumulative long-term exposures, farmworkers and their children, who often times also work on the farm, are at risk of developing serious chronic health problems, such as neurological impairments, autism, cancer, and Parkinson’s disease.

Pesticides like the herbicide 2,4-D, and organophosphate (e.g., chlorpyrifos), and pyrethroid insecticides are routinely detected in the bodies and homes of farmworkers. The risks of exposure from these chemicals have long lasting impacts on farmworker communities. For instance, research finds that children exposed to high levels of chlorpyrifos had brain development delays, attention problems, attention-deficit/hyperactivity disorder problems, and pervasive developmental disorder problems at three years of age. Other research finds that those with long-term exposure to 2,4-D had poor semen quality, and higher

## Dangers Persist

The scientific literature confirms that farmworkers, their families, and their communities face elevated hazards from pesticide exposures, and existing farmworker data finds that the incidence rate of pesticide poisoning is extremely high. An average of 57.6 out of every 100,000 agricultural workers experience acute pesticide poisoning, illness or injury each year.

Pesticide application and resulting drift cause dermal, inhalation, and oral exposures that are typically underestimated. Agricultural pesticides are detected in farmworker homes that tend to be located near agricultural fields, meaning that, even after workers leave the fields, they are still exposed. According to a study involving seasonal and migrant workers, they experience repeated exposures to the same pesticides, evidenced by multiple pesticides

rates of birth defects. Elevated rates of cancer is also a reality that many farmworkers face.

A recent Centers for Disease Control and Prevention (CDC) scientific report, *Worker Illness Related to Newly Marketed Pesticides — Douglas County, Washington*, (Calvert, 2014), identifies “at least three potential occupational hazards in agriculture: off-target pesticide drift, toxicity of some recently marketed pesticides, and a gap in worker notification requirements.” The report recounts the poisoning in April 2014 of 20 farmworkers at a Washington State cherry farm who were trellising cherry tree branches when a new pesticide mixture being applied to a neighboring pear orchard drifted onto their work site, causing acute illness within

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# Worker Protection Standard

**Updates to the Rule:** The proposed improvements to the Farm Worker Protection Standard (WPS) include many recommendations from farm-worker advocates. Most importantly, workers and handlers will be made aware of their rights under the WPS and of the resources available to them in the event of a suspected act of retaliation or noncompliance with the standard.

Improvements made to the 2014 WPS proposed rule	Recommendations to strengthen and improve 2014 WPS proposed rule
<p><b>Worker Training:</b> Raising the level of training for workers and handlers from every five years to once a year. The training will include information on farmworker protections required, restrictions on entering pesticide-treated fields, access to information and use of personal protective equipment. It will also provide instructions on reducing pesticide exposure in the home.</p>	<p><b>Provide more comprehensive training and information access.</b> Training that incorporates clear directions to report violations of pesticide use without fear of retaliation or intimidation must be prioritized. Further, workers should be provided with contact information of potential legal representation as a part of worker and handler training, should the worker need legal redress.</p>
<p><b>Notification:</b> Requiring mandatory posting of no entry signs in treated areas that have a re-entry time of more than 48 hours rather than either oral or posted notification.</p>	<p><b>Require notice of all pesticide applications, both on site and in central areas.</b> Pesticide application notices should be posted before and after application. Notices should be posted at the treated area and in central areas where workers converge. It should not be one or the other.</p>
<p><b>Minimum Age:</b> Setting the minimum age of pesticide applicators and early entry works to 16 years of age; previous rules had absolutely no minimum age requirements.</p>	<p><b>Protect all children.</b> The WPS should have a firmer stance on protecting children and establish a baseline age of 18 for all children. This includes farm owner children who are currently exempt. Science shows that adolescents are still vulnerable to pesticide exposures.</p>
<p><b>Buffer Zones:</b> Expanding no-entry buffer areas around pesticide-spray zones from nurseries and greenhouses to also include farms and forests to reduce exposure.</p>	<p><b>Establish broader, universal drift and volatilization protections.</b> The expansion of entry-restricted areas and buffer zones to include farms and forests, in addition to nurseries and greenhouses, is critical and should extend to areas neighboring treated sites where pesticides can drift and volatilize off the field after application. This must apply to all pesticides and application methods.</p>
<p><b>PPEs:</b> Requiring personal protection equipment must be consistent with the Occupational Safety and Health Administration standards for ensuring respirators are providing protection.</p>	<p><b>Institute the highest level of protective gear, supplies, and systems technology possible.</b> Equipment must be consistent and suited to the highest possible protective needs. Standards should also require improved technologies and systems shown to reduce hazardous exposure, such as closed mixing and loading systems, and dust/mist filtering masks and respirators.</p>
<p><b>Hazard Information:</b> Requiring employers to communicate pesticide hazards to workers, handlers, or authorized representatives. Require employers to maintain pesticide application-specific information, labeling and safety data and make that information available to workers, handlers, or their authorized representatives.</p>	<p><b>Provide medical monitoring and better accountability mechanisms.</b> Workers should be provided with medical monitoring, like those available in California and Washington, to better assess exposure and impacts while also providing them with access to medical care if needed.</p>

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minutes. Several farmworkers sought medical treatment for symptoms ranging from headache and eye irritation to gastrointestinal disorders and respiratory problems. Half of the affected workers had symptoms that persisted over two weeks. Pesticide residues were found on not only the workers' clothing, but also on the portable toilets used by the workers, demonstrating that workers can be exposed directly and indirectly from drifting pesticides.

Despite federal regulations to reduce pesticide exposure among farmworkers (e.g., personal protective equipment or PPEs), research conducted in farmworker communities show that such regulations are only partially enforced. High levels of pesticides continue to be detected among farmworker communities across the country, providing evidence that PPEs and other controls do not go far enough to protect this highly exposed population.

Many of these exposure and disproportionate impact issues will not be reduced by the proposed WPS as long as pesticide use remains a rampant and escalating component of agriculture. If EPA is committed to environmental justice and the health and well-being of farmworkers, and is unwilling to remove certain toxic pesticides that have proven to impair farmworker health from agricultural use, then the WPS must ensure the very high-

est safety standards, and assist in moving the agricultural industry toward a less pesticide-reliant system.

## Transition to safer practices

The consumer focus on pesticide residues on fruits and vegetables and other food commodities does not ensure that workers are being protected from hazardous pesticides. Some of the foods that have the least residues (e.g., onions) are grown with some of the most hazardous pesticides (e.g., chlorpyrifos). The situation is captured by the Beyond Pesticides' database *Eating with a Conscience*. The best way for consumers to advance protection of workers is to purchase food that is certified organic. The Agricultural Justice Project (AJP) is adding a social justice screen to organic production by working with growers to ensure adherence to workplace standards that protect worker rights, providing those growers in the program with an AJP label. The standards address fair wages and benefits for workers, housing, workplace health and safety, as well as children on farms, among others. For more information, visit the [agriculturaljusticeproject.org](http://agriculturaljusticeproject.org). Others, including Coalition of Immokolee Workers, El Comite de Apoyo a Los Trabajadores Agrícolas (CATA), Farm Labor Organizing Committee, and United Farm Workers, advance farmworker justice.

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## Endnotes

1. USEPA. 2014. Pesticides; Agricultural Worker Protection Standard Revisions, 79 Fed. Reg. 15444 (proposed March 19, 2014), at 15446.
2. Geoffrey M. Calvert et al. 2008. Acute Pesticide Poisoning Among Agricultural Workers in the United States, 1998–2005, 51 AM.J.INDUS.MED.883, 890.
3. Quandt SA, Arcury TA, Rao, P, et al. 2004. Agricultural and residential pesticides in wipe samples from farmworker family residences in North Carolina and Virginia. *Environ Health Perspect.* 112(3): 382–387.
4. Arcury, T, Grzywacz, J, Talton, J, et al. 2010. Repeated Pesticide Exposure among North Carolina Migrant and Seasonal Farmworkers. *Am J Ind Med.* 53(8): 802–813.
5. Shelton, J, Geraghty, EM, Tancredi, DJ, et al. 2014. Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides: The CHARGE Study. *Environ Health Perspect.* 122:1103–1109.
6. Zahm SH and Blair A. 1992. Pesticides and non-Hodgkin's lymphoma. *Cancer Res.* 52(19 Suppl):5485s-5488s
7. Tanner CM, Ross GW, Jewell SA, et al. 2009. Occupation and risk of parkinsonism: a multicenter case-control study. *Arch Neurol.* 66(9):1106-13.
8. Arcury, T, Grzywacz, J, et al. 2009. Seasonal Variation in the Measurement of Urinary Pesticide Metabolites among Latino Farmworkers in Eastern North Carolina. *Int J Occup Environ Health.*15(4): 339–350
9. Raymer, JH, Studabaker, W, et al. 2014. Pesticide Exposures to Migrant Farmworkers in Eastern NC: Detection of metabolites in farmworker urine associated with housing violations and camp characteristics. *Am J Ind Med.* 57(3): 323–337.
10. Quandt SA, Arcury TA, Rao, P, et al. 2004. Agricultural and residential pesticides in wipe samples from farmworker family residences in North Carolina and Virginia. *Environ Health Perspect.* 112(3): 382–387.
11. Rauh VA. 2006. Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first 3 years of life among inner-city children. *Pediatrics*;118(6):e1845-59.
12. Rauh V, Arunajadai S, Horton M, Perera F, Hoepner L, Barr DB, et al. 2011. Seven-Year Neurodevelopmental Scores and Prenatal Exposure to Chlorpyrifos, a Common Agricultural Pesticide. *Environ Health Perspect* 119:1196-1201.
13. Swan SH, Kruse RL, Liu F, Barr DB, et al. 2003. Semen quality in relation to biomarkers of pesticide exposure. *Environ Health Perspect.* 111(12):1478-84.
14. Lerda, D., and Rizzi, R. 1991. Study of Reproductive Function in Persons Occupationally Exposed to 2,4-Dichlorophenoxyacetic Acid (2,4-D). *Mutation Research* 262, 47-50.
15. Garry, V.F., Schreinemachers, D., Harkins, M.E., and Griffith, J. 1996. Pesticide Appliers, Biocides, and Birth Defects in Rural Minnesota. *Environmental Health Perspectives* 104, 394-399.
16. Mills PK, Yang R, Riordan D. 2005. Lymphohematopoietic cancers in the United Farm Workers of America (UFW), 1988-2001. *Cancer Causes Control.* 16(7):823-30.
17. Koutros S, Alavanja MC, Lubin JH, et al. An update of cancer incidence in the Agricultural Health Study. *Journal of Occupational and Environmental Medicine* 2010; 52(11):1098–1105.
18. Calvert, G, Rodriguez, L at al. 2015. Worker Illness Related to Newly Marketed Pesticides — Douglas County, Washington, 2014. *Morbidity and Mortality Weekly Report (MMWR).* 64(02);42-44.
19. Arcury, T. and Quandt, S. (eds). *Latino Farmworkers in the Eastern United States.* Chapter 5. Pesticide Exposure Among Farmworkers and Their Families in the Eastern United States: Matters of Social and Environmental Justice. DOI: 10.1007/978-0-387-88347-2\_5. Springer Science +Business Media. LLC 2009