



POLICY BRIEF

Overview of the Washington State Pesticide Application Safety Workgroup; recommendations should focus on education, not regulation

By Madi Clark,
Director, Initiative on Agriculture

November 2018

Key Findings

1. 99.995% of agricultural pesticide spraying occurs without posing any danger to the public – which indicates the high priority given to safety in Washington agriculture.
2. This rate has been achieved through existing federal and state policies and successful pesticide education programs administered by the Washington State Department of Agriculture.
3. Creating a pesticide spray database, mandating a spray notification system, and funding an equipment buyback program would be extremely damaging to Washington’s farmers, farmworkers, and taxpayers.
4. The government’s most effective role is in education. According to a panel of farmworkers and farmers, education works best in improving pesticide safety.
5. Washington State’s Pesticide Application Safety Workgroup recommendations should include: increasing educational efforts not regulations, reinstating the PIRT panel to inform policymakers on the state of pesticide safety and to synchronize data among agencies, and require farmworkers to wear reflective, orange vests when working in the fields to make them more visible to pesticide applicators.



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Introduction

“I’m a mom and so I’m not interested in seeing pesticides spread all over. I’m not interested in seeing my kids run through that. We’re talking about safe things because we live where we work... We’re very passionate about safety: for our pilots, for our crew, for the people we are working around... We are also interested in keeping our environment safe because that’s where our kids are going to live too. I’m not interested in making a place where my kids can’t live.”

– **Erin Morse**, Washington Business Owner and Mom

This testimony was presented at the first meeting of Washington’s Pesticide Safety Application Workgroup in June 2018, and reflects the attitudes of thousands of people within Washington’s agricultural community.

The 99.995% of agricultural pesticide applications which occur without incident indicates the high priority given to safety in Washington agriculture.¹ This high safety rate has been achieved under existing federal and state policies and the successful pesticide education programs administered by the Washington State Department of Agriculture.

In contrast, the 0.005% of pesticide applications that drift are often exaggerated and the people, crops, or the environment which may be harmed have become a political tool to impose new regulations, hurting both farmers and farmworkers.

Advocates of imposing more regulation have used biased and false messages in Washington, including:

- Misrepresenting an accidental drift event as intentional; one farmworker said during testimony in 2017 on House Bill 1564 – Pesticide Exposure, “I think he [the aerial applicator] did it on purpose.”² No evidence was presented to substantiate the claim.
- Taking regulations out of context
- One concerned citizen with the Washington State Parent Teacher Association (PTA) claimed, “There is no requirement for prior notification of intent to

¹ “Changing the Conversation About Drift,” by Dr. Steve Savage, On Behalf of Washington Friends of Farms and Forests, no date provided, at [https://www.wafriends.com/Changing%20The%20Conversation%202-27-17%20-%20Steve%20Savage%20Power%20Point%20\(Final\).pdf](https://www.wafriends.com/Changing%20The%20Conversation%202-27-17%20-%20Steve%20Savage%20Power%20Point%20(Final).pdf).

² House Health Care 7 Wellness Committee, Washington state legislature, February 17, 2017 at <https://www.tvw.org/watch/?eventID=2017021300>.

spray and without notification, children may be at risk;³ in fact, notification is required for school pesticide use by the schools and any agricultural drift of pesticides is illegal. An applicator would be held accountable if drift affected anyone or anyplace.⁴

These statements promote a culture of irresponsibility among advocates of regulation and reduce the possibility of collaborative solutions.

Collaborative efforts would make pesticide applications even safer and not just create additional costs, bureaucratic hoops, and paperwork. Washington's pesticide applications would be safer if state policy focuses on education, not regulation.

This Policy Brief presents an overview of the 2018 Pesticide Application Safety Workgroup, reviews the importance of pesticides to food production in Washington state, identifies current problems with requiring spray notifications and a reporting database, and presents practical recommendations for reform.

Washington State Pesticide Application Safety Workgroup should conclude that education is better than regulation

The Washington State's Pesticide Application Safety Workgroup was formed by Senate Bill 6529, a bill passed in the 2018 Legislative Session to protect agricultural workers and community members from pesticides.

The original version of SB 6529 was onerous, requiring a four-day notification of any pesticide application and creating an online database for pesticide reporting. These proposals would have been costly for taxpayers, consumers, and farmers; damaging to a vital Washington industry, and ineffective at protecting farmworkers.⁵

The final version of the bill was improved by reducing needless regulation and by forming a workgroup which would review existing state and federal regulations, learn about new pesticide application technology, review the structure of the former PIRT (Pesticide Incidence Reporting and Tracking) panel to see if a similar group should be created, and review current data and reports from agencies in Washington and other states. The Workgroup was to deliver its findings by November 1, 2018 to the state legislature and to the governor but that has been delayed.

Over the course of the 2018 summer, the Workgroup met four times.⁶ The first meeting produced a disagreement over data among the four state agencies involved in pesticide regulation: the Department of Agriculture (WSDA), the Department of Health (DOH), the Department of Labor and Industries (L&I), and the Department of Natural Resources (DNR).⁷

3 "Washington State PTA Comments to Pesticide Workgroup," by Megan Dunn, Washington State PTA, September 11, 2018, at <https://www.doh.wa.gov/Portals/1/Documents/4000/WSPTA%20CommentsPesticideWorkgroup2018.pdf>

4 "Schooling of State Pesticide Laws 2010 Update," by Kagan Owens, Pesticides and You, Quarterly Publication, Volume 29, Number 3, Fall 2009, at <https://www.beyondpesticides.org/assets/media/documents/schools/publications/Schooling2010.pdf>

5 "Senate Bill 6529 would have destroyed Washington farms but now promotes collaboration," by Madilynne Clark, Washington Policy Center, Legislative Memo, March 7, 2018, at <https://www.washingtonpolicy.org/publications/detail/senate-bill-6529-would-have-destroyed-washington-farms-but-now-promotes-collaboration>.

6 A summary of all 2018 meetings and documents can be found here: <https://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/Pesticides/ApplicationSafetyWorkgroup>

7 "Washington's Pesticide Application Safety Workgroup starts first meeting with a data duel," by Madilynne Clark, Blog, Washington Policy Center, July 2, 2018 at <https://www.washingtonpolicy.org/publications/detail/washingtons-pesticide-application-safety-workgroup-starts-first-meeting-with-a-data-duel>.

There is a difference among the agencies in statistics collection. An understanding among the regulatory agencies is needed before policymakers can make informed decisions. Before budget cuts in 2008, the Pesticide Incidence Reporting and Tracking Panel (PIRT) allowed agencies to meet regularly and compare data. Creating a similar group would benefit the Washington agricultural community.

The second and third meetings were held in Eastern Washington (in Quincy and Yakima, respectively). The second meeting was a presentation by farmers, pesticide applicators, and farmworkers about the technology they use to apply pesticides.

The cost, time, and educational requirements of existing pesticide regulations were a key finding of the second meeting. One farmer said he already spends \$25,000 per year on his mid-size operation just to buy safety equipment for his employees. This farmer said, “Despite the agriculture community doing more, our perception is getting worse.”⁸

The third meeting invited farmworkers, doctors, and community representatives to speak to the Workgroup about pesticide safety in Washington. Farmworkers affirmed the value of WSDA’s farmworker training programs and how they have changed their safety perception.

The final meeting gave the public the chance to testify, listened to members of the previous PIRT panel, and included more disagreements about data among DOH, WSDA, and the Poison Control Board. Though the Workgroup may meet again if needed, the final recommendations have yet to be released. Proposed recommendations from workgroup members include:

- Forming another workgroup or reinstating the PIRT panel. Possible work for the panel would include synchronizing data sources, studying a specific agricultural pesticide problem each year, increase industry involvement by having a sub-group tasked with tackling a new issue each year;
- Increasing funding and support for WSDA’s worker education programs;
- Supporting the communication systems already in place. A DOH workgroup member proposed the creation of a pilot program for a small area in Washington, similar to the costly grower notification program in Kern County, California that only went county wide in 2018;
- Beginning a state pilot program for pesticide use reporting;
- Promoting adoption of better and newer equipment through a grower buyback program of older pesticide application equipment. The program may favor small, beginning, disadvantaged, or geographically remote farmers.

The wide range of concluding comments leaves uncertainty about what will be in the final report. However, only some of these recommendations should be proposed in the final report: increasing the emphasis and funding for education and establishing something similar to the PIRT panel.

⁸ “One Washington farm spends \$25,000 every year on safety equipment but the public’s perception is getting worse,” by Madilynne Clark, Blog, Washington Policy Center, July 26, 2018, at <https://www.washingtonpolicy.org/publications/detail/one-washington-farm-spends-25000-every-year-on-safety-equipment-but-the-publics-perception-is-getting-worse>.

The other recommendations of a database, notification system, and grower equipment buyback program are fraught with challenges and costs.

Increase education, not regulation

Regulations tend to have the most harmful affect on smaller growers. The time, cost, and additional paperwork needed to comply with new rules outpaces the personnel capacity of many small farmers, leaving them vulnerable to bankruptcy, fines, and lawsuits. Additional pesticide regulations would be ineffective in improving the safety of farmworkers, farmers, and community members, and the proposals ignore the many federal, state, and local laws that already exist to protect community members.

Creating a pesticide spray database, mandating a spray notification system, and funding an equipment buyback program would be extremely damaging to Washington's farmers, farmworkers, and taxpayers and would not improve the safety of our communities or farmworkers.

Pesticide spray database

Other states have attempted similar notification lists and searchable databases, only to find they create high costs, chaotic administration and little public benefit. In states that have reported these costs, the annual amount is usually around \$1 million, not including startup costs.⁹

In 2006, the Oregon Department of Agriculture tried a complex Pesticide Use Report System (PURS), but cancelled the program after just two years.¹⁰ Oregon officials faced a number of problems, including the fact that pesticide users had trouble correctly identifying the product used, varying levels of computer literacy and access to online reporting, problems with connecting to the PURS website on certain internet browsers, and pesticide users not realizing that the reporting was mandatory.

Though the Oregon Department of Agriculture's final 37-page report released in 2008 is complex and detailed, the major inaccuracies it contains makes the report worthless to Oregon's citizens and policymakers.¹¹

Spray notification systems

Members of the workgroup frequently promoted Kern County, California's grower notification system as an example of what Washington should do for spray notifications. The experience of Kern County, however, is an unreliable model because it has been in a pilot program phase for the last 10 years and was implemented county-wide only in 2018. The Kern County system is time intensive, expensive, in its infancy, and of questionable success.¹²

Predictably, results from Kern County also indicate that over-notification occurs, because growers found the loophole that they can make notices without actually

9 "State Reporting Requirements for General Use Pesticides," by Lance Ching, Report No. 3, Hawaii Legislative Reference Bureau, 2013, at http://lrbhawaii.info/reports/legrpts/lrb/2013/act105_slh13.pdf.

10 "State Pesticide Use Reporting Programs," by Dennis Howard, Maryland Department of Agriculture, September 2013 at http://mda.maryland.gov/Documents/State_Pesticide_Use_Reporting_Pgms.pdf

11 "Pesticide Use Reporting System," 2008 Annual Report, Oregon Department of Agriculture, June 2009, at <https://www.oregon.gov/ODA/shared/Documents/Publications/PesticidesPARC/PesticideusereportingsystemAnnualreport2008.pdf>.

12 "Educate don't regulate to improve pesticide safety," by Madilynne Clark, blog post, Washington Policy Center, September 5, 2018, at <https://www.washingtonpolicy.org/publications/detail/educate-dont-regulate-to-improve-pesticide-safety>.

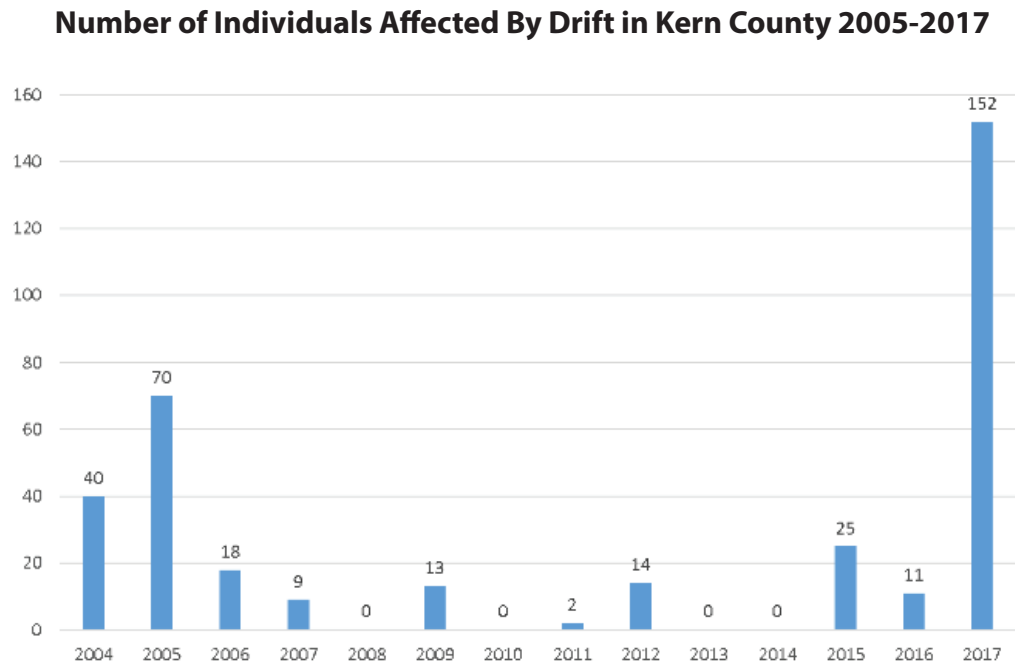
spraying. This can occur because conditions change and farmers decide not to spray. They would rather notify and not spray than find themselves in a situation where they need to spray but cannot because notification wasn't given. This practice leads to notification-fatigue and farmworkers and community members begin ignoring the signs and announcements.

Additionally, Kern County's short time-frame of administering the program minimizes the value of any of the conclusions. Other considerations undermine the significance of this regulatory notification program, including the fact that a voluntary, grower organized, one-day education program, Spray Safe, has been in effect within the same area for 12 years, so it is difficult to determine the effectiveness of this program compared to the existing education effort.

Kern County's regulatory notification system was adopted by officials who wanted to take credit for something citizens, farmers, and businesses had organized on their own. Both Spray Safe and the County's notification requirements claim to be the main reason for pesticide drift events to decline.

Spray Safe Committee Co-Chair, Jeff Rasmussen said, "Since this program [Spray Safe] was put in place, overspray accidents have dramatically declined."

Regarding the mandatory notification system, Kern County Commissioner Glenn Fankhauser provided the following chart:



Fankhauser explained 2017's spike in drift events by saying, "The number for 2017 was the result mostly of two incidents that affected a large number of individuals. As a result of these two incidents (which occurred outside of our pilot project area AND which I believe might have been prevented had they had the grower notifications) I expanded the Pilot project county wide in 2018."

We asked Jeff Rasmussen if this comment was accurate. He said,

“Yes and No. It may have prevented a few of these cases but one event that affected a lot of workers in 2017 was from a very large grower forgetting to notify his own workers that he had previously sprayed a field.”

“The regulatory system would not have protected those workers because it is neighbor notification. The other event was the perfect storm in which 4 or 5 growers were spraying in an area and the weather pattern changed when the workers were in the field and the drift occurred after they had done everything right.”

Obviously, neither program has perfected all pesticide applications within the county limits.

Additionally, the regulatory body cannot claim its program has played a role in reducing the rates of pesticide drift within the county, because the rates started dropping before the regulations went into effect and after the voluntary educational program began.

A further consideration is the cost of these programs. Spray Safe is a one-day grower-organized event that takes place in January in both English and Spanish. The goal is to train pesticide handlers, applicators, and farmworkers about how to properly apply pesticides.

According to Commissioner Fankhauser the grower-to-grower notification system “does not cost the county anything extra.” However, staff are available at all times to administer the 10,000 permits per year within the 48-hour window required for restricted-use pesticides, and the program is only able to work because of an extensive GIS system that has mapped all agricultural fields in the county. A similar program for Washington state would cost taxpayers because we do not have a similar database of agricultural fields nor does the state have the staff.¹³

Grower equipment buyback program

Equipment buyback programs for older spray equipment can have negative affects for taxpayers and growers. Though a few, short-term environmental benefits can be achieved by a buyback program, their significance may not be as effective as the benefits attained by administering existing rules and regulations.

If the current federal, state, and local rules are implemented and the full force of fines and fees are administered against agricultural drift events, then the farmers would have additional incentives to adopt new spray technologies that best suit their operation. Farmers would have the incentive and flexibility to choose the technologies that fit their needs.

The pesticide-application industry is rapidly developing new equipment platforms to improve spraying accuracy and safety. A buyback program would not be able to keep pace with new developments and would overlook innovative efforts by farmers, researchers, and developers.

¹³ “Dear Farmers: Let’s own our numbers,” by Madilynne Clark, Blog, Washington Policy Center, September 6, 2018, at <https://www.washingtonpolicy.org/publications/detail/dear-farmers-lets-own-our-numbers>.

Another problem with buyback programs is that historically similar programs have run out of funding, but the participants are still subject to the new regulations. For example, a buyback program was proposed for private forest land within riparian buffer zones to help private landowners absorb the heavy costs of new regulations. Funding for the program did not keep up with the need, yet landowners were still subject to penalties under the new laws despite promises of assistance.

Additionally, taxpayers should not fund programs for private businesses that have little benefit to the community. Many of the new spray technologies are not only safer but more effective at applying the chemicals, saving the farmers money by preventing product loss or overuse.

If a buyback program is implemented some considerations should be made to remove the moral hazard of the programs. The point of an equipment buyback is to remove the externality (spray drift in this case) from the community and the taxpayer is willing to cover this cost.

The program must ensure that the buyback does not subsidize growers who can or should afford the equipment on their own merit. A method that could limit abuse would be for the government to provide zero or low interest loans for specific equipment purchases that make a quantifiable difference in limiting spray drift.

Educate, don't regulate

The government's most effective role is in the area of education. According to a panel of farmworkers and farmers at the third meeting of the Pesticide Application Safety Workgroup in Yakima, *education* works best at improving pesticide safety.

All three panelists said the Washington State Department of Agriculture's (WSDA's) education programs for pesticide application and worker safety have been the biggest factor for improved safety on and off the farm. These programs have benefited thousands of workers in Washington state and are increasing in popularity.

In 2018 WSDA was able to hold 38 workshops and educate 2,880 participants. These workshops were administered with the help of over 56 partnerships. In 2002, this program only trained about 200 people a year in three workshops.¹⁴

Funding for the workshops comes from commercial pesticide license fees. The funds severely limit the ability of WSDA to expand the programs. In 2018, multiple requests for workshops were denied because personnel were unavailable.

Policy Recommendations

To improve the safety of farmworkers, their families, and rural communities, Washington Policy Center recommends that policymakers strengthen pesticide safety education in four ways.

1. The best method to fund agency programs is to increase the percentage of existing fees that go to WSDA.

¹⁴ "TSE's Pesticide Education Program," by Ofelio Borges, Presentation, Washington State Department of Agriculture, September 11, 2018, at <https://www.doh.wa.gov/Portals/1/Documents/4000/WSDA%20Workgroup%20Training%20Presentation.pdf>.

2. Restore a collaborative process, like the Pesticide Incidence Reporting and Tracking (PIRT) panel, to require state agencies to synchronize dates, coordinate efforts, and to discuss new concerns and issues facing agricultural pesticide applications.
3. Encourage county-level, farmer and industry-organized and funded educational spray seminar like Spray Safe in Kern County, California and currently exist in Washington.
4. Restore the public health standard of educating medical personnel about pesticide poisoning, which existed before the 2008 recession. Typically, medical students receive less than one half-day worth of lectures on pesticide poisoning and then are expected to make diagnosis based on this training. Unsurprisingly, many illnesses are misdiagnosed as pesticide poisonings, which is harmful to patients, the community's perception of risk, and the local farming community.
5. Farm workers should wear reflective, orange vests when working in the field, as aerial sprayers have requested, to make workers more visible to aerial and ground-based pesticide applicators.

Conclusion

Pesticide drift still occurs, and Washington state farmworkers and community members can still be at risk of being harmed. These events should not be dismissed. However, safety improvements will not be achieved with additional regulation. Instead, education is more effective at increasing safety.

In 2012, the Pacific Northwest Agricultural Safety and Health Center, University of Washington School of Public Health, and WSDA worked together to create "Practical Solutions for Pesticide Safety." These field-tested and evaluated programs made several recommendations which actually improved safety for handlers and their families. One of the program participants said, "[Safety is the] work of changing minds. And it is not done overnight."

Washington State's Pesticide Application Safety Workgroup should focus on educational programs in the recommendations which were scheduled for release on November 1, 2018 but are expected later in the month. Recommendations which focus on increasing educational efforts, not new regulations, and that recognize safety is a process and not accomplished quickly. These educational efforts should include the increasing funding for WSDA's educational programs, encouraging farmer and industry-organized spray seminars, and encouraging medical education programs to increase training for diagnosis of pesticide exposure and treatment.

Other Workgroup recommendations should include reinstating the Pesticide Incidence Reporting and Tracking (PIRT) panel to inform policymakers on the state of pesticide safety and to synchronize data among agencies. Another recommendation is to require farmworkers to wear reflective, orange vests when working in the fields to make them more visible to pesticide applicators.

Jeff Rasmussen from Kern County, California said, “It takes one person to spray 100. But it takes 1,000 people daily to not spray one.” To improve pesticide application safety in Washington state regulation is not the answer. Instead, the Pesticide Application Safety Workgroup should make recommendations that recognize that education, not regulation, is the only way to grow our network of 1,000 people to protect the one person.

Washington Policy Center is an independent research organization in Washington state. Nothing here should be construed as an attempt to aid or hinder the passage of any legislation before any legislative body.

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An Oregon native, Madilynne brings a lifetime of experience in Agriculture to WPC. Her passion for agriculture grew as she helped her dad on veterinary calls and then became active in FFA.

Before joining WPC, she worked for Ag Association Management in Kennewick as an Account Manager and field rep for the Far West Spearmint Marketing Order. She worked with growers and industry across Washington, Oregon, and Idaho. She also spent two years as an associate of The Context Network. Her time involved working as a business analyst on various agriculture projects in production, wholesale, retail, and policy Ag sectors.

Madilynne holds a Master's Degree in Agricultural and Resource Economics from Colorado State University as well as a B.S. in Environmental Economics, Policy and Management from Oregon State University. When not working for WPC, she enjoys knitting, running, and every minute with her husband, two sons, and their dog, Parli.