Poisoned Dreams
Family’s home contaminated, health threatened

Also in this issue:
State Preemption Law
The Right Way to Vegetation Management
The Pain Behind the Change We’re Fighting For

This issue of Pesticides and You contains a very personal story of pesticide poisoning—how one family, the Frandsen’s of Utah, has struggled to uncover the cause of their unexplained illnesses, their attempt to get their state to protect them from a neighbor’s toxic threat, their being forced to evacuate their new home, and a call for action to protect others. The story is a painful one and shows that people are victimized at different points in the cradle-to-grave life of a pesticide. It is not just the exposure associated with the use of a pesticide product, but the production, handling, mixing, loading, storage, and disposal that all account for points of potential contamination and poisoning.

The complexity of poisoning scenarios and the deficiencies and gaps in the protection of the public’s health and the environment is the principal reason to effect a shift to organic practices. As consumers of food and pest management services, if we reduce our demand for toxic products and services we will reduce the chain of poisoning and contamination in our community and throughout the nation. Then, alternative products and services blossom.

There is no question that people, in increasing numbers, want to reduce the poisons that they feed their family. A Stonyfield Organic Yogurt survey released in October finds that, “71% of Americans are worried about pesticides in their food and almost three out of four respondents (75%) would like to eat food produced with fewer pesticides.” So, it makes sense that Stonyfield changed its label to proclaim, “No toxic pesticides used here.”

But how can we ensure that the organic labeling program at USDA lives up to the standards that we want and need as a nation—that it eliminates the chain of poisoning from production through disposal; that the materials and manufacturing processes used in organic do, in fact, eliminate hazardous materials. Rigorous review procedures are under attack by USDA and some in the organic industry.

Protecting National Organic Law

When I was sitting at the table with others drafting the organic law, the Organic Foods Production Act (OFPA), we all recognized that, if organic was to be successful, it would have to undergo a higher degree of scrutiny than is the case with conventional, chemical-intensive agriculture. People did not trust the safety of the food supply because of the toxic chemicals that were used. We didn’t want our food genetically engineered, irradiated, and grown with sewage sludge. And, we wanted an independent National Organic Standards Board (NOSB) to oversee the process of reviewing synthetic chemical exceptions and advising on policy.

To differentiate chemicals used in organic from the conventional market, not only did we create a higher safety standard (assessing chemical ingredients’ effects at every stage of their production, processing, use, and disposal), but we enshrined in the law a sunset provision, which was intended to mandate a review by the NOSB, subject to public scrutiny, on a five year cycle. The materials were to literally sunset off the National List of allowed materials, be subjected to updated hazard and essentiality reviews, and then, if recommended by the Board, renewed by the Secretary of Agriculture.

Instead of staying true to the letter and spirit of our nation’s organic law, government officials are now weakening (in a September 16 Federal Register notice at page 56811) the synthetic chemical review process, making it difficult, if not almost impossible, to take synthetics (which can be produced with toxic constituents or extractants) off the National List or restrict them, should new science or alternative practices emerge. Instead of requiring a decisive NOSB vote to relist allowed synthetics at the end of five years, as would typically be required by a sunset clause, USDA is requiring a vote to delist.

For a future of clean air, water, soil, and food, I believe we must ensure the public trust in the organic label and grow the organic market. Through our efforts, we are advancing our challenge to chemical-intensive pest management practices in light of viable organic management systems that transform the underlying systems of land and building management—and the related policies—that contribute to pest problems and toxic chemical dependency. Communities are now seeking to prevent, rather than simply reduce, toxic chemical use and recognize the power of biological systems at a time when increasingly smaller doses or systemic chemicals wreak havoc with life and the natural balance.

To make your voice heard, go to our Keeping Organic Strong webpage at www.bit.ly/SunsetReview.

Your Support

At this time of year, we ask you to consider a donation to Beyond Pesticides. When you contribute to Beyond Pesticides, you are supporting the intersection of science and activism. Your contribution will be used to support: community action through awareness, resulting in changes in policies and practices; advocacy for a responsible marketplace, responsive to environmental and health concerns; and, organic standards that have integrity, as an alternative to toxic pesticide use.

Our voice is critical to a future without toxic pesticides. We have set a course for a sustainable future and are making tremendous headway in communities and through organic growth. Please consider helping our program to continue.

Best wishes for the holiday season and new year.

Jay Feldman is executive director of Beyond Pesticides.
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Tips for Taking Action

Thank you, thank you, thank you! I nearly wept with gratitude to receive my complimentary copy of your summer 2013 volume of Pesticides and You! May I get more copies of the issue to pass around in my community? Also, do you have a “sample” letter that I could send to the editors of local papers to support Beyond Pesticides cause?

Margaret G.

Margaret,

Great to hear that you enjoyed the recent edition of Pesticides and You! We appreciate your support and would be happy to provide you with additional copies of our newsletter.

Writing a letter to the editor is a great way to bring attention to the hazards of pesticide use and promote safer alternatives. Beyond Pesticides recently put together a webpage dedicated to helping concerned residents craft letters to the editor in their local newspapers. We provide a simple framework to follow when constructing the letter, and also list a few talking points that you can include in your letter. However, as we note on the webpage, try to adapt our points to reflect the unique conditions surrounding the issue you are addressing in your community. To begin writing your letter, go to bit.ly/PesticideLTE, enter your zip code at the bottom of the page, and select a local newspaper in your area. For additional help and tips on writing your letter, you can always contact Beyond Pesticides at info@beyondpesticides.org or 202-543-5450.

Pencil in Triclosan

Beyond Pesticides,

For years I’ve been buying school supplies for my child’s school in an effort to prevent kids’ exposure to harmful chemicals. I’m particularly concerned with the widespread use of Ticonderoga brand pencils, which are coated with the harmful chemical triclosan. However, many teachers in the school refuse to give up the “classic #2 pencil,” despite my efforts to educate them on the health effects it could have on developing minds. I want to enact change, perhaps as part of a larger effort related to kids and chemical exposure that I’ve dealt with in recent years. Do you have any ideas or resources that can assist my efforts?

-Kate P.

Virginia

Hi Kate,

Thanks for taking action on this important issue at your child’s school. The coating of #2 pencils with antibacterial pesticides in order “to inhibit the growth of odor and stain causing bacteria on the pencil,” as the manufacturer claims, is an underreported problem that is a health concern for students of all ages, but especially young children. Triclosan does not provide any additional health benefit to the consumer, but it does pose risks to human health, many of which are still under review by scientists. Research reveals that exposure to antibacterial compounds at an early age is associated with an increased chance of developing allergies, asthma, and eczema. Your idea about grouping your efforts into a “green” package may be a good way to go, as we have seen a lot of success with these types of initiatives, due to a growing demand for schools systems to become more health-conscious and environment-friendly. However, if you’d like to focus your efforts on triclosan, Beyond Pesticides has a model policy that your child’s school system can adopt that resolves to not purchase or use any products containing triclosan: bit.ly/TriclosanPolicy. Appealing directly to top administrators in the school system and joining together with other concerned parents is a great way to approach this problem. Peer-reviewed studies and additional material on the wide-ranging health impacts of triclosan can be found on Beyond Pesticides’ antibacterial webpage: bit.ly/BPTriclosan. On broader children’s issues, see www.beyondpesticides.org/schools.

Campus Green Committee

We just founded a “Green Committee” at our school and it is my personal goal to move our campus to be poison-free. I hope you can point me to resources for commercial lawn care without the use of pesticides and fertilizer.

-Tom

Share With Us!

Beyond Pesticides welcomes your questions, comments or concerns. Have something you’d like to share or ask us? We’d like to know! If we think something might be particularly useful for others, we will print your comments in this section. Mail will be edited for length and clarity, and we will not publish your contact information. There are many ways you can contact us: Send us an email at info@beyondpesticides.org; give us a call at 202-543-5450, or simply send questions and comments to: 701 E Street SE, Washington, DC 20003.
From the Web

Beyond Pesticides’ Daily News Blog features a post each weekday on the health and environmental hazards of pesticides, pesticide regulation and policy, pesticide alternatives and cutting-edge science, www.beyondpesticides.org/daily news blog. Want to get in on the conversation? Become a “fan” by “liking” us on Facebook, www.facebook.com/beyondpesticides, or send us a “tweet” on Twitter, @bpncamp!

Cosmetic Lawn Pesticide Use Outlawed in Takoma Park, MD, First Local Ban of Its Type in U.S.
From Pesticides and You, Vol 33, No 2, Summer 2013

Katrina Comments:
“It’s about time a U.S. municipality did this... I am all in favor of pesticide bans; the drift and water contamination from wanton pesticide use has endangered the public health - as well as my personal health. It’s time to stop the inadvertent poisoning of innocent bystanders. Thanks to a pesticide overexposure suffered at my former place of employment, I struggle with disabling Multiple Chemical Sensitivity (MCS) to this day. It’s been 3 years, and I still feel like the “bubble girl,” unable to move about freely in society due to the use of highly toxic chemicals (most notably pesticides) along our roadways, on lawns, in stores, restaurants, parks, seemingly everywhere... We’re literally awash in this stuff, and people (most alarmingly, children and young adults-our future) are getting sicker and sicker with bizarre and/or chronic illnesses that never plagued us prior to the “pesticide period” that we live in now.”

USDA Refuses to Investigate GE Alfalfa Contamination
From the Beyond Pesticides original blog post (9/17/13)

Jerre M. Comments:
The USDA is no longer there to protect us. It seems they are just there to protect and give in to corporations. Very sad since that is not what the agency was established for.

Hi Tom,
It’s great to hear about your Green Committee! We have a number of resources that can help your school ditch hazardous chemicals. The focus of maintaining an organic landscape should be on building soil microbial health. When the soil is healthy, the grass is healthy and more resilient to pest and disease pressures. Fall is the perfect time to transition your lawn to organic maintenance. Our new web page on how to Prime Your Lawn this Fall (bit.ly/prime-organic) is very helpful to that end. It provides some simple practices to follow in order to maintain an aesthetically pleasing lawn that also respects human and environmental health. Most weed problems will be eliminated though the cultural practices outlined in the fact sheet, however, if there are problems in certain areas, our guide to the Least-Toxic Control of Weeds (bit.ly/ltcwguide) can help manage problem plants without toxic chemicals.

Maintaining an organic landscape can save your school money in the long run. A report by the group Grassroots Environmental Education (bit.ly/costorganic) found that, though it takes some time to repair the damage done by synthetic fertilizers and pesticides, once healthy soil biology begins to kick in, the cost of maintaining an organic vs. a conventional lawn comes down significantly.

Pesticide Free Zone Sign Spotted at the Zoo!

Kudos to the Woodland Park Zoo in Seattle, WA for proudly displaying its Pesticide Free Zone sign! Thanks to Beyond Pesticides’ Board President, Dr. Routt Reigart, for the photo (to the right). Do you have a photo of an organic garden, lawn, or honey bee habitat? Send it to us at info@beyondpesticides.org. We love to showcase pesticide-free zones in action!
NOSB Fall Meeting Canceled
The government shutdown in early October caused dramatic impacts on the organic agricultural community. On October 10, USDA canceled the semiannual NOSB meeting, scheduled for Louisville in October. The next meeting will be held in April 2014. During the NOSB meetings, the board makes recommendations to the Secretary of Agriculture regarding materials on the National List of Allowed or Prohibited Substances in organic operations after reviewing technical documents and considering input from the public.

This fall, the board was set to take up several very important issues that face the organic community, such as voting on extending the use of an antibiotic in apple and pear production and the allowance of materials for use in aquaculture (before regulations defining organic aquaculture systems are proposed). The meeting cancelation comes on the heels of USDA’s September announcement that the agency has changed the process for exempting otherwise prohibited substances (such as synthetics) in food that carries the “organic” or “made with organic” label.

Food Safety Issues
The shutdown has also raised several food safety questions when the Centers for Disease Control and Prevention’s (CDC) was prevented from responding to a recent salmonella outbreak that was traced to three California poultry plants. The novel strain of antibiotic-resistant salmonella sickened at least 278 people nationwide, of which 42 percent were hospitalized—double the normal rate for such an outbreak. Foster Farms, the producer of the chicken, is not recalling its product and the USDA will not close the three poultry plants implicated in the salmonella outbreak.

Estimates by the public health advocacy group Union of Concerned Scientists suggest that 70 percent of antibiotics used in the U.S. are devoted to the non-therapeutic treatment of cattle, swine and poultry, endangering human health by contributing to the rise of antibiotic-resistant infections. Currently, the strongest regulatory restrictions in the country against the use of antibiotics for non-medical uses has been in certified organic agriculture. Under USDA’s organic standards, producers of organic livestock cannot use antibiotics in any form, with the exception of limited emergency situations when they are needed to save an animal’s life, at which point it cannot not be sold, labeled, or represented as organically produced.

Farm Bill
The shutdown also affected the Farm Bill process that organic advocates are hoping will, at the very least, restore organic programs in the 2008 Farm Bill. Leading up to the shutdown crisis, Congress failed to pass a new Farm Bill after the most recent extension expired on September 30. Under the most recently lapsed Farm Bill, which set a 10-month extension of the 2008 Farm Bill, several key organic programs lost funding. Organic programs that were not included in the extension include the Organic Research and Extension Initiative (OREI), the organic certification cost share, and an organic data collection system. Organic farmers say these programs are necessary to support organic agriculture as the multibillion dollar industry it is today and these supports come at a dramatically lower level of funding than given to conventional growers.

In May, the Senate passed a bi-partisan Farm Bill. However, the House of Representatives failed to pass an initial version of its Farm Bill in June. The bill failed after 62 House Republicans opposed it because it did not include a large enough cut to nutrition programs, or food stamps. The House then passed separate farm legislation and nutrition legislation and joined the two pieces together in late September. Conferees to resolve the differences between the House and Senate bill were named October 12, however, substantial discussion did not occur before the end of the shutdown. The first public meeting of the Farm Bill conference began October 30. Organic advocates are urging that provisions only in the Senate version of the legislation, which strengthen organic agriculture, are not removed from the bill during the conference process.
GAO Questions Adequacy of EPA’s Conditional Registration

A Government Accountability Office (GAO) report released in September finds that the U.S. Environmental Protection Agency’s (EPA) use and oversight of conditional registrations allows pesticides into the consumer market without all the required data to assess the chemical’s safety. This has created many serious human and environmental health problems, including bee decline, tree death, and potential increases in human health risks. According to the report, the total number of conditional registrations granted by EPA is unclear. This lack of a reliable system for managing conditional registrations constitutes an “internal control weakness” because the agency lacks an effective mechanism for program oversight and decision making.

EPA lists several reasons for its shortcomings, including incorrectly classifying pesticides as conditional, database limitations that do not allow officials to change registration status, and a general weakness in guidance and training, management oversight, and data management. According to EPA documents, there is limited organized management oversight to ensure that regulatory actions are not misclassified as conditional registrations. In the case of neonicotinoid insecticides linked to widespread bee deaths, EPA issued a conditional registration in 2003, requiring field studies, and as of today has not received the requested studies.

Earlier this year, the Natural Resources Defense Council (NRDC) published a scathing report on EPA’s conditional registration process, questioning the agency’s transparency and the rigor with which these inherently toxic chemicals are tested, and finding that “the public’s trust is misplaced.” This report asserts that nearly 65% of the more than 16,000 pesticides now on the market were first approved through the conditional registration process.

EPA officials told GAO that the agency has taken or is planning to take several actions to more accurately account for conditional registrations.

USDA Weakens Review Process that Allows Synthetics in Organic Food

In a move decried by consumer and environmental groups as severely weakening the meaning of the organic label, the U.S. Department of Agriculture (USDA) announced that the agency has dramatically changed the process for exempting otherwise prohibited synthetic substances in food that carries the “organic” or “made with organic” label. This decision makes it easier to continue use of artificial ingredients and substances, undermining the organic label’s integrity. The changes, which went into effect September 17, one day after the announcement, were not subject to a public comment period. The previous materials review policy had been in place since 2005.

Under the federal organic law and prior to the announcement, there was a controlled process for allowing the use of substances not normally permitted in organic production because of extenuating circumstances. Through a petition and “sunset” process in the law, these exemptions are authorized for a five-year period, in order to encourage the development of natural (or non-synthetic) alternatives. At the end of that period, the exemptions had to be reinstated by a two-thirds “decisive” majority vote of the National Organic Standards Board (NOSB) and subject to a public review—repeating a rigorous review, utilizing any new science or essentiality data, that is required to allow the exemption initially.

Under the new policy, an exempt material can be permitted indefinitely unless a two-thirds majority of the NOSB votes to remove an exempt (synthetic) substance from the list. The new policy allows USDA to relist exemptions for synthetic materials without the recommendation of the independent board and outside of public view, as has been required. The new approach threatens public trust in a label that was understood in the market to be supported by a materials review system that is more rigorous than the chemical review process used in chemical-intensive agriculture, with a reaffirmation of ingredient safety and essentiality.
Parents Sue EPA for Continued Failure to Protect Kids

In an attempt to finally force EPA to protect the civil rights of hundreds of Latino children, farmworker and human health groups filed a lawsuit on behalf of the Garcia family and multiple generations of Latino school children who still do not have substantive protection under EPA standards. The schools are near crop fields where methyl bromide and other toxic fumigants are sprayed. The Garcia’s complaint challenges EPA’s Civil Rights Act regulations. If successful, the lawsuit has the potential to allow other people of color across the country more access to protections from racial discrimination, as a result of disproportionately elevated harm.

The lawsuit comes more than a decade after Latino parents initially filed a civil rights complaint with EPA, detailing the dangerous levels of pesticides at Latino public schools throughout California. In 1999, the Garcia family alleged that their children and other Latino children were being exposed to dangerous levels of pesticides at their public schools, which are directly adjacent to several strawberry fields where methyl bromide and other fumigants are sprayed. The complaint was filed under Title VI of the Civil Rights Act of 1964, alleging that the California Department of Pesticide Regulation’s (CDPR) annual renewal of the registration of methyl bromide in 1999 discriminated against Latino school children based on the health impacts of this pesticide. In 2011, EPA issued the first ever preliminary findings of racial discrimination based on Garcia’s claims, finding that California’s Latino school children do, in fact, suffer disproportionately from exposure to pesticides from spraying near their schools. However, the agency has yet to remedy these pesticide exposures.

“I will keep fighting for my family,” said Maria Garcia, a mother and grandmother, as the lawsuit was filed. This discrimination has gone on so long that Maria’s son, who participated in the original suit as a high school student, is now a father with two of his own children who will attend the same polluted schools he did. These schools, like many other schools in California with high concentrations of Latino students, continue to face high levels of exposure from dangerous levels of pesticides in the air.

California Passes Bill to Tackle Pesticide Drift

California Governor Jerry Brown has signed Assembly Bill 304, a bill designed to protect people from harmful pesticides identified as toxic air contaminants (TACs). The bill will require the California Department of Pesticide Regulation (CDPR) to develop mitigation measures for the use of harmful pesticides that vaporize and drift from application sites. California, a major user of pesticide fumigants, has tried to tackle the prevalence of pesticide drift in the state, and is one of few states that monitors air-borne pesticides.

AB 304 “Pesticides: toxic air contaminant: control measures,” introduced by Assembly member Das G. Williams (D-Santa Barbara), gives CDPR two years to reduce the effects of harmful air toxicants once the department determines that additional mitigation measures are necessary. Out of the hundreds of registered pesticides in California, CDPR has completed the review process for only eight of them in the past 25 years. Imposing a timeline for action would give farmers timely information to help mitigate against drift.

“This is a victory for everyone who cares about the health and safety of the people in our community,” said Assemblyman Williams. “These toxic pesticides don’t stay in one place. They drift and can cause serious health problems. Now we can begin to identify ways to remove these toxins from our environment.”

Fumigants are some of the most dangerous pesticides on the market and include the controversial methyl iodide. They are applied in large quantities, vaporize easily, drift off site and expose nearby farmworkers and other community members to harm, with health effects linked to headaches, vomiting, severe lung irritation, and neurological effects. Some fumigants are linked to cancer, reduced fertility, birth defects, and higher rates of miscarriage.
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Pesticides Found To Be Culprit Behind Minnesota Bee-Kills

In mid-September, thousands of bees in Minneapolis, Minnesota were found twitching and dying on the ground. An investigation revealed that fipronil, a widely used insecticide, was to blame. University of Minnesota Bee Lab, the University’s Bee Squad, and the Minnesota Department of Agriculture (MDA) carried out the investigation, taking samples from hives to confirm pesticide poisoning, finding that all three of the affected hives tested positive for the presence of fipronil. The MDA’s report posited that the bee kill incident was likely started by a neighborhood individual who sprayed fipronil along the boundaries of a building and onto nearby flowers visited by bees. Once exposed, those bees flew back to their hives, exposing the entire colony. It is unknown who exactly sprayed the pesticide, and the MDA report indicated that it will not investigate further into the identity of the applicator.

Pesticide-related bee-deaths have become a recurring story across the nation. In June 2013, an estimated 50,000 bumblebees were found dead or dying in a shopping mall in Wilsonville, Oregon due to a tree application of the neonicotinoid insecticide dinotefuran. Then in July 2013, 37 million honeybees were reported dead across a single farm in Ontario from the dust associated with planting neonicotinoid-treated corn seeds, prompting Health Canada to release new measures intended to protect bees from further exposure to neonicotinoids. That same month, the EU put forward a proposal to restrict the use of fipronil. This proposal came on the heels of an EU-wide decision to restrict the use of three pesticides that belong to the neonicotinoid family –imidacloprid, clothianidin and thiamethoxam. EPA then issued limited label changes in August. Although neonicotinoid pesticides have been widely implicated in the phenomenon of colony collapse disorder (CCD), other pesticides, such as fipronil, are known to adversely affect honey bee health as well.

Landmark Pesticide Protections in Kauai Enacted

Months of political wrangling in the Garden Isle of Kauai, Hawaii came to an end when the County Council voted to override Mayor Bernard Carvalho’s veto of Bill 2491 by a vote of 5-2. The bill establishes much-needed disclosure, notice, and reporting mandates for commercial-scale pesticide applications, requires pesticide application buffer zones for schools, hospitals, residences, public spaces, waterways, and parks, and mandates that the County perform an Environmental and Public Health Impact Study (EPHIS).

Local leaders crafted Bill 2491 in response to public outcry from residents, many of whom live, work, or have children that go to school near agricultural fields leased by these companies. “The people in my community have asked for help,” said Kauai County Councilmember Gary Hooser. “People are concerned.”

The hard-fought victory of Kauai residents to protect their homes, children, and natural environment from the agrichemical industry’s excessive and secretive applications of pesticides has been met with legal threats from the corporations operating on the island. Attorney’s representing these corporations assert that the bill is preempted by state and federal law. Lawyers from the groups Earthjustice and Center for Food Safety pledged to defend the county from any lawsuits brought by the agrichemical companies.

A critical component of the bill is the inclusion of a penalties provision. Acting as a strong industry incentive to comply with the bill’s mandates and protective measures, the penalties provision permitted civil fines of between $10,000 and $25,000 per day per violation and potential misdemeanor criminal sanctions.

An estimated 4,000 people marched September 18 on Kauai to support the passage of Bill 2491. Photo taken by pass2491, available at http://flic.kr/ps/2xJ5WN.
OR Supports Genetically Engineered Crops, WA Labeling Prop Fails

Genetically engineered (GE) crops gain more of a foothold. Oregon passed a controversial agriculture bill that bars Oregon counties from restrictions, to the dismay of many organic and environmental groups. Senate Bill 863 also includes an emergency clause, which will allow the bill to go into effect immediately, precluding opponents from referring the bill to voters. Environmentalists rallied against the inclusion of the emergency clause, which Republicans advanced. House Minority Leader Mike McLane (R-Powell Butte) said it was needed to prevent a patchwork of different county policies.

S.B. 863 was passed by the Oregon Senate 17-12 on October 2, after three days of a special session to debate a controversial five-bill package. S.B. 863 declares that “regulation of agricultural seed, flower seed, nursery seed and vegetable seed and products of agricultural seed, flower seed, nursery seed and vegetable seed be reserved to the state, thereby preempting local governments from adopting any of their own GE policies.”

The fact that S.B. 863 is packaged with other beneficial legislation—more funding for K-12 schools, mental health programs, and changes to tax rules, is reminiscent of the so called “Monsanto Protection Act,” which was quietly slipped into the federal continuing resolution (CR), H.R. 933-Sec. 735, earlier this year to keep the government running for six months. After public outrage, the language has been removed from the latest CR. The immediate enactment of S.B. 863 also fends off attempts to refer a repeal measure to the ballot. Like the “Monsanto Protection Act” fiasco, many in Oregon are questioning how S.B. 863 made it into legislation that is designed to help improve funding for Oregon’s schools and retiree benefits.

Environmental groups and local food activists are upset that the provision sailed through the state’s legislature with language pushed by American Legislative Exchange Council (ALEC), which was previously introduced in other states.

The bill comes on the heels of recent findings of GE contamination of wheat fields in the state, which has led to the filing of several lawsuits against the agrichemical giant Monsanto. Given that Oregon ranks 5th in the nation for its number of organic farms, with more than 444 certified farms operating on over 156,000 acres as of 2010, according to the Center for Food Safety, oversight of biotechnology is critical.

The Washington proposition to label GE food was rejected by voters by a margin of 51 to 49 percent, with a 45 percent voter turnout in the state. Organically labeled food is the only source of food that is not grown with GE crops.

Trans-generational Effects of DDT Linked to Obesity

Washington State University (WSU) scientists have found that exposure to the insecticide DDT—banned for most uses in the U.S. in 1972, but still used today in developing countries for malaria abatement programs—affects multiple generations, ultimately contributing to obesity three generations down the line. The laboratory study, published in the journal *BMC Medicine*, provides the scientific community with new information on multi-generational impacts of pesticide exposure.

Lead researcher Michael Skinner, PhD., professor of biological sciences at WSU, and colleagues exposed pregnant rats to DDT to determine the long-term impacts to health across generations. The study, *Ancestral dichlorodiphenyltrichloroethylene (DDT) exposure promotes epigenetic transgenerational inheritance of obesity*, finds that the first generation of rats’ offspring developed severe health problems, ranging from kidney disease, prostate disease, and ovary disease, to tumor development. By the third generation, more than half of the rats have increased levels of weight gain and fat storage. In other words, the great grandchildren of the exposed rats are much more likely to be obese.

“Therefore, your ancestors’ environmental exposures may influence your disease development even though you have never had a direct exposure,” the study finds.
A few years ago, my husband and I built a beautiful new home. We had planned and saved for years to build our dream house, which made everything even more exciting when we were finally able to start construction. No expense was spared structurally, as we planned to live there the rest of our lives. Never before had I enjoyed granite and quartz counter tops, custom cabinets, or a jetted bathtub. We would finally have enough space so that each of our children could even personalize and have their own rooms. You can imagine our excitement!

Discovering Toxic Practices Next Door
As we began building, we noticed jugs and barrels of pesticides stored in the tree line next to our home. In fact, at one point, my oldest son even mentioned to me that I should probably turn the business in next door as what he was doing was illegal. However, in my ignorance, I thought: “Obviously the neighbor will see that we will be moving in soon and move them. He wouldn’t do anything that would potentially bring harm to my family.” I was sorely mistaken.

In the springtime, after we had lived in our home for just barely a year, our youngest son, Josh, who also has autism, began to complain of dizziness. After several falls, we realized that whatever was happening was serious. We immediately started to see doctors. An MRI and countless other tests were run to rule out anything physiologically wrong.

Deteriorating Health
After all the tests, it was concluded that perhaps Josh had Meniere’s disease. We began treating him at once. Despite the treatment, we watched as Josh’s health declined and symptoms became worse. Now he was not only hanging on to walls and furniture to help him balance, but he also seemed extremely lethargic and exhausted all the time. He slept 12-16 hours a day.

We had to pull him from school because of his health and the risk of falling. Headaches and terrifying eye tremors (where his eyes would shift uncontrollably back and forth) became a regular thing. We tried changing our diet to help. Nothing was working. After months of treatment, we were sent to Primary Children’s Hospital.

We saw multiple doctors there and were even referred out to more specialized clinics and centers. Each doctor seemed to see that something wasn’t right, but didn’t know what to do to help Josh. Finally, it was suggested that we look into environmental factors.

The smell of fertilizer and chemicals was strong at our house. The business next door, which turned out to be an exterminator that stored chemicals in our tree line and was the source of the odor, generated a smell that was extremely potent to even walk by on the sidewalk. We began to take careful notice of the happenings next to us and realized that it was common practice for them to load, rinse, and dump their tanks into the soil above our property. Many times trucks would drive out of the small field next to our home after emptying their tanks. We had to keep our windows closed to keep the smell out.

Could this be the source of our problems? The business stored multiple chemicals in an old garage that was, many times, stacked to capacity with chemicals and fertilizers. It was never locked, doors were always left propped open and the venting system in place consisted of a removed window.

We went to city officials to ask about policy and the safety of what was going on so close to our family. Our city told us that it was the state’s responsibility to deal with these types of things because the business owner’s license had been issued by them, not our town. When I questioned why this kind of business was operating inside of a residential area, I was told it was because
he had been “grandfathered in.” Rules were set in place after he had already established his business, so new policy didn’t apply to him. We were also told by our city that, “Just because you can smell something, doesn’t mean it will hurt you.”

By the end of the summer, I fell down from dizziness. I had been having headaches and my eyes would hurt or sting frequently. I also was having a hard time thinking clearly. I had the sense of not feeling well, but didn’t know why. I found myself moving slowly because I was losing my balance.

Josh, at this point, was dizzy all the time. He only spent several hours a day out of bed and wasn’t able to participate in any of the things that previously made him happy.

School resumed in the fall. Our other children started struggling. They were missing many days of school because they weren’t feeling well. Everyone was having a hard time focusing and concentrating. My husband, who had always had a very sharp memory, began to say that maybe he had better be checked to see if he had Alzheimer’s. He was struggling to remember things.

The very strong chemical smell outside continued.

**Requesting Government Assistance**

I called the county to complain about the business next door. I was told that if I requested an audit of the business they would come out and check things and take a soil sample. Prior to the audit, chemicals that had previously been stored outside were “mysteriously” removed.

Our county sent an inspector to our home. He was polite as I spoke with him. He told me he needed to go see the owner of the business. When he came back, he told me how the owner’s place reeked from residuals. A soil sample was taken. In fact, when the sample was taken, the inspector smelled it and told me he could smell residues in it.

I was surprised when I didn’t get any feedback from the county. So I called them and was shocked at their response. I was told they had decided not to test the soil sample. I questioned why and was told, “...then what? Where would it go from here?” This was the beginning of my disappointment from county or state help.

Later, as I talked with the inspector, I asked him if he could pursue our case further. He told me his boss would have “strung him up” if he did. During one of our phone calls, he told me that if something had been spilled, it would most likely break down in 30-90 days. We live in a small town where I know many people. We thought we would just move out of our home for a short time and all of this would pass. Then, we thought, there wouldn’t be bad feelings with our neighbor.

No one ever mentioned the half-lives of chemicals or their toxicity problems. We saw multiple trees and plants die. We saw many dead birds on our property. My son’s pet bunny got sick and died. Our symptoms persisted and we realized that this problem wasn’t just going to go away in one to three months. We continued trying to find someone to help us.

**Lack of Responsiveness**

The people at the State Department of Agriculture told me that we didn’t have a pesticide problem. Outside of the inspector, no one in the Ag Department showed any amount of concern for our situation. My phone calls to them weren’t returned. I was being ignored with stalling tactics. After a phone call to my State Senator and pressure from him, I finally received a return phone call. I had previously asked for our report. I was told I would have to file a formal request to receive it. It took months to get this report, for which I was charged.
The report conveniently left out nearly all relevant details about the problems we were facing and the findings that the inspector had discovered during that initial audit. When we questioned Clarke Burgess, the Pesticide Program Manager at the Utah Department of Agriculture and Food (UDAF), we were simply told, “That was not in the report.”

Health Problems Become More Dramatic
About seven months after Josh began showing symptoms, we were outside in the yard laying sod. The chemical smell was very strong in the air that day. Our married daughter came to help. She went down dizzy in our front yard. This is when I started to realize how serious our problem was.

Josh was so sick at this point that we moved him out of the house to sleep at our daughter’s home. Some days, he would not even respond to us when we talked to him or asked him questions. We were seeing problems with his blood work. We also were seeing tremors in him and my husband. Headaches, hurting or stinging eyes, malaise and fatigue were consuming our daily lives.

I spent literally hundreds of hours on the phone and at appointments trying to get help for our family. It soon became apparent to me that the resources for someone with chronic chemical exposure were almost non-existent. Not only did no one seem to understand the chemicals and the health problems they caused, but there wasn’t even a regulating agency to enforce safe practice and stop these types of exposures from happening!

More Agencies Get Involved
The Health Department found highly volatile organic compounds (VOCs) in our home but didn’t know where they were coming from or what to do about them. UDAF (which we kept being referred to) said their job was just licensing and training. So who is responsible for the safety and the well-being of the citizens? Who protects them? What is the job of the regulator when they come out to check the sprayers? I asked these questions to Mr. Burgess directly. His response was that the Ag Department checks to make sure the sprayers are wearing the correct clothing and that their tanks are secured on their trucks. “But who protects the citizen?” I asked again. He shrugged his shoulders and said, “Maybe DEQ.”

The Politics of Pesticides
Clark Burgess was the Pesticide Program Manager at the UDAF, and recently became Deputy Director of Plant Industry at the department, overseeing various aspects of pesticide enforcement. While Pesticide Program Manager, Mr. Burgess sat on the board of directors of the Utah Pest Control and Lawn Care Association, a clear conflict of interest. As Brian Monech, M.D. of Utah Physicians for a Healthy Environment wrote in an op-ed to the Salt Lake Tribune, “It’s like the tobacco companies regulating smoking.”

Do you know the background of the person that regulates pesticides in your state?

Pressure for Action Builds
Finally, after pressure from the media, the Department of Agriculture agreed to come out and test our soil. This was over a year and a half after we first started seeing symptoms. The morning they arrived to test at our property they got out of their truck and immediately told us they would not be testing for any breakdowns, residuals, benzenes (a chemical we had previously detected in an air test that we had done at our own expense through a private, professional lab), etc. We provided a backhoe on the property that morning, as well. But, UDAF refused to take anything but surface soil samples, despite the opinions of experts that deeper samples would provide the greatest chance of discovering the causative agent. It became instantly apparent to us at this point that they were there only to protect their name. They were testing for pesticides only. (Even though the time frame suggested that breakdowns and residuals would be the main concern at this point.) And when, despite the sampling techniques and

More of the unmarked containers strewn about on the property.
the lapsed time, the test DID come back with a pesticide, they said it “does not move in the soil,” and wouldn’t be “considered a health hazard in this case.”

Who is Being Protected?
The state of Utah has over 7,400 pesticide applicators. There are only a handful of regulators. It is still unclear to me what they regulate, as it appears they are there to protect the sprayer only. We and many neighbors have seen many regulations broken. We have seen pesticides stored in the trees. There are many who have seen the emptying of containers and dumping in inappropriate places by this company. The shed was not properly ventilated. It was not locked. “POISON” signs were printed on paper and only posted during the state’s inspection. They disappeared after the first strong winds.

Yet, I recently received a letter from our Governor’s office stating, “With regard to the pesticide issue, UDAF is required under federal and state statute and rule to regulate the licensing of pesticide applicators and the enforcement of the proper use of pesticides. The investigation conducted by UDAF found no pesticide violations coming from the property next door, related to how the pesticides were being stored or applied. The containers on the property that were not in the shed were empty and contained no pesticide residue.”

Their letter continued, “The UDAF chemistry lab does not have the ability to test for chemical breakdown as there are no standards available... We wish there were agencies to refer you to or tests to do or samples to run that would give you answers to your health problems.”

It is beyond frightening to me that the government agencies that I thought were set up to protect the people don’t understand the chemicals they are charged with regulating.

Look for Signs
I share our story so that if you find yourself in a position where you are seeing illegal spraying and dumping happening, report it. Don’t wait for it to pass. If your neighbor has someone spraying their yard in the wind and it is drifting, report it. Insist on help immediately. Don’t let it be put off for months or years.

We have had to walk away from our beautiful new home. It is sitting vacant and has been for nearly two years. Our health has been challenged. Thankfully, our son’s and family’s symptoms have improved immensely after leaving our home. Josh has returned to the wonderful, fun-loving kid we all knew before this whole ordeal began. But, we don’t know what the future will continued on page 23
This past July the Takoma Park, Maryland City Council unanimously passed the Safe Grow Act of 2013, which generally restricts the use of cosmetic lawn pesticides on both private and public property within the city’s jurisdiction. This landmark victory was the first time that a local jurisdiction of this size in the U.S. has used its authority to restrict pesticide use. While this type of local law has taken hold in provinces across Canada over the last seven years, its adoption in the U.S. is a watershed moment for public health and environmental advocates, raising the larger question as to why it hasn’t happened sooner and more widely across the country. The answer—state laws that preempt, or take away, local authority to restrict pesticide use. Currently, 43 states have some form of state law that preempts local governments’ ability to regulate the use of pesticides. In fact, state environmental preemption law often applies more broadly to local restrictions on genetically engineered crops and the use of synthetic fertilizers.

**What is State Preemption?**

Preemption is the ability of one level of government to override laws of a lower level. While local governments once had the ability to restrict the use of pesticides on all land within their jurisdictions, pressure from the chemical industry led many states to pass legislation that prohibits municipalities from adopting local pesticide ordinances affecting the use of pesticides on private property that are more restrictive than state policy. A U.S. Supreme Court decision in 1991 upheld the rights of localities to restrict pesticides under federal pesticide law. Chemlawn Services Corporation, now TruGreen, went to bat that same year, lobbying state legislatures with the argument, “The lawn care industry is besieged by misinformation regarding industry’s use of pesticides and fertilizers and the effect these chemicals have on the environment and the public health.” According to Allen James, former president of the Responsible Industry for a Sound Environment (RISE), a pro-pesticide trade group, “Local communities generally do not have the expertise on issues about pesticides to make responsible decisions.” Beyond Pesticides argued that the basic rights of local governments to protect public health and the environment must be preserved, especially in a climate where federal and state government are not adequately protective. Local grassroots organizations have effectively mobilized against the use of lawn pesticides, armed with the knowledge of the hazards and the viability of management practices that, without pesticides, focus on building a soil environment rich in microbiology that will produce strong, healthy turf that is able to withstand many of the stresses that affect turfgrass.

State preemption laws effectively deny local residents and decision makers their democratic right to better protection when a community decides that minimum standards set by state and federal law are insufficient. Given this restriction, local jurisdictions nationwide have passed ordinances that restrict pesticide use on the town’s public property, or school districts have limited pesticides on its land. As pesticide pollution and concerns over the effects of GE foods on human and environmental
health mount, many are fighting to overturn preemption laws and return the power back to localities, enabling them to adopt more stringent protective standards throughout their communities.

History of Preemption

In 1979, Mendocino County, California was one of the first local jurisdictions in the country to pass a pesticide ordinance, in this case prohibiting the aerial application of phenoxy herbicides, such as 2,4,5-T. The measure was passed after an incident in 1977 that resulted in herbicide drift on school buses nearly three miles away from the application site. A California State Supreme Court decision upheld the right of citizens to adopt more protective standards than the state and federal government. (*The People v. County of Mendocino, 1984*) The California legislature then adopted legislation to preempt that right. The issue of federal preemption of local ordinances made its way to the U.S. Supreme Court, which ruled in 1991 that federal law (the *Federal Insecticide, Fungicide and Rodenticide Act*, FIFRA) does not preempt local jurisdictions from restricting the use of pesticides more stringently than the federal government. (*Wisconsin Public Intervenor v. Ralph Mortier*) However, the ability of states to take away local authority was left in place. The pesticide lobby immediately formed a coalition, called the Coalition for Sensible Pesticide Policy, and developed model legislation that would restrict local municipalities from passing ordinances regarding the use or sale of pesticides on private property. The Coalition lobbyists descended upon states across the country, seeking and passing, in most cases, preemption legislation that was often identical to the Coalition’s wording.

Variations in Pesticide Preemption Language

Explicit Preemption. Twenty-nine states have nearly identical preemption language that explicitly preempts localities from adopting stricter legislation that would regulate the use of pesticides. Most states’ preemption clauses read similar to the American Legislative Exchange Council’s (ALEC) *Model State Pesticide Preemption Act*, which states, “No city, town, county, or other political subdivision of this state shall adopt or continue in effect any ordinance, rule, regulation or statute regarding pesticide sale or use, including without limitation: registration, notification of use, advertising and marketing, distribution, applicator training and certification, storage, transportation, disposal, disclosure of confidential information, or product composition.”

Limited preemption. Fourteen states do not have explicit preemption language. However, they delegate all of the authority to regulate pesticide law to a commissioner or pesticide board. This implies that localities seeking more restrictive pesticide regulations could petition the commissioner for a variance from the states pesticide law. For example, in New York, “Jurisdiction in all matters pertaining to the distribution, sale, use, and transportation of pesticide, is by this article vested exclusively in the commissioner.” (33-0303)

Five states that vest exclusive regulatory authority in their commissioner specify that localities can petition the commissioner for exemptions to these pesticide regulations. For example, in Louisiana, “The governing authorities of parishes and municipalities may request that the rules applicable to the distribution, sale or application of pesticides be amended to provide for specific problems encountered in the parish or municipality.” (R.S 3:224B)

No preemption. Seven states do not preempt local authorities’ ability to restrict the use of pesticides on any land within their jurisdiction. Some of these states have no regulations that would preempt local authority and others have specific language written in that reaffirms localities’ authority, such as in Maine, which states, “These regulations are minimum standards and are not meant to preempt any local ordinances which may be more stringent.” (01-026 Chapter 24, Section 6)

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<th>Explicit Preemption</th>
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*Except Chicago

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<th>Exclusive Authority</th>
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<td>Connecticut</td>
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<td>Rhode Island</td>
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<th>Explicit Right to Petition</th>
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<td>Alaska</td>
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<td>South Dakota</td>
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Preemption of Local Laws on GE Crops
In 2005, agricultural lobby groups worked to pass state preemption legislation that prevents towns, counties, or cities from passing any ordinance, regulation, or resolution to restrict GE crops or any other plants. These laws seek to stop laws that have been adopted by nearly 100 towns in New England that limit the growing of genetically modified seeds and livestock. So far, 16 states have passed legislation that limits the ability of localities to regulate GE crops. These preemption regulations often amend state seed law. For example, in Arizona, “The regulation and use of seeds are of statewide concern. The regulation of seeds pursuant to this article and their use is not subject to further regulation by a county, city, town, or other political subdivision of this state.” (3-243)

Oregon recently joined this list of 16 states after Gov. John Kitzhaber signed Senate Bill 863 into law on October 8, 2013. The bill, which preempts localities’ ability to regulate seeds used for commercial agriculture, contains an emergency clause that allows it to take immediate effect. The law however, does not affect measures in Benton and Lane counties that already restrict GE planting. This legislation comes after unapproved GE wheat was found growing in an Oregon wheat field, which led to Japan temporarily halting its importation of U.S. western white wheat from the Pacific Northwest.

Even more troubling, an amendment added to the House of Representatives version of the 2013 Farm Bill by Rep. Steven King (R-IA) would set a federal standard that preempts any state’s or locality’s ability to impose conditions on the production of any agricultural product offered for sale in interstate commerce. This amendment would prohibit locality’s from restricting the sale or use of GE seeds. This amendment would also undo state laws in Maine and Connecticut, regarding the labeling of GE ingredients.

Recent Preemption Struggles and Victories
On April 15, 2004, Dane County, Wisconsin officials, who oversee 61 municipalities including Madison, passed a local county-wide ban on the use of synthetic lawn fertilizers that contain phosphorus due to its pollution of local lakes. This directly restricted the use of ‘weed and feed’ products that combine synthetic fertilizers and herbicides. The chemical industry trade group RISE sued the County citing preemption law. The U.S. 6th Circuit Court of Appeals upheld Dane County’s ordinance in December 2005, finding that the law does not preempt local authority to regulate fertilizers. Jurisdictions in states that preempt local authority to restrict pesticides can in most cases institute synthetic fertilizer
restrictions that limit ‘weed and feed’ products with pesticides.

State activists have worked to overturn preemption law. In 2008, California State Assemblywomen Fiona Ma introduced AB977 to overturn the California state law that prohibits the restriction of pesticides by local jurisdictions. In 2011, Connecticut State Senator Edward Meyer introduced S.B. 244, which would have overturned Connecticut’s preemption law. In 2012, a similar bill, HB 5121, was introduced in the State House and passed through the Joint Committee on Environment, however the bill was not brought to the floor for a vote.

Bill 2491, which would establish provisions governing the use of pesticides and GE crops in Kauai, Hawaii, was introduced by county council member Gary Hoosier in 2013 over concerns about the use of pesticides on GE test fields and genetic drift. The bill calls for buffer zones between fields where pesticides are applied and areas that are used by sensitive populations, such as schools and hospitals. The bill would also force seed companies to conduct an Environmental and Public Health Impact Study (EPHIS) as a prerequisite for the further planting of GE seed. As this fight over GE regulation in Hawaii has grown, Gov. Neil Abercrombie argued that regulation of GE crops should come from the state and promised that the state will increase oversight of seed companies’ use of pesticides. Despite these efforts by the Governor, the Kauai county council passed the bill by a 6-1 margin. After the bill was vetoed by Kauai Mayor Bernard Carvalho, the County Council overturned the veto by a vote of 5-2.

The most important achievement under state law that upholds local authority to restrict pesticides has been the passage of the Safe Grow Act of 2013, which generally restricts the use of cosmetic lawn pesticides on both private and public property throughout Takoma Park, Maryland. This landmark legislation stops involuntary poisoning and non-target contamination from pesticide drift and volatility that occurs, resulting in these toxic chemicals moving off of treated private yards. The new law fits into the city’s strategic plan to lead community efforts in environmental sustainability, protection, and restoration, and secures Takoma Park’s role as a leader in sustainability in the state of Maryland and the nation.

What Can I Do?
Residents in one of seven states (Alaska, Hawaii, Maine, Maryland, Nevada, South Dakota, and Utah) without preemption, can consider using local authority to adopt pesticide restrictions that are protective of health and the environment.

Residents in 14 states (Connecticut, Delaware, Indiana, Louisiana, Massachusetts, Michigan, Mississippi, New Jersey, New York, South Carolina, Rhode Island, Virginia, Vermont, and Washington) with limited preemption, can petition the state to authorize the adoption of local pesticide restrictions. Within the five states that explicitly provide for local petitions (Indiana, Louisiana, Michigan, New Jersey, and Washington), this mechanism can be used to move a policy recommendation forward.

Those who live in states that explicitly preempt local authority can mount an effort in the state legislature to reverse preemption and advance principles of local democratic governance.

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) has established a partnership between local state, and federal governments. This partnership has resulted in a variety of important solutions to pesticide problems. When the Supreme Court ruled in 1991 to uphold the historic FIFRA partnership, it affirmed an authority that has been a part of FIFRA since its original enactment. Preemption denies citizens the right to protect health and the environment. Numerous studies by the U.S. Government Accountability Office and scientific studies indicate that federal and state governments alone are not adequately protective of health and the environment.

There is no evidence that the prospect of local democratic decision making is a threat to agriculture or other business interest in local communities. In fact, those closely aligned with these interest are well-represented in local decision making bodies.

Finally, local legislators know that restricting pesticides is no different from other environmental and neighborhood stewardship laws, including restrictions on littering, recycling, noise, picking up after pets, and smoking. These local laws all act on values associated with living in a community where contaminant-free air, water, and land are shared resources.

Beyond Pesticides has available on its website model ordinances that you can use to begin discussion in your community on local policies that restrict pesticides and advance sustainable land practices. See www.beyondpesticides.org for a fully cited version of this article.
The Right Way to Vegetation Management

An updated review of selected pest management policies and programs for rights-of-way

By Matthew Porter

Every year, millions of miles of roads, utility lines, railroad corridors and other types of rights-of-way (ROWS) are treated with herbicides to control the growth of unwanted plants. However, public concern over the use of dangerous and inadequately tested pesticides has resulted in an increasing effort over the last decade to pass state laws and local policies requiring notification of pesticide use, restrictions on application types and implementation of least-toxic and organic approaches to vegetation management.

This report highlights vegetation management on ROWs in select states, and is an update of the original version published 1999 in Pesticides and You. This summary is supplemented by a more extensive and fully cited version available at www.beyondpesticides.org. Examples are given of five states -- two provide right-to-know provisions regarding ROW herbicide applications — and all five incorporate the principles of integrated pest management (IPM) into their ROW management. However, under the variety of IPM definitions, cultural, mechanical, and biological management practices are utilized, and chemicals are typically a part of state ROW management programs. This review of policy does not evaluate the degree to which these policies are currently being enforced.

ROW management is governed by many different levels of government, including state laws or administrative procedures, state subdivisions’ or local government entities’ policies, and voluntary agreements. As a result, inconsistencies exist in overall protection from pesticide exposure. Many states have separate policies for the different types of ROWs. Utility ROW requirements may be mandated by a state’s department of agriculture, environment or other pesticide lead agency, while requirements for roadside management are under the review of the state’s department of transportation. As a result, the level of protection varies considerably, but they all tend to be deficient in protecting the public from the potential exposure to pesticide applications along ROWs.

The Case for Notification
Chemical control of ROWs pose hazards to human health and the environment. Although a number of chemicals are registered for use on ROWs to control grasses, brush and trees, picloram (Tor-don™), 2,4-D (Weedone™), dicamba (Banvel™), trichlopyr (Gar-lon™), glyphosate (Roundup™), fosamine ammonium (Krenite™), hexazinone (Velpar™) and diuron (Karmex™) are among the most commonly used. These herbicides as a group are known to cause cancer, birth defects, reproductive effects, neurotoxicity, kidney/liver damage and are toxic to wildlife. (See Table 1) New studies are continually finding serious problems associated with exposure to commonly used pesticides.

Many states have addressed the issue of ROW herbicide applications by notifying the public of the application, enabling people to attempt to avoid pesticide exposure. Prior notification is commonly provided through newspapers and/or radio. However, the notification announcements tend to be in the newspaper’s legal section and do not appear or are not heard frequently enough to alert large numbers of people. Broadcast notification through such news media is intended to either notify the public of the application(s) or of a hearing on a proposed ROW application. Targeted prior notification, although less common, is provided in some states, like Connecticut, Iowa, Maine and New Hampshire, to every property that is abutting or within a specific distance to the treated ROW property. Other states provide prior notification if a property owner or resident has requested to be placed on a notification registry of ROW applications, including Maine,
Table 1: Adverse Health and Environmental Effects of Commonly Used Herbicides on Rights-of-Way

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<tr>
<th>Herbicides</th>
<th>Cancer</th>
<th>Birth Defects</th>
<th>Reproductive Effects</th>
<th>Neurotoxic</th>
<th>Kidney or Liver Damage</th>
<th>Sensitizer or Irritant</th>
<th>Detected in Groundwater</th>
<th>Potential to Leach</th>
<th>Toxic to Birds</th>
<th>Toxic to Fish</th>
<th>Toxic to Bees</th>
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Source: Environmental Protection Agency, National Cancer Institute, California Department of Pesticide Regulation and Extension Toxicology Network and www.scorecard.org.

New Hampshire, Pennsylvania, Vermont, Washington and West Virginia. Some states require the posting of signs to notify the public at all entrances to the ROW. Prior notification should be given to all property owners and tenants within one mile of the ROW application and should be complemented with the posting of signs. Posting of signs will provide notice to the general public that enters a treated ROW.

No-Spray Agreements

No-spray agreements are offered by many states. These agreements between the ROW managing entity and the landowner require that the landowners maintain the ROW that is adjacent to their property or the managing entity will agree to maintain the ROW without using herbicides, sometimes at the landowner’s expense. Maine, North Carolina and Oregon are examples of states that have no-spray agreements. A voluntary program of utilities in North Carolina allows residents to establish no-spray agreements between utility companies and landowners without the force of law.

Integrated Roadside Vegetation Management

Some states have addressed the risk of using herbicides along ROWs by developing an IPM program for ROWs, or Integrated Roadside Vegetation Management Plans (IRVM), restricting when and where pesticides can be applied on ROWs and integrating the planting of native vegetation in the planning process of road construction. With the potential for contamination, a strong IRVM plan allows for only least-toxic chemical use as a last resort if all other means, including the use of mechanical, biological and cultural methods, of managing ROWs have been exhausted.

Nonchemical pest management methods are utilized in controlling unwanted vegetation on ROWs and are used around the country. Programs that adopt the principles of IRVM can be carefully designed for the specific vegetation management needs for each ROW situation and must include pest identification, population monitoring, determination of injury and action levels, and selection of the most appropriate control tactics. A long-term perspective is critical when developing a pest management strategy for ROW. Ideally, an ecologically stable plant community that persists in a state that does not reach injury levels should be the goal for all ROWs. Intervention, when necessary to remove unwanted vegetation, should be highly selective and non-disruptive to other life forms of the community. ROW management can become worse if competitors and natural enemies of pest vegetation are inadvertently killed by herbicide applications.

In 1997, the National Roadside Vegetation Management Association and the Integrated Roadside Vegetation Management Program Task Force produced a manual, How to Develop and Implement An Integrated Roadside Vegetation Management Program, which many states have used in their plan for roadside management. This program serves a variety of purposes, including erosion control, wildlife habitat, scenic qualities, weed control, utility easements, and recreation uses. It incorporates integrated management practices, like burning, seeding, mowing, but also typically incorporates spraying in the control of weeds, damaging insects and invader plant species.

The adoption of IRVM plans began in some states after President Bill Clinton’s Invasive Species Executive Order in 1999 as it encouraged integrated management of road side weeds before and-after projects and use of environmental beneficial landscaping practices. The National Cooperative Highway Research Program published in 2005 Integrated Roadside Vegetation Management: A Synthesis of Highway Practices, which outlined several state IRVMs. The survey found that, out of the 21 states responding to their survey, 10 had a state policy that requires a defined IRVM strategy. Ten other states address vegetation management in road construction projects. Florida, Illinois, Maryland, Minnesota, Montana, Nebraska, Ohio, and Washington all have policy or state law that requires the use of native plant species when constructing or restoring roadside vegetation. The survey also found that mechanical controls are the most commonly used management
technique for states that had an IRVM policy. Alaska, Arkansas, Connecticut, Illinois, Indiana, Maryland, Montana, New York, and West Virginia identified 90% to 100% of their rights-of-way being mowed.

Other states, including California, Iowa, North Carolina, Utah, and Wisconsin, that did not respond to this report’s survey also have IRVM policy. County level governments have also established IRVM policies in Kansas and the Roadside Office of the University of Northern Iowa Roadside Office was established to increase county participation in the state IRVM program.

The Case for Alternatives
Notification and IRVM programs cannot curb all the potential impacts of ROW herbicides on wildlife, given their potential to contaminate wells, drainage ditches, lakes, and air miles from the pesticide-treated area. Additionally, it couldn’t alone insure that habitat is maintained for beneficial organisms. Pesticide labels with instructions, such as Tordon’s “Do not apply directly to water,” are not strong enough given the proximity of many ROW spray routes to water and the potential for ground or aerial drift or runoff. Instructions, such as “Do not contaminate food or feed” or “Avoid drift,” are commonly ignored by applicators spraying in high winds, which carry the spray past the intended application area. The most effective way to eliminate the potential harm caused by pesticide use is to use alternative organic management practices.

Planting native vegetation, using mechanical, biological and nontoxic vegetation control methods are effective nontoxic solutions. Creating and encouraging stable, low-maintenance vegetation is a more permanent vegetation management strategy. The establishment of desirable plant species that can out-compete undesirable species requires little maintenance and meets the requirements for ROW management. Although native vegetation may take more time to establish itself, native flower and grass species are better adapted to local climate and stress than those introduced from Europe and Asia. Native plant species are especially effective in providing increased erosion control,

Goats and Biological Controls
Goats have begun to receive wider recognition as an effective form of biological weed control on ROWs. The utility company Pacific Gas and Electric (PG&E) in 2013 used over 900 goats to clear weeds and brush over 100 acres and along roadways. The project reduced the standard cost of the ROW maintenance by half, and was so successful that, according to the project director, Jack Harvey, they will bring the program back the next year. In 2008, the Maryland Department of Transportation’s State Highway Administration (SHA) utilized 40 goats to maintain eight acres of meadows and bogs, which are inhabited by the threatened Bog Turtle. Using traditional mowing methods would have disrupted habitat or killed the threatened turtles.

Local communities often strongly support the use of goats to manage weeds. This past September activist on Cape Cod protested NStar’s plan to resume spraying herbicides on ROWs by putting on a goat grazing event. The event showcased four goats along road clearing weeds.

Goats and other grazing animals are not the only form of biological control. A number of plant pests can be controlled with the introduction of natural insect enemies. In 2001, researchers at North Dakota State found that a mix population of two types of flea beetles, A. czwalinae and A. lacertosus, were able to reduce the density of leafy spurge by 95% within four years along a train ROW in North Dakota. The study also found that this form of biological control was less expensive than the use of herbicides.
### Table 2: Summary of Selected Pest Management Policies and Programs for Rights-of-Way (ROW)

<table>
<thead>
<tr>
<th>State</th>
<th>Prior Notification</th>
<th>Posting</th>
<th>Pesticide Alternatives/Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>State ROWs that require a permit, 2 notices in local newspapers and “in any other media the central office considers appropriate.” The Department of Environmental Conservation will hold a public hearing on a permit application for a right-of-way spraying if, within 30 days after the second publication of notice under 18 AAC 15.050(c), a hearing is requested by 50 residents of the affected area.</td>
<td>Public ROW where public exposure is foreseeable, pesticides with worker reentry interval of at least 24 hours, post sign or create barrier.</td>
<td>In 2006, several jurisdictions passed resolutions opposing the spraying of pesticides by the Alaska Railroad in their districts, including the Denali, Kenai Peninsula and Matanuska-Susitna boroughs, the Municipality of Anchorage, the City of Seward, the Native Village of Eklutna, and the citizens advisory board for Matanuska-Susitna Valley state parks. The Alaskan Supreme Court also halted plans for the use of glyphosate to kill weeds along Alaskan Railroad track in 2010.</td>
</tr>
<tr>
<td>California</td>
<td>Electric, telephone or telecommunication company provides 48-hour prior notification to all abutting property.</td>
<td>Electric, telephone or telecommunication company, application to pole, post sign on each pole treated.</td>
<td>CalTrans pledged not apply pesticides within 100 feet of school bus stops and use IPM; established reduced herbicide management plans. CalTrans District 1 local governments can opt for no herbicide spraying.</td>
</tr>
<tr>
<td>Connecticut</td>
<td>Electric, telephone or telecommunication company provides 48-hour prior notification to all abutting property.</td>
<td>Electric, telephone or telecommunication company, application to pole, post sign on each pole treated.</td>
<td>Prohibition of aerial broad-spectrum pesticide applications for non-agriculture purposes. Public highway, prohibition of aerial pesticidal dust applications within 100 feet.</td>
</tr>
<tr>
<td>Florida</td>
<td></td>
<td>Highways, roads, streets, alleys, sidewalks and recreational trails within corporate limits of municipalities, post at each end of treated area.</td>
<td>Florida Department of Transportation (FDOT) adopted a roadway and roadside maintenance rule that requires each district to prepare a plan that addresses soil testing, seeding, soil amendments, aeration, and herbicides.</td>
</tr>
<tr>
<td>Iowa</td>
<td>Within 500 feet of application area, notice provided between 3 and 60 days prior to treatment through regular newspapers; if no such newspaper exists, all landowners within 500 feet of application area are directly notified. Individual occupants of “sensitive areas” can contact ROW entity to be notified of any application within 500 feet. Notification registry, 6 hrs to 14 days prior notice for application made within 250 feet of property.</td>
<td>Sign posted prior to application, remain posted for 48 hours at point of entrance to area.</td>
<td>IA DOT required to control invasive weeds along roadsides with herbicides only if mowing or other control not practical. 50 out of 99 counties participate in IRVM program.</td>
</tr>
<tr>
<td>Maine</td>
<td>Roadway, railroad, power lines, conduits, channels or communication lines, public meetings and 45-day comment period on 5-year Vegetation Management Plan and the annual Yearly Operational Plan (YOP) ROW proposal. Plans must look at alternative approaches.</td>
<td></td>
<td>Utility and DOT offer “no spray agreements” for individual or municipality to adopt.</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Commercial applicators conducting broadcast or foliar ROW applications provide prior notice through personal contact or through local newspaper to residents of property within target area.</td>
<td>Roadway, railroad, power lines, conduits, channels or communication lines, prohibition on aerial application to ROWs. Prohibition on handling, mixing or loading herbicide concentrate within 100 feet of sensitive area. Restrictions on pesticide applications with regard to distance to water supplies, surface water, wetlands, inhabited and agriculture areas. YOP must include IPM in the plan.</td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>The Department of Transportation must submit a statement or summary of all invasive weed actions to the state weed coordinator and shall post a copy of the statement or summary on a state electronic access system.</td>
<td></td>
<td>The board must manage invasive weeds on all land or rights-of-way owned by a county or municipality within the district. While managing the invasive weeds, they are directed to preserve beneficial vegetation and wildlife habitat. When possible, management must include cultural, and biological methods.</td>
</tr>
<tr>
<td>Minnesota</td>
<td></td>
<td></td>
<td>State required to use IPM in management of roadside plans. IRVM program have been adopted by seven out of eight counties.</td>
</tr>
<tr>
<td>Montana</td>
<td></td>
<td></td>
<td>The board must manage invasive weeds on all land or rights-of-way owned by a county or municipality within the district. While managing the invasive weeds, they are directed to preserve beneficial vegetation and wildlife habitat. When possible, management must include cultural, and biological methods.</td>
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<tr>
<td>New Hampshire</td>
<td>Applicators to power transmission and distribution lines, gas pipelines, railroads, public road ROW, between June and October 15, notify directly to residences within 200 feet 10 days prior to treatment. Notification in newspapers once for 2 weeks at least 45 days prior to treatment and includes cut out coupon for all abutting owners to receive notice 30 days prior to treatment.</td>
<td>Department of Transportation (DOT) uses an IVRM plan to control vegetation along state highways with most vegetation management accomplished by mowing. The NYSDOT started a project to develop a strategic plan for IVRM and test non-herbicide alternatives for managing ROWs.</td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td>The Rochester region of New York provides public notice of scheduled herbicide applications on the NYSDOT website.</td>
<td>Department of Transportation (DOT) uses an IVRM plan to control vegetation along state highways with most vegetation management accomplished by mowing. The NYSDOT started a project to develop a strategic plan for IVRM and test non-herbicide alternatives for managing ROWs.</td>
<td>Prohibition on aerial application to public road ROW or within 25 feet of road. NC DOT internally adopted IPM program. Private, no-spray agreement available between landowner and utility company.</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Utilities provide prior notice of ROW herbicide applications in inserts of customer bills, adopted by private agreement between state utilities and landowners.</td>
<td>State agencies required to use IPM. OR DOT district IPM plans available to public for review. OR DOT can provide no spray agreement.</td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>Commercial or public applicators conducting restricted use pesticide ground applications to ROW publish notices in 2 newspapers or oral or certified mail notice to all abutting residences. Abutting residence can request additional information regarding application. 12 to 72 hour prior notification to anyone that works or lives within 500 feet of treatment site and on the medically verified hypersensitive registry.</td>
<td>State agencies required to use IPM. OR DOT district IPM plans available to public for review. OR DOT can provide no spray agreement.</td>
<td></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Owners of property within 1,000 feet of electric utility ROW can request to be notified 30 to 60 days prior to treatment. Newspaper notification once a week for 4 weeks, include cut out coupon to be listed on notification registry. Any person making a pesticide application to ROW, 25 to 60 days prior to treatment, must print notice in 2 newspapers, once a week for 2 weeks, notice also by either radio, mail to abutting residents 2 weeks prior or personally delivered 10 days prior to treatment.</td>
<td>State agencies required to use IPM. OR DOT district IPM plans available to public for review. OR DOT can provide no spray agreement.</td>
<td></td>
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<tr>
<td>Vermont</td>
<td>Owner of property within 1,000 feet of electric utility ROW can request to be notified 30 to 60 days prior to treatment. Newspaper notification once a week for 4 weeks, include cut out coupon to be listed on notification registry. Any person making a pesticide application to ROW, 25 to 60 days prior to treatment, must print notice in 2 newspapers, once a week for 2 weeks, notice also by either radio, mail to abutting residents 2 weeks prior or personally delivered 10 days prior to treatment.</td>
<td>State agencies required to use IPM. OR DOT district IPM plans available to public for review. OR DOT can provide no spray agreement.</td>
<td>If ROW traverses private property, can request electric utility not use any herbicides, such request costs $30 to the Dept of Public Services for administrative costs.</td>
</tr>
<tr>
<td>Washington</td>
<td>Certified applicator treating ROW, notice at least 2 hours prior, to abutting residents on the medically verified pesticide hypersensitive registry.</td>
<td>Certified applicator treating ROW, post notice on each “power application apparatus.”</td>
<td>State agencies required to use IPM. OR DOT offers no spray agreements.</td>
</tr>
<tr>
<td>West Virginia</td>
<td>Utility ROW provides notice 60 to 120 days prior to treatment to all news media to all persons on the hypersensitive registry and abutting residents who have made a written request to be notified.</td>
<td>Prohibition on aerial application of picloram and dicamba and all other herbicides within specific distance to recreation areas, residential structures and roads.</td>
<td>Wisconsin's DOT have managed highways landscapes to utilize native and naturalized species and intentionally leave some areas un-mowed to create wildlife habitat. This strategy of natural landscape planting is designed to require minimal maintenance.</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Railroads must notify employees no less than 48 hours before applying a pesticide to a right-of-way that a railroad owns or maintains at a central location accessible to employees of the railroad. The railroad has to make available on its website the public can receive information of pesticide used by the railroad on ROWs. If aerial application occurs on a ROW adjacent to a property owner’s house, the property shall be notified of the application at least 24 hours in advance of the aerial application.</td>
<td>State agencies required to use IPM. OR DOT district IPM plans available to public for review. OR DOT can provide no spray agreement.</td>
<td>Wisconsin's DOT have managed highways landscapes to utilize native and naturalized species and intentionally leave some areas un-mowed to create wildlife habitat. This strategy of natural landscape planting is designed to require minimal maintenance.</td>
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aesthetics, wildlife habitat, and biodiversity. Numerous states have established roadside wildflower programs for these reasons.

Planting native wildflowers along ROWs are often described as beautification projects. However, native wildflowers can also help create habitat for stressed pollinator populations. Native flower projects along highways and roadways create a network of habitats that link natural resources throughout a state. Roadside commonly border or bisect commercial agricultural areas, which bees and other pollinators often help pollinate. Rachel Carson, in her seminal work *Silent Spring*, expressed concern over the habitat destruction pesticide use can have on ROW’s. “Many roadsides are merely one example…of the senseless destruction that is going on in the name of roadside brush control throughout the Nation… Such vegetation is also the habitat of wild bees and other pollinating insects.”

Cutting, girdling, and mowing are successful mechanical means to eradicate unwanted vegetation on various ROWs. Mowing can be useful under certain circumstances, such as when the ROW must be maintained as turf or low vegetation. The schedule for mowing, if done, must adjust to plant life cycles in order for maximum effectiveness. The uses of fabric material and mulch under roadside signs and guardrails and on the edge of the shoulder are effective in suppressing weeds. Other control methods include the use of corn-gluten and steam treatments.

**State Review**

**Florida**– Highway Landscape Guide states, “There are two basic methods of weed control: cultural and chemical. Cultural methods should first be employed; and only when they fail should chemical methods be employed.” In 2009, Florida DOT (FDOT) adopted a Roadway and Roadside Maintenance rule that requires each district to prepare a comprehensive and balanced roadside vegetation management plan. The plan must address soil testing, seeding, soil amendments, aeration, and herbicides. According to the rule, herbicides should only be considered for use on vegetation cannot be controlled by mechanical methods and the DOT may not use restricted use herbicides on roadsides.

**Minnesota**– Statute, section 188.063, requires the state to “use integrated pest management techniques in its management of public lands, including roadside rights-of-way, parks, and forests; and shall use planting regimes that minimize the need for pesticides and added nutrients” (MINN. STAT. § 188.063 (1998)). Department of Transportation (Mn/DOT) has developed an “Integrated Roadside Vegetation Management Program” (IRVM) which fosters the development of local IRVM programs and annual plans at the local, district or maintenance area level within Mn/DOT. 7/8 districts have developed IRVM strategies.

**Montana**– Annotated Code 7-22-2151 states that a state agency that controls land within a district, including the department of transportation, shall enter into written agreement with the [pesticide] board. The agreement must include an integrated noxious weed management plan, which must be updated biennially. The Department of transportation must also submit a statement or summary of all noxious weed actions to the state weed coordinator and shall post a copy of the statement or summary on a state electronic access system. According to 7-21-2121 Weed management programs, the board shall provide for the management of noxious weeds on all land or right-of-way owned by a county or municipality within the district. It shall take particular precautions while managing the noxious weeds to preserve beneficial vegetation and wildlife habitat. When possible, management must include cultural, chemical, and biological methods.

**New York**– State Department of Transportation (DOT) uses an IVRM plan to control vegetation along state highways with most vegetation management accomplished by mowing. The New York State Department of Transpiration (NYSdot) has partnered with Cornell and the State University of New York College of

In 2011, FDOT set up a study to investigate how roadside vegetation management helps support and benefit pollinator populations. According to the study, “Roadsides support a wide variety of pollen and nectar resources; and unlike agricultural landscapes, remain unplowed and therefore can provide potential nesting sites for ground nesting bees.”

> Many roadsides are merely one example...of the senseless destruction that is going on in the name of roadside brush control throughout the Nation... Such vegetation is also the habitat of wild bees and other pollinating insects.
> —Rachel Carson, *Silent Spring*
Poisoned Dreams

continued from page 12

bring us after the repeated exposures we’ve experienced, or what long term problems we may face.

If someone tells you, “Just because you can smell something, doesn’t mean it will hurt you,” DON’T believe this! There are serious side effects from inhaling pesticides.

For the last two and a half years, our family has been living through a horrible nightmare. We don’t know how long this will last. We don’t know how to resolve it.

Pesticides CAN BE DANGEROUS. They are not studied very well, especially long term effects. Our society has made it seem that they are safe, but so much about them and the side effects of being exposed are still unknown. Even if you are not the person spraying, you may be affected in ways you never considered.

We weren’t safe within the walls of our own house. We were poisoned at home.

Editor’s Note: Stories of poisoning and contamination are too frequent. This story of the Frandsen’s pesticide poisoning in Utah reflects the failure of the regulatory system to manage adequately those who store and use the pesticides, in this case as a business. There is a lack of responsiveness to those who are poisoned by dumping of pesticide containers, the mixing of pesticides, the rinsing of equipment and the resulting non-target effects of pesticide drift and chemical run-off to neighboring sites. Those in positions of authority to protect communities and people from poisoning and contamination often are advocates of those they’re regulating, rather than those who are being poisoned. Typically, they see the practitioners that pollute as their constituents, having come from the user community or from the chemical industry.

This is a heart-wrenching story. And while there is a tendency to see the solution as better restrictions, ultimately our dependence on these chemicals has created the situation the Frandsen family is suffering through. We know from our work at Beyond Pesticides that the typical hazardous pesticides widely used for pest control are not necessary to manage pest populations. If we begin the transition to alternative practices in our communities, either by doing it ourselves or demanding it of service providers, the polluting businesses and exterminators described here will disappear. The Frandsen house is the equivalent of a “fenceline” community where people struggle within the toxic chemicals that invades communities where chemical plants are operating.

The answer is within our grasp if we advance in our communities land and building management practices, and organic systems that don’t rely on the toxic chemicals that have unnecessarily invaded peoples homes, schools, and work places.

Thanks to the Frandsen’s for sharing their story to help others advance the necessary changes in local, state, and national policy to protect our health and the environment.

—Jay Feldman

Environmental Science and Forestry (SUNY-ESF) to release studies on the use of native grasses and alternatives to herbicide use. In 2008, the NYS DOT started a project to develop a strategic plan for IVRM and test non-herbicide alternatives for managing ROWs. The Rochester region of New York provides public notice of scheduled herbicide applications on the NYS DOT website.

Wisconsin—Passed Act 286 in 2009 which requires rail roads to provide pesticide notification no less than 48 hours before applying a pesticide to a right of way that a railroad owns or maintains at a central location accessible to employees of the railroad. The railroad also has to make available on its website how the public can receive information of pesticide used by the railroad on ROWs. If aerial application occurs on a ROW adjacent to a property owner’s house, the property shall be notified of the application at least 24 hours in advance of the aerial application. Wisconsin also utilizes an integrated vegetation management system to foster sustainable roadside vegetation. Wisconsin’s DOT have managed highways landscapes to utilize native and naturalized species and intentionally leave some areas un-mowed to create wildlife habitat. This strategy of natural landscape planting is designed to require minimal maintenance.

For more information on ROW policies and tools on how to organize for the adoption of such policies at the state or local level, please contact Beyond Pesticides. A fully cited version of this article, including a more in-depth look at several additional states, can be found online at www.beyondpesticides.org/weeds.

Conclusion

People have a right to be informed and protected from the unnecessary use of herbicides to which they are potentially exposed on nearby rights-of-way. In order to avoid exposure to the herbicides applied on ROWs, policies must require prior notification to nearby property, posting of signs, access to information regarding the herbicides used, and the use of a strong IPM program in the management of ROWs.

This review is intended as an overview of states and localities that are moving forward in their efforts to protect people from unintended exposure. Implementation and enforcement are absolutely critical. Although the many states listed in this review are exemplary in notification or in requiring integrated pest management, the states listed may be ineffective in protecting the people near the ROWs.
Exposed and Ignored
How Pesticides are endangering our nation’s farmworkers


Farmworker Justice’s new report, Exposed and Ignored: How pesticides are endangering our nation’s farmworkers, is a clarion call for the U.S. Environmental Protection Agency (EPA) to update worker protection standards (WPS) for the 1-2 million people who endure long hours, backbreaking labor, and incessant chemical exposure to provide food to hungry Americans. The WPS, the main set of rules intended to protect farmworkers from chemical exposure, have not been updated in over 20 years.

Exposed and Ignored conveys the importance of WPS reform by sharing the stories of farmworkers unaware of the health dangers associated with chemical exposure and subsequently poisoned by pesticides in their attempts to earn a meager living for themselves and their families. One account comes from Juana, who packed boxes of conventional lettuce during her first pregnancy and, “…didn’t know how important it was to wear gloves and protect myself from those pesticide residues.” She lost her child to miscarriage and wonders if it was due to working closely with the pesticide-laden lettuce. Ten years later she and her youngest son were both diagnosed with lymphoma around the same time. “Our house was (and still is) along the edges of lettuce fields,” she says in the report. “I would hang my clothes outside in the fresh air, and my son would play in the water that collected in the irrigation ditches. We didn’t know the risks.”

Most workers in the U.S. look to the Occupational Safety and Health Administration (OSHA) for standards to protect them from exposure to hazardous chemicals. However, farmworkers are not eligible for protection under these rules. Protection for farmworkers from pesticides is left to EPA’s authority under the WPS, a standard that is far more lenient than OSHA rules and is fundamentally inadequate.

Farmworker Justice’s report calls for the following changes to the worker protection standards:

- Provide more frequent and more comprehensible pesticide safety training for farmworkers;
- Ensure that workers receive information about specific pesticides used in their work;
- Require medical monitoring of workers who handle neurotoxic pesticides;
- Require safety precautions and protective equipment limiting farmworkers’ contact with pesticides;
- Require Spanish translations on pesticide labels to ensure that this information can be quickly and accurately explained by supervisors and accessed by workers who have questions about proper usage and safety precautions;
- Implement buffer zones around schools and residential areas to protect farmworker families from exposure to pesticides through aerial drift;
- National reporting of pesticide use and pesticide poisonings to EPA; and,
- Increase funding for research on the health effects of the repeated pesticide exposures farmworkers experience and prioritize investments in technological innovations aimed at preventing exposures.

Exposed and Ignored immerses the reader in the daily hardships, including the uncertainty that farmworkers and their families must suffer through, and it becomes quite evident that pesticide exposure compounds and further exacerbates the troubles associated with an occupation in which 60% of America’s 2.5 million farmworkers and farmworker families live in poverty. The report reveals the injustice of indifference to the laborers that bring food to American’s dinner tables each night. These workers don’t have the information required to protect them, access to medical coverage when they inevitably fall ill, or adequate data to trace their illness back to pesticide applications. As the report says, “Farmworkers and their families are exposed to pesticides on a daily basis, in large quantities and over sustained periods. Consumers have become aware of the risks that pesticides pose to their health. We should not continue to ignore the dangers such exposures pose to farmworkers’ health, in both the short and long term.” A call to EPA that must not be ignored.
Save the Date!
Beyond Pesticides’ 32nd National Pesticide Forum

April 11-12, 2014
Portland, OR

Convened by
Beyond Pesticides
Northwest Center for Alternatives to Pesticides
Institute for Sustainable Solutions, Portland State University

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Find resources for activists and information on Beyond Pesticides’ campaigns.

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$25 Individual
$30 all-volunteer org
$50 public interest org
$100 business

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- Go to -
www.beyondpesticides.org/join/membership.php

- Or -
Simply mail a check in the enclosed envelope to:
Beyond Pesticides, 701 E St SE, Washington, DC 20003

Questions?
Give us a call at 202-543-5450 or send an email to info@beyondpesticides.org

Vol. 33, No. 3 Fall 2013
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A quarterly publication of Beyond Pesticides
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- Online: Donate at www.bit.ly/donateBP.

- Through Earth Share: If you are an employee of the federal government or a company that includes Earth Share in its workplace giving program, consider choosing Beyond Pesticides by checking the appropriate box. If you are a federal employee, Beyond Pesticides’ number is 11429 in the Combined Federal Campaign.

Donate $150 and receive the BEE Protective kit, featuring Beyond Pesticides’ Habitat Guide and Honey Bee Pesticide Free Zone sign!

We appreciate your support!
Best wishes for the holiday season and new year.