

Pesticides and You

News from Beyond Pesticides / National Coalition Against the Misuse of Pesticides (NCAMP)

Beyond Pesticides

Be•yond Pes•ti•cides

(bē ond´) *prep., n., adv.* (pes´tə cīds) *n.*

1. taking action to bring full public awareness of the unacceptable and unnecessary poisoning and contamination of the environment caused by biocides (synthetic pesticides that damage life), and moving society toward safe alternatives — policies, practices and materials — for pest management; protecting the fragile web of human health and the environment.

2. the new name of the National Coalition Against the Misuse of Pesticides (NCAMP).

**The Building of State Indoor Pesticide Policies •
The Dispossessed, Living with Multiple Chemical Sensitivities •
The Schooling of State Pesticide Laws: A Petition to
the Federal Government and a Response**

Movement in the Direction of Protection: Taking Stock of State Pesticide Laws

Sometimes you just don't want to hear the negative stuff. It gets to be too much. You look for the positive. Point to models and strive to move in that direction.

Well, we have been documenting models. Model state laws. Laws that protect people from pesticides. Laws that other states might wish to consider. In the last issue of *Pesticides and You*, we found 30 states that were doing something, *anything*, to protect children from pesticides in schools. We found some good things happening after many months of pouring over state laws and talking with state officials. The fact that there is movement in the direction of protection is a good news story and testimony to the incredible fortitude of thousands of grassroots people and organizations.

But, let's face it. What we found is that as a nation, the picture is not good. The protections are too narrow in scope and spotty across the country. A child in one state may have some protection from pesticides in school, but just down the road in the next state another child may have none.

In this issue, we continue our review of state laws. This time we look for the degree to which the public is provided, through state laws, with information (right-to-know) on pesticide use in public indoor spaces and residential buildings. We also looked for states that require integrated pest management (IPM) in their buildings. The good news is that 15 states are doing something, anything, regarding public right-to-know when pesticides are used in indoor public spaces. (However, we just could not bring ourselves to count three of the 15, which must only provide information when people ask.) Three states are conducting IPM programs in their buildings.

But, we have got to face the bad news. This issue of *Pesticides and You* provides a telling picture of the poor state of the public's right-to-know when pesticides are used in indoor public spaces and residential buildings. Since 40 states have taken away the authority of local governments to restrict pesticide use or require disclosure of use in their towns and cities, only the state government can act. These state preemption laws forbid the adoption of local pesticide ordinances similar to those that ban or restrict smoking in restaurants, offices and other publicly accessible areas.

Of the 12 state governments that have enacted laws that require public notification when pesticides are used in one

or more type of public building, only four require commercial buildings, like restaurants, to post notices of pesticide use. Some state requirements are probably not even worth mentioning. California, for instance, requires the posting of signs in a conspicuous place for structural pesticide applications made to a commercial or industrial building, "unless the owner or owner's agent objects." One state official asked us how we could expect a restaurant owner to want to notify customers that poisons are being used.

When we released our schools report, we also petitioned EPA to adopt national standards to protect children from pesticides used in schools. That letter and EPA's response is printed in this issue. We will continue to push for a national standard to protect children.

EPA staff has described notification and IPM as a political issue with a "big P." So, folks, get ready to PLAY Politics. Use the information here to move your state into action by citing the movement in other states. NCAMP can provide you with any background material to establish the basis and need to protect people, especially children, from pesticide exposure. The good news begins here.

NCAMP's New Name

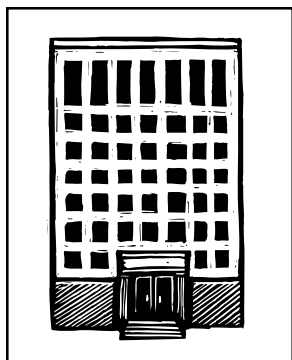
Now, an explanation of the cover for this issue. In an effort to better capture the mission of our organization, the board of directors of NCAMP voted last year to change our name to Beyond Pesticides. For the near future, we will continue to use NCAMP along side the new name in order to maintain continuity. The change reflects a redoubling of our efforts as an organization to effect changes that significantly reduce reliance on hazardous pesticides and puts in place alternative approaches. There is no time to waste in making sure that alternatives are widely adopted.

Thanks for your support.



—Jay Feldman is Executive
Director of NCAMP

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Printed with soy-based inks on Ecoprint Offset, and cover on Quest™, both 100% post-consumer waste and processed chlorine free.

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Pesticides and You ©1999 (ISSN 0896-7253), published 4 times a year by Beyond Pesticides/National Coalition Against the Misuse of Pesticides, is a voice for pesticide safety and alternatives. Beyond Pesticides/NCAMP is a non-profit, tax-exempt membership organization; donations are tax-deductible.

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Two Calls for Right-to-Know:

FROM MINNESOTA

Dear Beyond Pesticides/NCAMP,

We are a non-profit grassroots organization that serves as a sounding board for local residents to the city council and government. Currently our Environment Committee is working to expand a city ordinance regarding pesticide applications. Our main goal is to add language requiring residents and commercial sprayers to give their neighbors better notice before and after chemical spraying so that they can take steps to protect themselves. Can you send us examples of state or local policies that have such requirements?

Scott Foss

Macalester-Groveland Community

Council

Saint Paul, MN

Dear Mr. Foss,

It is vital that there are groups like yours pushing for stronger pesticide laws. Minnesota is among 40 states that have amended their state pesticide laws to prohibit local jurisdictions from adopting requirements that are more stringent than state law. In the absence of this authority, local jurisdictions have focused on improving the protections associated with publicly owned land, such as parks, schools and city or town offices. State governments have become the focal point for improved right-to-know on private property. Minnesota Pesticide Control Law, chapter 18B section .09, states that statutory and home rule charter cities can enact an ordinance containing the pesticide application warning information set by the state, but cannot enact an ordinance that is any stronger. The ordinance that a statutory or home rule charter city may enact requires all commercial or noncommercial applicators who apply pesticides to any lawn or yard, including parks, golf courses, athletic fields, playground and other similar recreation property, to post signs at the entrance and adjacent to the treated area. The signs must re-

main posted for 48 hours after the application. Beyond Pesticides/NCAMP has produced a 'Model Ordinance' and maintains examples of local ordinances from around the country, which may be of use to you. If policies are adopted in your community or school district, please let Beyond Pesticides/NCAMP know so we can inform others around the country who are working on similar policies. Best of luck with your efforts and let us know what we can do to help.

FROM CALIFORNIA

Dear Beyond Pesticides/NCAMP,

I have recently started reading your newsletter and absolutely love it. Your recent issue on pesticides and schools was enlightening and disturbing. I read the California laws for posting outdoor pesticide applications for the schools. My daughter is in 8th grade and I have never seen a posting. I will contact her school now and find out. What I would like to know is if the same law applies to apartment housing. It never even occurred to me that they might spray around my apartment. We had a spider infestation and they were making their homes on everyone's doorstep. It didn't bother me. I sort of enjoyed looking at the little critters. However, all of a sudden they disappeared and I found out that the management sprays regularly. Does the landlord legally have to tell me what they use and how often? I need to approach my apartment manager and landlord with my concerns, but I would like to know the laws, if any, first. Thanks so much for all your vital and dedicated work to educate our public.

Shelly Lewis

La Costa, CA

Dear Ms. Lewis,

Thank you for your kind words and concern about pesticide use at your daughter's school and your apartment. Like many environmental laws, you have to always read the fine print. As we noted in our review, California's state posting law for schools only applies when the pesticides used have a worker reentry interval of at least 24

hours. These are only a fraction of the pesticides typically used in and around schools. Regarding your apartment, state law requires the commercial pest control operator to provide notice to the operator of the property and any tenants immediately prior to the structural indoor or perimeter application. Notice includes information on the pest brand name and active ingredient(s) of the pesticide to be applied, and a precaution statement. Notice is not required for applications made to lawns, or applications made by your landlord. Despite this serious deficiency in California state law, your county agricultural commissioner can adopt requirements regarding prior notification and posting of signs for lawn, structural and agriculture applications. Agreements can also be reached with individual landlords or managers to provide residents with basic safety information. Also, local communities have taken it upon themselves to require more protections at the local level. Let us know if we can help you further with an organizing effort in your community and apartment complex.

Adverse Effects Reporting Curtailed by EPA, Call for Poisoning Reports

Dear Beyond Pesticides/NCAMP,

Thanks for your article on page 5, Vol. 18 No 3 of *Pesticides and You* about EPA's adverse effects reporting rule. It's worse than you reported, though. You reported that "registrants have at least a year to come into compliance with the new chronic/delayed requirements," but in fact the PR Notice that EPA issued on 8/4/98 says, "By this PR Notice... the Agency ELIMINATES for all registrants the requirement to report incidents in which a registrant has been informed that a person or non-target organism may suffer a delayed or chronic adverse effect in the future...The elimination of this requirement will remain in effect for at least one year and for any further period until the Agency provides written

notice to registrants that the requirement has been reinstated.” (Emphasis mine.)

The courts have held that the government cannot impose regulatory requirements without “fair notice.” This generally means rulemaking with public notice in the Federal Register. So EPA’s pesticide program seems to think it can eliminate a requirement that was in a rule without public notice. But will it ever reinstate that requirement without rulemaking? Don’t count on it.

We have taken enforcement actions where adverse effects incidents were reported to registrants (i.e., pesticide manufacturers), but they failed to report them to the EPA pesticide program. This includes lawsuits. So when NCAMP receives calls from the public about health effects, please encourage people to send a written report to the registrant. The registrant is required to summarize and forward the information to EPA’s pesticide programs. People who really want to be sure EPA knows about a problem can send a copy of their report to EPA’s Office of Pesticide Programs (Kate Bouve, FIFRA 6(a)(2) desk, Office of Pesticide Programs, 401 M Street, SW, Washington D.C. 20460). To be most useful, reports should describe exactly what product was used, what happened, to whom and when, with particular emphasis on the indications that the problem(s) were caused by pesticides.

Is there a national clearinghouse or database for pesticide injury claims and lawsuits? This kind of information would help us find pesticide registrants that are not providing adverse effects information to EPA. And it might assist attorneys representing injured people as well, since showing a pattern of problems would support their cases.

Sincerely,
James Handley, Attorney
Toxics and Pesticides Enforcement
Division, EPA

Dear Mr. Handley,
Thank you for your clarification of the EPA requirement that chemical manufacturers report to the agency chronic/delayed adverse

effects associated with their products under section 6(A)2 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Beyond Pesticides/NCAMP does receive calls from people who believe they have been adversely affected by pesticides, some of whom are involved in lawsuits. Part of our standard advice to callers is to report such incidents to their state lead pesticide enforcement agency (most often the agriculture department), their regional EPA office, and to the manufacturer of the pesticide involved.

As for your question about a national database of pesticide injury claims, Beyond Pesticides/NCAMP has established a “Pesticide Incident Report” database in association with our “Toxic Warning Signals” project. This is a follow-up to our earlier project called “Voices for Pesticide Reform,” which documented many of the shocking pesticide-related incidents reported to us over recent years. We also have an unofficial database of attorneys who have worked on toxics cases.

In response to your third point, **there is no one place to find an accurate count of all injuries caused by pesticide exposure in the U.S.** The Agency for Toxic Substances and Disease Registry at the Center for Disease Control (CDC) deals with Superfund sites, so it does not maintain a national count of reported pesticide injuries. However, the American Association of Poison Control Centers (AAPCC) compiles reported incidents collected through the 73 Poison Control Centers (PCCs) around the nation. Their website (<http://www.aapcc.org>) offers information on poisonings by substance, collected for its Toxic Exposure Surveillance System (TESS). Dr. Jerry Blondell, health statistician, EPA’s Health Effects Division of the Office of Pesticide Programs (OPP) says EPA periodically purchases the data from the AAPCC. Reporting between PCCs and state health departments varies by state and is usually voluntary. Thirty-one states require some form of reporting by physicians, hospitals, laboratories, etc. to their state authority, usually the state health department. However, only eight of these state governments conduct routine



surveillance activity. For example, in California, which has the most comprehensive system, doctors are required to report to the county health department, which then reports to the county agricultural commissioner, and then the state Department of Pesticide Regulation periodically compiles them. The Pesticide Telecommunications Network (800-858-7378, <http://ace.orst.edu/info/nptn/>), which is partially EPA funded, also maintains a list of caller incidents, and then periodically reports them to Frank Davido, pesticide incident response officer, EPA’s Information Resources and Services Division at OPP (703-305-7576). The National Center for Health Statistics (<http://www.cdc.gov/nchswww>) keeps track of deaths due to toxics poisoning.



Kagan Owens, is Beyond Pesticides/NCAMP’s Information Coordinator

Write Us!

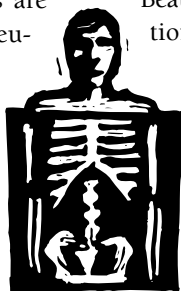
Whether you love us, hate us, or just want to speak your mind, we want to hear from you. All mail must have a day time phone and a verifiable address. Space is limited so some mail may not be printed. Mail that is printed will be edited for length and clarity. Please address your mail to:

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Pesticide Industry Using Human Subjects to Test Toxicity

Pesticide companies are using human subjects to test the toxicity of organophosphate pesticide chemicals. Though the Environmental Protection Agency (EPA) says it informally discourages the practice, the agency is still accepting this data for implementing the *Food Quality Protection Act*. Human testing has been going on for decades, according to statements made by industry representatives during the last Tolerance Reassessment Advisory Committee (TRAC) meeting in September, 1998. The Environmental Working Group (EWG) recently completed a report, "The English Patients: Human Experiments and Pesticide Policy," which points out the ethical and political issue related to this practice. The report derives its name from the fact that most of the human studies EWG identified are being conducted in England and Scotland. EWG points out that the use of human tests have actually weakened standards. This is because EPA implements an extra 10-fold factor of safety for children when calculating risk to account for extrapolating from animal tests—but with human tests it does not have to do this. The medical journal, *The Lancet*, Vol. 352, No. 9127, says that some of the organophosphates are actually being tested for therapeutic uses for neural diseases, but states that the drug companies have not been very forthcoming with information about ethical standards. Some activists point out that such studies are unnecessary because alternative humane testing methods are currently available. The companies responsible for the testing include Amvac for its flea collar ingredient dichlorvos, and Rhone Poulenc for the insecticide aldicarb, according to EWG. Contact EWG, 1718 Connecticut Avenue, NW, #600, Washington DC 20009, 202-667-6982, email



info@ewg.org, or see website for copy of report at <http://www.ewg.org>.

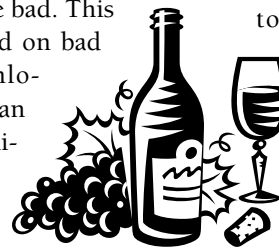
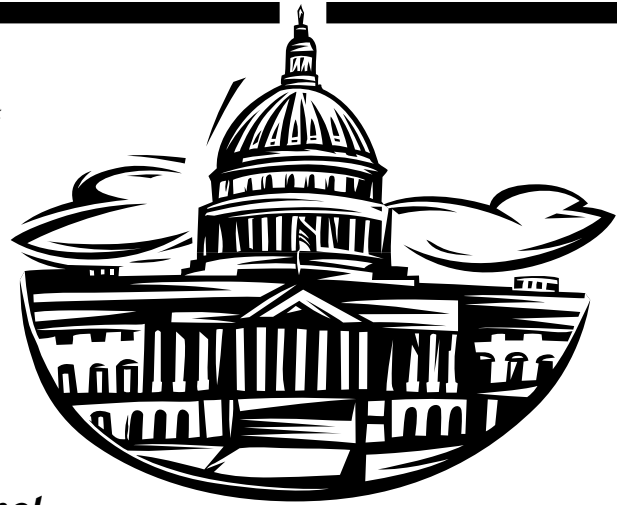
French Wines Found Contaminated with Wood Preservative Pentachlorophenol

A wine industry group acknowledged on December 28, 1998 that some wines produced in France may have been contaminated with polychlorophenols, specifically pentachlorophenol, for the past decade. The wine industry says the contamination causes "no health hazard," according to *L'Express* news magazine, but that it makes the wine taste bad. This bad taste was often blamed on bad corks. However, pentachlorophenol is a probable human carcinogen that contains dioxin; it is not registered for food uses and has no "safe" level, according to Beyond Pesticides/NCAMP. The chemical is used to treat wood used for the walls of wine storage facilities, and "trace quantities" seeped into such wines as Bordeaux, Burgundy, Beaujolais and champagnes. Contamination in champagne has been known of since 1982. The industry chose not to inform the public so as not to cause unnecessary alarm. According to *L'Express*, Sophie Gerard, a spokesperson for the wine industry, says that less than one percent of Bordeaux wine was affected and that the problem has now been resolved through replacing the treated wood with solid oak which does not need treatment. She cites a study by the Conseil Interprofessionnel du Vin de Bordeaux (CIVB), also mentioned in *Wine Spectator* magazine, which found that of 1344 wine samples, only 11 were contaminated with a wood

preservative. The scientist, Pascal Chatonnet, who discovered the contamination, says that about 50% of his samples had been contaminated. According to *Wine Spectator*, vintners believe it is the humid conditions in wine cellars that cause the polychlorophenol molecules from wood ceilings and walls to evolve into 2,4,6, trichloroanisole (TCE), which is commonly cited as the chemical responsible for making wine taste "corky." Contact Beyond Pesticides/NCAMP. Also see story below on pentachlorophenol's link to dioxin.

Study Shows 87% of Dioxin "in" Pentachlorophenol- Treated Wood, Fuels Beyond Pesticides/ NCAMP's Fire on Poison Poles Project

The Environmental Protection Agency released an "Inventory of Sources of Dioxin in the U.S." in April, 1998, which showed pentachlorophenol treated wood as the largest source by far of dioxin in the U.S. In its dioxin-like compound emission inventory for the year 1995, EPA inventoried four categories in terms of their "Toxic Equivalency Quotient (TEQ)": air emissions of dioxin, land



sources, water sources, and product sources. Total air emissions were estimated at 2,745 g TEQ/yr with the largest source being municipal waste incineration. Total estimated land sources were 208 g TEQ/yr, and water sources amounted to 19.5 g TEQ/yr. These are all dwarfed in comparison by the 25,050 g TEQ/yr that is found in products, with pentachlorophenol wood at the top of the list at an estimated 25,000 g TEQ/yr. It is still unknown how much of the dioxin stored in the penta treated wood escapes into the environment. Section 10-1 of the Inventory discusses the phototransformation of chlorophenols. "Several researchers demonstrated that CDD/CDFs [types of dioxin] can be formed via photolysis of pentachlorophenol (PCP) under laboratory conditions." However, it is still uncertain if photolysis occurs to the same degree or greater in nature.

Beyond Pesticides/NCAMP staff met with Frank Sanders, director of the Antimicrobials Division (AD) in EPA's Office of Pesticide Programs, and Connie Welch, chief of AD's Regulatory Management Branch, in February 1999 on the reregistration (safety reevaluation) of wood preservatives, slated for completion in 1999. The science chapter of pentachlorophenol is now complete and has been sent by EPA to the wood preserving and chemical industry for review. Beyond Pesticides/NCAMP has requested access to this document and EPA has said the request will be granted. The agency is ready to begin its evaluation of creosote and copper chromated arsenicals (CCA). EPA staff stressed that they would be grateful to receive any information on wood preservatives, especially where these chemicals may be harmful to children. The division is working closely with Canada's environmental ministry through this process. Canada has a cradle-to-grave policy for its pesticide evaluation, so it may force the U.S.

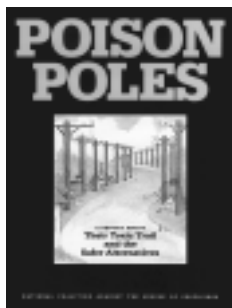
to have a "bigger picture" view of wood preservatives' impacts, not only from use, but also from manufacturing, transport, and disposal. *Contact Beyond Pesticides/NCAMP.*

Danish Study Correlates Breast Cancer with Banned Insecticide Dieldrin

Dr. Annette Hoyer, M.D., et al, concluded a study begun twenty years ago that shows a strong link between serum levels of the banned insecticide dieldrin and the incidence of breast cancer in women.

The scientists, from several medical centers in Denmark, collected blood samples from 7,712 women who had participated in a heart study in 1976 and tested them for 48 different pesticides. In 1996, they again took blood samples of 244 of the women who had developed breast cancer and 477 who had not. The study, published in the *Lancet*, Vol. 352, No. 9143,

states, "The risk of breast cancer was twice as high in the women with the highest serum concentrations of dieldrin as that in women with the lowest concentrations and a significant dose response relationship was apparent." The study received significant media coverage because, though dieldrin was banned in 1975 in the U.S. due to its toxicity and oncogenicity in wildlife, it is an organochlorine that persists in the environment. Dieldrin is also a hormone mimicer which can interfere with the endocrine system. The study looked for a correlation with DDT and PCBs, but did not find a significant relationship. Past studies analyzing these two types of chemicals have been conflicting. *Send \$2 to Beyond Pesticides/NCAMP for a copy of the study (12 pp).*



Newspaper Investigation Shows Air Force Covered Up Effects of Agent Orange on Veterans

According to a *San Diego Union-Tribune* investigation, a government health study on the effects of Agent Orange, an herbicide used in the Vietnam War by the U.S. military, was tampered with by high ranking U.S. Air Force officials. In its \$200 million study, the Air Force attempted to conceal the deadly effects of Agent Orange, claims reporter Clark Brooks. The study examined 1,000 Vietnam veterans of Operation Ranch Hand of 1979, who were responsible for aerial and ground spraying of Agent Orange and other herbicides.

EPA says that over 100 million pounds of Agent Orange were sprayed on jungles as a defoliant. According to the *Union-Tribune*, it was also sprayed, beginning in 1962, on crop fields to destroy staple foods of the Vietnamese. Besides being an herbicide, Agent Orange contains a known carcinogen, dioxin. The Air Force drafted reports in 1984, withholding information on high rates of birth defects and infant

death among children of Vietnam veterans and downplayed veterans' high incidence of cancer, says the *Union-Tribune*. Among the several cancers listed on the veterans' compensa-

tion list are Non-Hodgkins Lymphoma, prostate cancer, and soft tissue sarcoma. The Air Force study also left out information on reproductive effects associated with exposure to Agent Orange exposure, leaving veterans to start families without full knowledge of the risks, says the article. An estimated 25,000 Vietnamese children have suffered birth defects due to their parents' exposure to Agent Orange during the Vietnam War.



Richard Albanese, a scientist who started out on the research project, but was later removed, says the withholding of information on adverse effects attributable to Agent Orange is “against medical ethics.” Rep. Bernard Sanders (Ind.-VT) is calling for congressional hearings to investigate the accuracy of the Air Force study. Senate minority leader Tom Daschle, who has been interested in the study’s results since the 1980s, has proposed that veterans may not have received due compensation, and is calling for \$2-4 million more for further research. Veterans groups assert that the health study should have been conducted by independent scientists. The study began in 1979 and is slated for completion in 2006. *Contact Beyond Pesticides/NCAMP.*

EPA Releases Controversial “Pesticides and Food” Brochure for National Distribution

The Environmental Protection Agency finally released its controversial “Pesticides and Food” brochure that it was required to produce under the *Food Quality Protection Act*. The brochure is intended for voluntary distribution through grocery stores around the country. While industry groups say the brochure is alarmist, public health and environmental groups say it is not strong enough. When Beyond Pesticides/NCAMP first received a draft copy of the brochure in January 1998, then called “Pesticides on Food,” it was four pages long. The final brochure is reduced to two pages that do not describe the health effects associated with pesticides at all, and instructs people to wash, trim, and peel their food, though some residues remain in the food and are impossible to wash off. It reduced the section on organic foods and mentions that there are no national standards, leading readers to conclude that no standards at the state level exist. It dedicates one whole page to directing people to their website. On a posi-

itive note, the brochure does point out several reasons why children are more susceptible to harm from pesticides. Beyond Pesticides/NCAMP notes that the EPA was handed an impossible task by Congress in requiring publication of an informative brochure whose voluntary distribution is

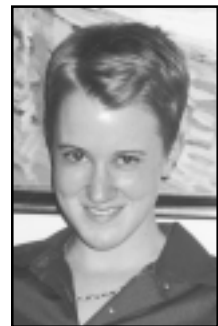


dependent on retail grocers that sell conventional, chemically grown, not organic food. You have to wonder whether Congress envisioned a “don’t worry, be happy” brochure or simply thought it would never see the light of day. Politics! *Look for the brochure at your local supermarket, or contact Beyond Pesticides/NCAMP for a copy. If your grocer doesn’t display it, ask the manager why.*

President Clinton Issues Executive Order on Invasive Species

The threat of noxious and invasive species has become such a menace that President Clinton issued an Executive Order on Invasive Species (number 13112). It orders any federal agency whose activities may affect the spread of noxious and invasive species to take preventive action immediately. The order states that such efforts should be carried out in a cost effective and environmentally sound manner, but activists believe that it will result in extensive pesticide use as has been the case in battling noxious weeds in the West. The order requires agencies to identify how their actions affect the spread of noxious species, mitigate this as much as possible, provide for the restoration of native species, develop technology to control invasive species, and promote public education on the issue. The President also calls for the creation of an Invasive Species Council, which will offer national guidance through an Invasive Species Management Plan and en-

courage regional and state plans to control invasive and noxious species. The council will consist of the Secretaries of the Interior, Agriculture, Commerce, Defense, and Transportation, and the Administrator of the Environmental Protection Agency. The Council will work together with existing entities that work on this issue, including the Federal Interagency Committee for the Management of Noxious and Exotic Weeds. *Contact Beyond Pesticides/NCAMP.*

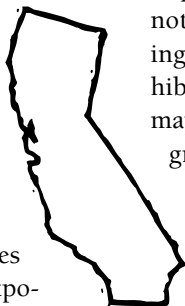


WELCOME HILARY

We are happy to welcome Hilary Melcarek as our new Information Assistant to the Beyond Pesticides/NCAMP staff. Hilary is a recent graduate in natural resource management from the University of Michigan’s School of Natural Resources and the Environment, in Ann Arbor, Michigan, where she concentrated on organic agriculture, pesticides and development issues. During her course of study at U of M, she spent a semester abroad on a field course in Costa Rica, where her concerns about these issues were heightened. While in Costa Rica, Hilary led groups of international volunteers on nightly patrols aimed at sea turtle conservation and education. Her senior year of college, she led a group of volunteer students to Tucson, AZ to perform trail restoration in Saguaro National Park. Hilary moved to DC last August, intending to work for an environmental non-profit in the field of pesticide awareness, and she is happy to have joined the Beyond Pesticides/NCAMP team.

Parkinson's Linked to Environmental Factors in CA Study

The *Journal of the American Medical Association* published a study on January 27, 1999 (Vol. 281, No. 4) that strongly links environmental pollutants with Parkinson's disease, especially if the disease develops after age 50. This connection had long been suspected, as early-onset Parkinson's that develops before age 50 accounts for only 10% of all cases in the U.S, according to the *Los Angeles Times*. Environmental pollutants cited as possible culprits include pesticides and cigarette smoke. The scientist leading the study, Dr. Caroline Tanner, M.D., Ph.D., and colleagues at the Parkinson's Institute in California, studied 19,842 white male twins who are enrolled in the National Academy of Sciences/National Research Council World War II Veterans Twin Registry. Of 193 individuals who developed Parkinson's, the likelihood that their twin sibling would also have the disease was found to be no higher than the population at large. Thus it is induced that genetics are not the primary cause of the disease. The next step of the inquiry is to narrow down the exact causes by investigating pollutant exposures of those who contracted the disease after age 50. Past studies have reached a similar conclusion, including one by the now deceased Andre Barbeau, O.C., M.D., Clinical Research Institute of Montreal, in his 1985 study "The Relative Roles of Aging, Genetic Susceptibility and Environment in Parkinson's Disease." His study of 5000 people with Parkinson's found a very high correlation with pesticide exposure due to a history of high pesticide use in the region of residence. One fact that led to the theory is that many of the test subjects with Parkinson's that developed before age 50



showed defects in the liver enzymes that detoxify chemicals in the body. View an abstract of the study at http://www.ama-assn.org/sci-pubs/journals/archive/jama/vol_281/no_4/oc81035a.htm, or contact Beyond Pesticides/NCAMP.

Beyond Pesticides/NCAMP Calls for National Standards to Protect Children in Schools; Industry Disputes Problem

On January 28, 1999, Beyond Pesticides/NCAMP released its report, "The Schooling of State Pesticide Laws," (see *Pesticides and You*, Vol. 18, No. 3) which shows that basic protections against pesticide exposure in children's schools at the state level are uneven and inadequate. The study shows that only 30 of 50 states addressed one or more of five categories of protection including 1) prior written notice, 2) buffer zones for aerial spraying, 3) posting of warning signs, 4) prohibitions on when and where spraying may take place at schools, and 5) integrated pest management programs. No one state offers protections in all five categories. Beyond Pesticides/NCAMP wrote a letter to Environmental Protection Agency Administrator Carol Browner and Secretary of Education Richard Riley petitioning them to initiate a rulemaking to establish federal standards to protect children from pesticide exposure at school. (See petition and letter on page 20.) Copies of the study were also sent to key congressional leadership.

The Bureau of National Affairs *Daily Environment* reported on the release of the study, and quoted an industry spokesperson's rebuttal. The ar-

ticle, published on February 2, 1999, interviewed Gene Harrington of the National Pest Control Association, who said, "As many as 14 or 15 states" require pest control operators who apply pesticides at schools to be trained. He also said that states do an adequate job of protecting children, and that requiring prior notification to parents and school staff is burdensome and will divert resources from implementation of integrated pest management. (Part two of *Beyond Pesticides/NCAMP's* series of studies analyzing state pesticide laws can be found on page 9 of this issue of *Pesticides and You*.)

Florida Study Finds Malathion Poisoning from Medfly Spraying

A study conducted by Omar Shafey, Ph.D., a Florida Health Department epidemiologist, found that 123 cases of illness and hospitalization were related to the organophosphate insecticide malathion, which was aerially sprayed by the state to combat the Mediterranean Fruit Fly (medfly) in 1997 and 1998. However, before the study was released, changes were made to downplay the effects of malathion, according to an article in the *Tampa Tribune* by environmental reporter Jan Hollingsworth. The original study recommended that spraying be ceased, and that the state compensate poisoning victims and provide spray shelters for those seeking to avoid exposure.

The final study version stated that, "the findings...do not allow an association between malathion/bait applications and reported adverse health effects to be established," and

recommended that further study be conducted. The *Tampa Tribune* reports that pressure from the state's agricultural agen-



cies triggered the changes, as damage from the medfly are considered a serious threat to the state's citrus industry. Sharon Heber, head of the Florida Health Department's Environmental Health Division, and Brian Hughes of Environmental Epidemiology, both deny the accusations. *Contact Beyond Pesticides/NCAMP or Jan Hollingsworth, Tampa Tribune, 813-259-7607, <http://tampatrib.com/news/medfly.htm>.*

New York Times Magazine and Washington Post Run Front Page Story on Genetically Engineered Crops

In its October 25, 1998 issue, the *New York Times Magazine* focused its cover story on a new potato created by Monsanto, called "New Leaf." The New Leaf contains genetic material from the bacterial toxin *Bacillus thuringiensis* (Bt). The article points out that the potatoes are not required to be labeled even though they technically serve as a pesticide as well as a food. Under the *Federal Food Drug and Cosmetic Act*, the Food and Drug Administration, which is responsible for labeling foods, must only label genetically engineered (GE) foods if they contain common allergens or have been materially changed. The article does a thorough job of explaining the potential problems with this technology, including pest resistance, damage to beneficial insects, and genetic "pollution" from gene flow into non-GE crops, which may create "superweeds."

According to the *Washington Post*, such gene flow has already occurred in the case of a herbicide resistant canola oil plant in Canada, which crossed with a weed of the same family. The *Post* story, on February 3, 1999, featured a canola farmer who says Monsanto's Roundup Ready canola variety was found growing on his property even though he had not planted it. The



new GE plants are patented by Monsanto, and the company does not want farmers reusing its seeds or potato eyes for the next year's crop. So, farmers who purchase the seeds must sign a "Technology Use Agreement," allowing Monsanto to perform field inspections using a simple genetic test for three years after purchase. The farmer in this case is outraged because Monsanto conducted an unauthorized sampling, and he is now being sued by the company for patent violation. A Monsanto representative is quoted as saying that the money earned from this and related lawsuits will be used for a "scholarship fund to help the children of farmers go to college." *For copies, contact Beyond Pesticides/NCAMP. For further information on Monsanto's GE crops, contact Rural Advancement Foundation International, USA, P.O. Box 4672, Chapel Hill, NC 27515, 919-929-7099, msligh@rafiusa.org.*

Florida Couple Wins Chlordane Contamination Case

When George and Carolyn Fox called the Orkin Exterminator company to spray their house for termites in 1993, little did they know the trouble that would ensue. The exterminator used existing stocks of the chemical chlordane, which had been banned in 1988, and contaminated the couple's home to the point that it was uninhabitable. The couple sued the company, and on November 20, 1998, won the suit, receiving almost \$2,000,000 in damages. According to the *Tampa Tribune*, they were awarded \$200,000 for their historic home, \$200,000 for mental anguish, \$1.2 million in punitive damages, and \$168,000 to replace the value of antiques that Mrs. Fox collected. The house has now been condemned by state health officials. *The couple was represented by the Russel Snyder Law Firm, 355 West Venice Avenue, Venice, FL 34285, 941-485-9626.*

Wisconsin Department of Agriculture Begins IPM Pilot Project in WI Schools

Six Wisconsin schools were chosen from a group of volunteers to be part of a pilot project on how to implement integrated pest management (IPM). The project is a joint effort among the WI Department of Agriculture (DOA), Trade and Consumer Protection, and the University of Wisconsin's Extension Service. The goal is to help schools find effective alternatives to pesticides for pest control, and also to collect feedback on the clarity of the DOA's manual on IPM. The schools chosen are located in Milwaukee



and several other school districts, and represent a variety of pest control problems. A team of specialists will make three visits to the schools during the year to assist with and assess progress. In addition to these schools, fourteen other schools volunteered to test the pest management manual with help via phone from the IPM team specialists. The number of schools interested in the program demonstrates the schools' desire and willingness to move away from toxic pesticide use. *For more information, contact Ned Zuelsdorff, Pest Management in Schools Project, Wisconsin Department of Agriculture, Trade and Consumer Protection, P.O. Box 8911, Madison, WI 53708, 608-224-4550.*

Beth Fiteni is Beyond Pesticides/NCAMP's Program Coordinator



The Building of State Indoor Pesticide Policies

Most state laws fail to require pesticide use disclosure and reduced pesticide use for indoor public spaces and residential buildings

by Kagan Owens and Jay Feldman

With limited exceptions, the public is denied basic information on pesticide use in public indoor spaces, residential buildings, and workplaces on a daily basis is repeatedly exposed to low levels of toxic chemicals without its knowledge. Despite advances in pest management techniques that utilize alternative non-chemical measures, requirements that pest managers reduce their reliance on toxic chemicals in public indoor spaces and residential buildings are extremely few. While the federal government has done nothing to require public right-to-know when pesticides are used in public indoor spaces, workplaces, and residential buildings, state governments have begun to step in to take action.

One of the most neglected areas of pesticide regulation is the indoor environment, where pesticides can fill the ambient air, leaving residues on furniture, ceilings, walls, and in the building's ventilation system. In fact, the Environmental Protection Agency's *Nonoccupational Pesticide Exposure Study* (NOPES) found 26 different pesticides in indoor air.¹ Of the 26 pesticides NOPES detected, 19 are nerve poisons, 18 may cause cancer, 15 are mutagens, 15 cause birth defects, and 19 can cause reproductive problems. EPA, in the report, states that the common roach, ant, and termite killers, along with a frequently used disinfectant, are found in the majority of households tested, often at tens times their concentration in outdoor air.

States can and do play a valuable role in protecting people and the environment from such exposures. However, only 12 state governments, barely one-quarter of the states nationwide, have enacted laws that require public notification when pesticides are used in one or more type of public building. Some of these states require different methods of pesticide use notification, including posting notification signs, providing prior notification, and otherwise making available information regarding a

With limited exceptions, the public is denied basic information on pesticide use in public indoor spaces and residential buildings and on a daily basis is repeatedly exposed to low levels of toxic chemicals without its knowledge.

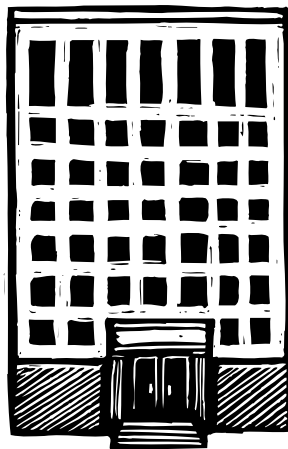
pesticide application. Three states mandate an integrated pest management (IPM) program for state facilities to better protect people. Indoor IPM is an approach to pest management that utilizes a mix of pest prevention and control techniques, including biological, mechanical, sanitation, and, as a last resort, least toxic chemical practices. However, the conventional pest control industry mostly views IPM as a method

that treats toxic pesticides as an equal partner to the non-chemical approaches available, and therefore does not necessarily reduce the inherent hazards of its practices. Of the 12 states, only one state prohibits pesticide use when patients are in hospital rooms. Four states, require that information on pesticide use be made available upon request.

States should require that all types of structural sites such as multiple dwelling complexes, workplaces, government buildings, commercial buildings and restaurants, health care facilities, and schools, provide notification of pesticide use and require an IPM program that utilizes synthetic pesticides only as a last resort.

This report is intended to shed light on the degree to which states, in the case of publicly accessible buildings, require public disclosure, or right-to-know, of pesticide use and mandate IPM. It serves as a tool for those seeking to improve the level of protection from pesticides, either through improved enforcement of existing laws or by the adoption of new ones.

State involvement in pesticide right-to-know and IPM is critical, given the lack of attention to this in the federal pesticide law, *Federal Insecticide, Fungicide and Rodenticide Act* (FIFRA), and EPA regulations. People that utilize public space have no way of knowing whether pesticide applications have occurred, nor do they have information on the hazards of the pesticides used. Therefore, the state role in this area is critical. The federal government has yielded this important area of law and regulation to the states, and as a result has contributed to a patchwork of very spotty and uneven protection across the country. In the absence of federal and state attention to these



issues, local jurisdictions have increasingly jumped in to address the concern. However, except in the case of ten states, local governments are preempted, or prohibited, by state law from regulating structural pesticide use on anything other than their publicly owned land.² Therefore, comprehensive law must be adopted at either the state or federal government level.

This is the second report in a series that reviews state pesticide statutes and regulations. School pest management is addressed in a separate study by Beyond Pesticides/NCAMP, entitled *The Schooling of State Pesticide Laws*. (See *Pesticides and You*, Vol. 18, No. 3, 1998.) The review does not identify state laws that address lawn applications, other outdoor pesticide uses, or fumigation requirements. The review does not evaluate state enforcement of their policies and the level of compliance. It is also not a review of local efforts to disclose pesticide use and require IPM in public spaces, which is an important and critical piece of the larger national effort to protect people and the environment from pesticides.

Findings

Only 12 states require disclosure, or right-to-know, in their state laws when pesticides are used in public indoor areas, workplace, or residential building,³ and do so by several different means. This leaves over 75 percent of the states, or the majority of the United States population, without basic protections from pesticides when they are used in publicly accessible buildings. The 12 states, including California, Connecticut, Georgia, Illinois, Maine, Massachusetts, Michigan, Montana, New Jersey, Pennsylvania, Texas, and Virginia, have notification requirements, such as posting or prior notification, for pesticides applied to one or more structural sites. The posting of signs is the most common form of notification. Eight states require posting in one or more structural sites. Five states have requirements for prior notification. Prior notification is generally provided for those who live or work at the site. One state, California, leaves the option of posting or providing notice to the building owner. Two states, Connecticut and Pennsylvania, have established notification registries for people who request to be notified of specific structural pesticide applications. Four states, including California, Delaware, Kansas, and New York, require the information regarding the application to be available upon request. This is the extent to which Delaware, Kansas, and New York regulate in this area. Connecticut law does

The use of pesticides in apartments, condominiums, duplexes and other types of multiple dwelling complexes is usually out of the resident's control.

not ensure tenants to be provided label(s) of the pesticides that will be applied. Three states, including Connecticut, Oregon and Washington require state agencies to adopt an IPM program. Only one state, Illinois, has restrictions on the use of pesticides, which are specific to health care facilities only.

Recommendations

No matter what type of facility, notification and posting should be required when all structural pesticide applications take place. No matter what type of pesticide is applied, no matter whom the applicator is, whether commercial applicator or building custodian or owner, all pesticide applications should be preceded by notification of people likely to be exposed, which includes all people who enter the building. Sufficient prior notice, at least 72 hours prior to the application, is necessary for people to prevent any unwanted exposure. Notification in these areas is especially important for people who are sensitive to chemicals as they could be placing their lives in immediate danger just by walking into a grocery store or public library. It is also necessary to enable people to avoid exposure and the associated hazards and risks. If permanent posted notices are required, then temporary posted notices should also be used. Temporary posted notices are needed along with the permanent notices, because people tend to ignore the permanent notices. Signs should be posted at least 72 hours before the application commences and remain in place for an additional 72 hours. Posting signs at entrances and adjacent to the areas treated is an effective way to inform people who would otherwise be completely unaware. Signs should include information on who to contact for further information, the name of the pesticides used, and when and where they will be applied. Information on the potential hazards of the pesticides used should be provided before, and made available at the time and after, the application occurs.

All buildings should use the principles of an IPM program, using alternative non-chemical pest management techniques first, and least toxic pesticides should be used only as a last resort. Proper maintenance of a building's structure and continual pest monitoring is also important to pest prevention in an IPM program.

Multiple Dwelling Complexes

Most people in the United States spend the majority of their day indoors. The use of pesticides in apartments, condominiums, duplexes and other types of multiple dwelling complexes is usually out of the resident's control, thus they are involuntarily exposed to potentially danger-

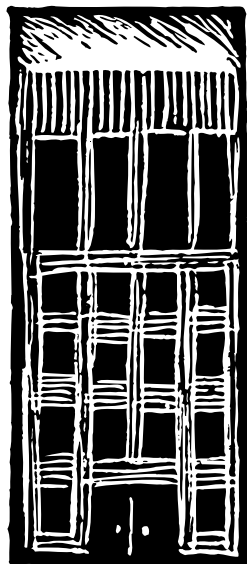


Table 1. Summary of State Right-to-Know Policies Regarding Structural Pest Control

STATE	Multiple Dwelling Complex	Workplace	Government Building	Commercial Building	Health Care Facility
California	Notice to tenants required immediately before initial treatment. Any person may request name of pesticide applied by structural pest control company; company must provide within 24 hours.	Any person may request name of pesticide applied by structural pest control company; company must provide within 24 hours.	Any person may request name of pesticide applied by structural pest control company; company must provide within 24 hours.	Any person may request name of pesticide applied by structural pest control company; company must provide within 24 hours.	Any person may request name of pesticide applied by structural pest control company; company must provide within 24 hours.
Connecticut	Notice of pesticide to be used and notice of registry given to manager or resident of unit to be treated prior to contract and before any additional pesticides used. Registry for residents provides 24 hour prior notice of any application made within 100 yards of adjoining property line.			Registry for tenants & building owners provides 24 hour prior notice of any application made within 100 yards of adjoining property line.	
Georgia			Buildings owned or leased by "an agency," open to public must post sign at entrance & remain for 24 hours, or use permanent notice.		
Illinois					Sign required to be posted at entrance to building and treatment area. Prohibits use of certain pesticides while patients in the treatment area.
Maine	Posting required when application made to residential, commercial or institutional area of "likely human use," and remain for 48 hours.	Posting required when application made to residential, commercial or institutional area of "likely human use," and remain for 48 hours.	Posting required when application made to residential, commercial or institutional area of "likely human use," and remain for 48 hours.	Posting required when application made to residential, commercial or institutional area of "likely human use," and remain for 48 hours.	Posting required when application made to residential, commercial or institutional area of "likely human use," and remain for 48 hours.

Table 1. Summary of State Right-to-Know Policies Regarding Structural Pest Control, continued

STATE	Multiple Dwelling Complex	Workplace	Government Building	Commercial Building	Health Care Facility
Massachusetts	Prior notification 7 days to 48 hours.	Prior notification: "to anyone upon request," "Public building." Post sign at entrance to building or area.	Prior notification: "to anyone upon request," "Public building." Post sign at entrance to building or area. Post sign at entrance to any federal, state or local government building and remain for 48 hours.	Prior notification: "to anyone upon request," "Public building." Post sign at entrance to building or area.	Prior notification: "to anyone upon request," "Public building." Post sign at entrance to building or area.
Michigan					
Montana			Post sign at entrance to building owned or leased by a "public agency" and open to public at area treated until pesticide is dry.		
New Jersey	Prior written notification to resident of a multiple family residence to be treated, 48 hours.	Post permanent signs at commercial and public workplaces.	Post permanent signs at "public buildings."	Post sign at treated area in mall, airport, etc. until pesticide has settled or dried.	Post permanent sign at nurse's station at health care facilities.
Pennsylvania	Prior notification, MCS Registry, 72 to 12 hour, if application within 500 feet of one's primary or secondary residence.	Prior notification, MCS Registry, 72 to 12 hour, if application within 500 feet of one's workplace.			
Texas	Prior notification to all residential property units with 5 or more units to be treated & adjacent units, 48 hours. OR post sign in common access areas. 5 or fewer units, notice at time of application.	Workplaces required to give information to anyone who works in the building. Signs posted in common access areas & remain for 48 hours.			
Virginia	Prior notification to tenant unit to be treated, 48 hours.				

ous chemicals that put their health at risk. This is particularly problematic for people with multiple chemical sensitivity (MCS).⁴ However, otherwise healthy people recognize that low level exposure to pesticides can have adverse impact on their nervous and immune system, affect their respiratory system, and lead to chronic effects, such as cancer. People experience, and the scientific literature supports, a range of acute effects such as headaches, nausea, disorientation, inability to concentrate, and breathing and vision problems from exposure to neurotoxic pesticides.⁵

Over the past decade, people with MCS have taken such matters to court and won some important rights. For example, in a landmark housing discrimination suit, *Sally Atkinson v. Lincoln Realty Management Co.* (Docket No. H-4358, 1990), the Pennsylvania Human Relations Commission (PHRC) ordered the realty company to “cease and desist from discriminating on the basis of handicap” by using pesticides near a tenant with MCS. PHRC’s final order in the suit required the management company to “reasonably accommodate” Ms. Atkinson’s handicap by formulating an IPM strategy for areas in and around her building, implementing an organic lawn care maintenance program, and installing better ventilation equipment. A similar decision was reached in 1994 when the Secretary of Housing and Urban Development (HUD), through its Office of General Counsel, issued a MCS-related determination of reasonable cause and charge of discrimination against County Creek Association, Inc. in Vienna, Virginia for violating the *Fair Housing Act*. In a March 5, 1992 HUD memorandum, entitled “Multiple Chemical Sensitivity Disorder and Environmental Illness as Handicaps,” from Associate General Counsel for Equal Opportunity and Administrative Law, HUD recognizes that MCS is a handicap under Section 504 of the *Federal Rehabilitation Act* and subsection 802(h) of the *Fair Housing Act*.

Eight states, including California, Connecticut, Maine, Massachusetts, New Jersey, Pennsylvania, Texas, and Virginia, require notification of structural pesticide applications to residents of multiple dwelling complexes. California and Connecticut have provisions for notification at the time of the initial application while the other five states re-

quire prior notification. Residents can request to be placed on a registry to be notified of structural pesticide applications made to adjoining property in Connecticut. Maine requires posting notification signs at the time of the application. California, Delaware, Kansas, and New York require that information regarding a pesticide application is made available to a tenant upon his/her request. Massachusetts has the longest prior notification requirements of seven days to 48 hours. Texas requires notification to extend beyond the resident of the treated dwelling by including other residents in the building who share ventilation systems and walls.

As a rule, prior notification to all building occupants and posting of signs should take place when pesticide applications occur in hallways, stairwells, laundry rooms, mailrooms and other common access and use areas.

People experience, and the scientific literature supports, a range of acute effects such as headaches, nausea, disorientation, inability to concentrate, and breathing and vision problems from exposure to neurotoxic pesticides

Workplaces

Five states, including Maine, Massachusetts, New Jersey, Pennsylvania, and Texas, require structural applications to specifically notify employees working in the building. Texas is the only state that requires both prior notification and posting of signs. California, Delaware, Kansas, and New York do not provide

notification of the application but do provide information regarding a structural pesticide application upon request.

Employees should have a right-to-know when pesticides are applied in their workplace. Prior written notification should be given seven days to 72 hours prior to application to all employees that work in the building. Plenty of time needs to be provided in order to notify people who do not work everyday and for those who need to take appropriate measures to miss work in order to avoid exposure. Signs should be posted at each entrance to the building, at a central bulletin in each office, and adjacent to each treated area in order to protect people that missed the written prior notification warning.

Government Buildings

The public has access to numerous government facilities. Five states have notification requirements for structural pesticide applications to government buildings. Georgia, Michigan, and Montana notification requirements specifically pertain to buildings owned or leased by a government agency

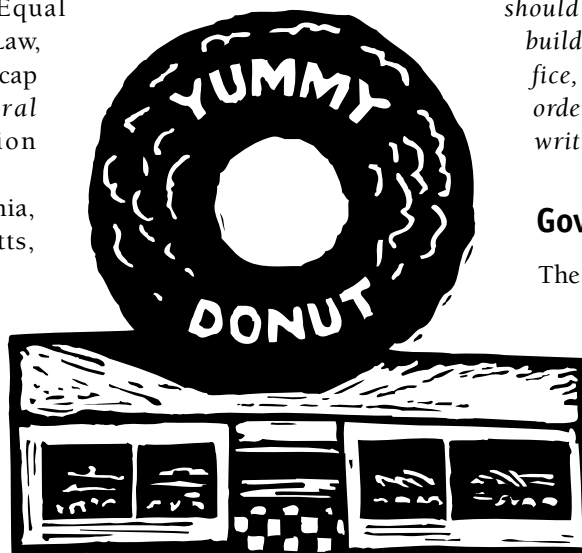


Table 2. Summary of states that require integrated pest management (IPM)

State	Government Buildings
Connecticut	State agencies are required to use IPM at facilities under its control, once commissioner establishes guidelines.
Oregon	State agencies required to use IPM at facilities under its control.
Washington	State agencies required to use IPM at facilities under its control.

and open to the public. Although Massachusetts and New Jersey do not specify government buildings, their notification requirement for “public buildings” includes government. Connecticut, Oregon, and Washington require state agencies to use IPM at their facilities. California and Delaware require information regarding a pesticide application to be available upon request.

In order to inform the public that enter government buildings, notification signs should be posted at each entrance to the building and treated area.

Commercial Buildings

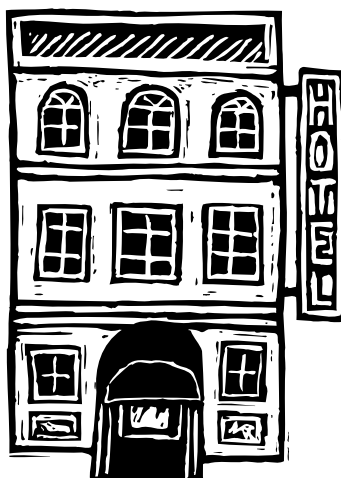
Commercial buildings can include grocery stores, malls, hotels, motels, restaurants and the like. Potential exposure to pesticides applied at these sites is self-evident due to the regularity with which people frequent these types of establishments. Limiting the exposure of customers to pesticide applications is crucial. Four states, including Maine, Massachusetts, Michigan, and New Jersey, require notification for structural pesticide applications to commercial buildings. In Connecticut, building owners or tenants can request to be placed on a registry to be notified of structural pesticide applications made to adjoining property. California and Delaware require information regarding an application to be available upon request.

In order to inform the public who enter these commercial sites, notification signs should be posted at each entrance to the building and treated area.

Health Care Facilities

Pesticides applied in a health care facility can have critical effects on its patients. Five states, including Illinois, Maine, Massachusetts, New Jersey, and Texas specifically require notification of pesticide applications made in health care facilities. Illinois prohibits the use of certain pesticides while patients are in the treated area. California and Delaware require information regarding an application to be available upon request.

All patients should be removed from the pesticide treatment area for at least 72 hours. It is crucial that these facilities have a strong IPM program in place.



State Review




California Structural Pest Control Act, section 8538 of the California Codes, requires a structural pest control company to provide notice to the owner, the owner’s agent, and tenant of the premises to be treated. Notice includes the name of the pest to be treated, the pesticide to be used and a “caution” statement. Notice must be left at the time of the initial treatment, and is provided either by mail, personal delivery or posting at a conspicuous place on the property. The section also states that signs are to be posted at a conspicuous place for structural pesticide applications made to a commercial or industrial building, “unless the owner or owner’s agent objects.” Notice is required for indoor and perimeter structural pest control applications only. California Code of Regulations, title 16, section 1970.4(f), states that a structural pest control company that applies a pesticide within, around or to any structure, must provide the common, generic, or chemical name of each pesticide used to anyone that requests it within 24 hours.





Connecticut Public Act No. 97-242, *An Act Concerning an Integrated Pest Management Program and the Registration of Pesticides*, requires each state department, agency and institution to use IPM at the facilities under its control once the Commissioner of Environmental Protection has provided a model IPM plan. The plans are currently being developed and should be available to the agencies by summer 1999. Connecticut General Statutes, section 22a-66a(a), require a commercial pest control operator, prior to entering into a written or oral agreement, to provide the manager or resident of the property to be treated with information about a registry and the label(s) for the pesticide(s) to be applied. The applicator will provide “to such persons” the label for any other pesticide(s) to be applied prior to the initial application of that pesticide(s). Section 22a-66a(b) states that an owner or tenant can request to be placed on a registry maintained by the commissioner of the Department of Environmental


and should be available to the agencies by summer 1999. Connecticut General Statutes, section 22a-66a(a), require a commercial pest control operator, prior to entering into a written or oral agreement, to provide the manager or resident of the property to be treated with information about a registry and the label(s) for the pesticide(s) to be applied. The applicator will provide “to such persons” the label for any other pesticide(s) to be applied prior to the initial application of that pesticide(s). Section 22a-66a(b) states that an owner or tenant can request to be placed on a registry maintained by the commissioner of the Department of Environmental

Protection in order to be notified at least 24 hours in advance of a pesticide application made to adjoining property. Notice includes the time of the application, common name of the pesticide, the location of the application, how to contact the applicator business and is made by telephone, mail or personal notification.


 Delaware Pesticide Rules and Regulations, section 14.01(g), states that a commercial applicator must have a copy of the pesticide label being used at the application site available to those that request a copy. "Any interested person at or adjacent to the application site" can request information contained on the pesticide label from the commercial applicator.

 Georgia House Bill 1317, passed in 1996, requires posting notification signs when restricted use pesticides are applied in public buildings. Public buildings include "buildings owned or leased by an agency, which is open to the public, including but not limited to any building which provides facilities or shelter for public use or assembly or which is used for educational, office or institutional purposes" (1996 GA. LAWS 1317). A notice of pesticide application is required to be at the building's entry, posted before commencement of the application and for 24 hours after. If pesticides are applied regularly, a permanent notice must be posted at the building's entry. Posted notice must include when and where the application is to occur and how to obtain a copy of the material safety data sheet (MSDS) and label of the pesticide(s) applied from the building operator. The building operator is required to keep all records of pesticides applied, including all MSDS' for a period of five years. Georgia Rules and Regulations, section 620-3-.02(k), require posting when structural applications extend six feet outside of a structure.


 Illinois Administrative Code, title 77 section 830.800(g), prohibits the use of any liquid, aerosol, mist, fog, dust or powder pesticide formulation to patient areas or rooms of a health care facility when patients are in the areas or rooms. Health care facilities include, but are not limited to, nursing homes, mental health facilities, and hospitals. This section also requires pest control technicians to post a sign at all entrances to the treated room or area in the health care facility in order to keep all unauthorized individuals out of the treated area. The pest control technician must also provide information regarding the pesticide application to the person responsible for patient care in the treated area.

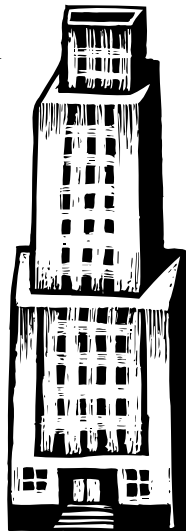
 Kansas Administrative Regulations, section 4-13-4a(c), requires the pesticide business licensee to give the owner or manager information regarding a pesticide application made in an office building, "apartment house" or "other multiple tenant structure." Information regarding the application is available from the owner or manager to any tenant of the residence or business treated upon request.

Only 12 state governments, barely one-quarter of the states nationwide, have enacted laws that require public notification when pesticides are used in one or more type of public building.

 Maine Board of Pesticide Control regulations, chapter 22 section 2(G), requires posting signs for structural pesticide applications when the applications occur in an area of "likely human use." Such areas include any area within 150 feet of a building used for residential, commercial or institutional purposes or are regularly used by persons other than the persons authorizing or conducting the

application. The sign must be posted before the commencement of the application and remain posted for 48 hours afterwards.

 Massachusetts Code of Regulation, title 333 section 13.10, requires notification for indoor pesticide applications. Section 13.10(3)(b) requires commercial applicators to notify residential unit occupants seven days to 48 hours in advance of a pesticide application. Notification must include information regarding the pesticide application, the applicator, ways to minimize exposure, and a statement of precaution for sensitive individuals. Section 13.10(1) requires posting signs for indoor pesticide applications to public buildings by commercial applicators. Public buildings include "buildings where the public has access, work, recreate, including but not limited to commercial buildings, health care facilities, restaurants, hotels, places of worship, stores, airports and other public places" (CMR title 333 § 13.10(1) (1996)). Wood preservatives, enclosed baits and traps are exempt from posting requirements. Signs are posted at entrances to the room or area where the application has occurred, prior to the beginning of the application. Section 13.10(3)(d) states that commercial applicators will "provide pre-notification to anyone upon their request, which will include the date of the next treatment, the locations to be treated and the potential pesticide(s) that may be used" (CMR title 333 § 13.10(d) (1996)). Section 13.10(3)(c)(3) states that the applicator must provide information regarding a previous treatment to any person upon their request.





Michigan Administrative Code, section 285.637.11(4), requires posting signs for an insecticide application to a commercial or public building or health care facility. A public building is defined as a building that is owned or operated by a federal, state or local government. The building manager is to post signs, given to him/her by the applicator, at the entrances to the building and keep posted for 48 hours.



Montana Pesticide Act, section 80-8-107 of the Montana Code Annotated, requires posting signs when a building operator or commercial applicator applies pesticides to any public building. A public building is defined as “a building that is owned or leased by a public agency and that is open to the public, including but not limited to a building that is used for education, office, or institutional purposes” (MONT. CODE. ANN. § 80-8-107(1)(b) (1997)). Signs must be posted at the time of the application at each entrance to the building or room. Signs are to remain posted until the pesticide is dry or the reentry interval has expired. If applications take place on a regular basis, signs may be permanently displayed. Signs state how to obtain information regarding the application, including a copy of the MSDS and label for the product(s) used. Posting is not required for pesticide baits, pastes and gels.



New Jersey Administrative Code, title 7 section 30-9.10(b), requires commercial applicators to provide 48 hour prior notification for any commercial structural application to a “multiple family residence.” Notification must be given in writing and include information on the application and how to obtain a copy of the label(s) of the pesticide product(s). Prior notification is not required for crack and crevice applications or flushing agents. Section 30-9.10(c) requires posting permanent signs at “commercial and public buildings” for a pesticide applied by a commercial applicator in order to notify employees of the building. The section continues to state specifically where to post permanent notices in health care facilities, restaurants, hotels and motels, and commercial workplaces. For applications made in malls, stores, airports and “other large public places,” signs are to be posted during the application at the entrance to the treated area and remain posted until the pesticide has settled or dried. Crack and crevice applications at malls, stores, airports and “other large public places” are exempt from the posting requirement.



New York Environmental Conservation Law, section 33-0905(5), requires a certified commercial applicator treating a multiple dwelling, building or structure to supply the owner or owner’s agent of the building with information regarding the pesticide(s) used. This information is available to all “occupants,” upon request, from the owner or agent.



Oregon State Pesticide Control Act, section 634.660 of the Oregon Revised Statutes, requires the following agencies to implement an IPM program: “State Department of Agriculture, State Department of Fish and Wildlife, Department of Transportation, State Parks and Recreation Department, State Forestry Department, Department of Corrections, Oregon Division of Administrative Services and each Oregon institution of higher education for the institution’s own building and grounds maintenance” (OR. REV. STAT. § 634.660 (1995)). Each person responsible for pest management in each agency must be trained in IPM. The law establishes an Interagency Integrated Pest Management Coordinating Committee, which consists of an IPM representative from each agency listed above. Its meetings are open to the public.

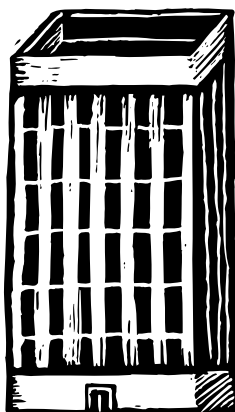
One of the most neglected areas of pesticide regulation is the indoor environment, where pesticides can fill the ambient air, leave residues on furniture, ceilings, walls and in the building’s ventilation system.



Pennsylvania Code, title 7, sections 128.111 to 128.112, establish provisions for the pesticide “hypersensitivity registry” maintained by the Department of Agriculture. The registry provides 12 to 72 hour prior notification for commercial and public pesticide applications that occur within 500 feet of one’s primary home, secondary home and workplace. Prior notification includes information on the pesticide application and, upon request, how an individual can obtain a copy of the label. Placement on the registry requires a doctor’s verification of an individual’s sensitivities to pesticides.



Texas Structural Pest Control Board Regulations, section 595.8, states that when a pesticide is applied by a licensed applicator to a residential property with five or more rental properties, the owner or manager of the property must notify the residents of each unit to be treated and those that share a wall, ceiling or floor to the application area. “Consumer information sheets” regarding the application are left at the front door of or inside each unit 48 hours before each planned treatment. If “consumer information sheets” are not provided, the owner or manager must post notification signs 48 hours prior to the application



in “common access areas.” Section 595.7 of the regulations states that for residential rental properties with less than 5 units, the “consumer information sheets” and the name of the pesticide(s) used must be given to all residents at the time of the application. “Consumer information sheets” state that a copy of the label and MSDS can be obtained from the pesticide licensee. This section also states that employers, building managers, administrators of workplaces, hospitals, nursing homes, hotels, warehouses and food-processing establishments are required to provide, upon request, “consumer information sheets” regarding pesticide applications to anyone who works in the building. Signs must be posted for 48 hours in common access areas to notify all employees. The signs state how to obtain more information on the pesticide(s) applied.



Virginia Landlord and Tenants Act, section 55-248.18(A) of the Code of Virginia, requires a landlord to give written notice to a tenant at least 48 hours prior to his/her application of a pesticide in the tenant's dwelling unit.



Washington Revised Code, chapter 17.15, requires all state agencies that have pest control responsibilities, including the Department of Agriculture, State Noxious Weed Control Board, Department of Ecology, Department of Fish and Wildlife, Department of Transportation, Parks and Recreation Commission, Department of Natural Resources, Department of Corrections, Department of General Administration and each state

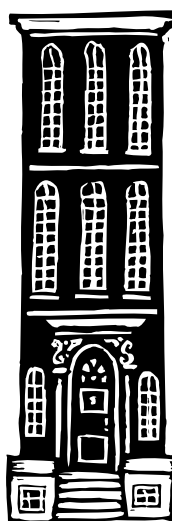
People have a right to be informed about the use and adverse effects of pesticides to which they are potentially exposed in public indoor spaces and residential buildings.

institution of higher education, for the institution's own building and grounds maintenance, to follow the principles of IPM. Each state agency listed is required to designate an IPM coordinator. The Interagency IPM Coordinating Committee consists of the IPM coordinators from each state agency listed and a representative from the Department of Labor and Industries and the Office of the Superintendent of Public Instruction. All committee meetings are open to the public.

Conclusion

People have a right to be informed about the use and adverse effects of pesticides to which they are potentially exposed in multiple dwelling complexes, workplaces, government buildings, commercial buildings and health care facilities. In order to avoid exposure to the pesticides applied for structural pest management, laws must require prior notification of the application, posting of signs, access to information regarding the adverse effects of the pesticides used, and the use of a strong IPM program at the site.

For information on the above discussed statutes and regulations and tools on how to organize for the adoption of such policies at the state or local level, please contact Beyond Pesticides/NCAMP. In addition to working at the state or local level to have such policies adopted, work with your building managers and custodians as well.



Kagan Owens is information coordinator at Beyond Pesticides/NCAMP; Jay Feldman is executive director of Beyond Pesticides/NCAMP

- 1 EPA, *Nonoccupational Pesticide Exposure Study (NOPES)*, Atmospheric Research and Exposure Assessment Laboratory, Research Triangle Park, NC, EPA/600/3-90/003, 1990.
- 2 Ten states that do not preempt local governments from regulating structural pesticide use include Alaska, California, Hawaii, Maine, Maryland, Nevada, South Dakota, Utah, Vermont and Wyoming. Please note that California vests local authority in this area solely with the county agriculture commissioners.
- 3 This is a review of state pesticide laws with the exception of the *Landlord and Tenants Act* of Virginia. There may be in some cases other state laws not cited here that regulate pesticide use and notification in dwelling complexes, workplaces, government buildings, commercial facilities or health care facilities.
- 4 MCS is based on five criteria. 1) “The symptoms are reproducible with repeated chemical exposure.” 2) “The condition is chronic.” 3) “Low levels of exposure result in manifestations of the syndrome.” 4) “The symptoms improve or resolve when the incidents are removed.” 5) “Responses occur to multiple chemically unrelated substances.” Nethercott, J.R. et. al., “Multiple chemical sensitivities syndrome: toward a working case definition,” *Archives of Environmental Health* 48:19-26, 1993.
- 5 Ashford, N and Miller, C, M.D., *Chemical Exposures: Low Levels, High Stakes*, New York: Van Nostrand Reinhold, 1991; Sherman, J, M.D., *Chemical Exposure and Disease: Diagnostic and Investigative Techniques*, New York: Van Nostrand Reinhold, 1988

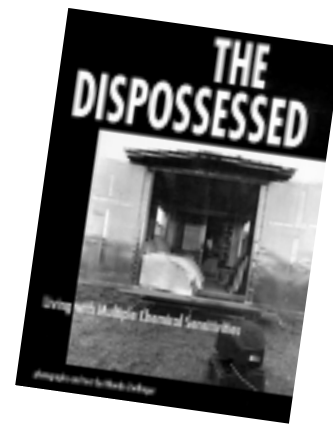
The Dispossessed

Living with Multiple Chemical Sensitivities

by Hilary Melcarek

Photographs and text by Rhonda Zwillinger. (The Dispossessed Project, 1998). Rhonda Zwillinger, a worldwide renowned photographer who was instrumental in the East Village art movement of the 1980's, developed a severe case of Multiple Chemical Sensitivities (MCS) in 1991 and created this book to inform the general public of the existence and crippling nature of the disease. "MCS," she states, "is one of the most challenging public health problems of our time and the incidence is thought to be on the rise." With stories told in the first person and with photographs, *The Dispossessed* offers the reader a peek into the lives of more than 40 chemically sensitive people, all living within an hour and a half of Zwillinger's home in an area of Arizona that is relatively chemical-free. Victims of MCS generally need to avoid all chemicals, cannot enter toxic areas, such as schools, churches, or malls, due to the use of pesticides and toxic cleaning agents in these areas. They have a very difficult time finding medical and governmental support and non-toxic housing. Future exposure to toxic chemicals in even very small amounts could lead to seizures, dizzy spells, memory loss, disorientation and even death. The case stud-

ies involve people from a variety of backgrounds and ages. The victims have become chemically sensitive from misapplications of pesticides in the homes, yards, and work places, from installation of new carpeting in badly ventilated office buildings, from breast implants, or from exposure to toxic fumes while fighting in the Gulf and Vietnam wars. Zwillinger conveys the message that MCS is a disease that could affect anybody at any time, and that it needs more public, medical, and governmental support and recognition. The book is designed so as not to overwhelm the reader while creating a clear picture of what MCS victims must endure just to survive every day. Below are some of the moving stories of ordinary people coping with MCS that the author shares. *Beyond Pesticides/NCAMP*, through a seed grant program, provided financial support for this project, as it has for dozens of others. For a copy, send \$18.00 to The Dispossessed Project/R. Zwillinger, P.O. Box 402, Paulden, AZ 86334-0402.



"I was born on the south shore of Long Island, New York, where many lawn chemicals and pesticides are used. I developed parasitic infections after living in Mexico and was exposed to large doses of formaldehyde during an anatomy class at the City College of San Francisco. At the age of 23, I developed MCS and Multiple Sclerosis."

— Jerry D.

"The interiors of the buses were routinely sprayed with a kerosene-based pesticide which, when outlawed, was replaced by a more toxic pesticide. I organized a petition signed by more than 400 of my co-workers protesting the unsafe working conditions. The *L.A. Times* covered the story, as did a local TV station. Approximately 5-10 percent of the bus drivers were chemically injured or MCS."

— Randy H.





"I experience personality disorder symptoms when exposed to pesticides and petrochemicals. I go into rages, slam my head against a wall, feel paranoid and regress into childlike behavior. For years, I thought I had a multiple personality disorder until I was diagnosed with MCS. The chemically injured fear discussing such symptoms because they would be labeled mentally ill and face additional discrimination, especially by the medical profession."

– Kelly S.

"The baby's father and I were very concerned when we found out I was pregnant. To help us make a decision about the pregnancy, we consulted a doctor who is an MCS specialist. The doctor had experience with babies born to a healthy parent and an MCS parent, but had no experience with pregnancies resulting from two sick people like us. The doctor thought that since our illness had been stable prior to the pregnancy, there could be a chance the baby would be born healthy."

– Ciara S.



" In 1978, I became an architect. By 1992 my health was steadily going downhill. Each job site was a chemical soup of paint, solvents, pesticides and formaldehyde; I had constant brain fog. I reinvented architecture for myself with a mission to discover what makes a building healthy. As an architecture student and apprentice, I was never taught that building materials could be detrimental to one's health; I assumed safety was being regulated by someone."

– Paula B.

"There are restrictions for two married people with MCS. We have to respect each other's food allergies and not use treatments that cause the other person to react. Our doctor suggested we do not kiss on the lips to prevent transmission of bacteria and viruses. Our health has improved and we both have put back on some weight.

We attribute this to new treatments and to our love and companionship, which is healing."

– Arlene & Larry M.



The Schooling of State Pesticide Laws — A Petition To The Federal Government and a Response

When Beyond Pesticides/NCAMP completed its study, *The Schooling of State Pesticide Laws*, earlier this year (see *Pesticides and You*, Vol. 18, No. 3), it shipped the results off to the Administrator of the U.S. Environmental Protection Agency (EPA) and the Secretary of Education, with a petition asking the federal government to address the serious deficiency in the protection of children from pesticides used in our nation's schools. The report shows a patchwork of standards across the states which neglect to fully protect children in five areas: (i) buffer zones to address drift, (ii) posting signs for indoor and outdoor pesticide applications, (iii) prior written notification for pesticide use, (iv) prohibitions on when and where pesticides may be applied, and (v) requirements for integrated pest management plans. What follows is the Beyond Pesticides/NCAMP petition to the federal agencies and a response from the EPA. At the time of printing we are still awaiting an initial response from the U.S. Department of Education.

PETITION TO EPA ADMINISTRATOR BROWNER AND SECRETARY OF EDUCATION RILEY, JANUARY 28, 1999

Dear Administrator Browner and Secretary Riley,

We are writing to urge the Environmental Protection Agency and Department of Education to begin rulemaking to protect children from the use of pesticides at schools across the country. Our formal request to initiate rulemaking in this regard is borne out of the data collected by the National Coalition Against the Misuse of Pesticides (NCAMP), to be released today in a study which documents uneven and inadequate protection of children from school pesticide use in the 50 states. Given your and the administration's interest in protecting children, we know that you do not want to see this situation continue unabated. We are filing this request with both the Environmental Protection Agency and the Department of Education in the hope that the two can work together to make our children's schools a safer place to learn.

NCAMP's study, *The Schooling of State Pesticide Laws*, reveals a striking lack of protection in five basic areas that together would constitute an adequate standard for protecting children from pesticides at school. While 30 states offer some limited degree of protection in these areas, the federal government has been silent in these areas, allowing children to go off to school each morning facing an unnecessary threat of pesticide exposure in their classrooms and on school grounds. When you break down the number of states that institute some protections in the key areas of exposure and right-to-know, as cited below, the totals shrink considerably. For example, only six states establish buffer or restricted spray zones around schools to try to protect against chemicals drifting into the classroom and school yard. Only five states require that measures are instituted to use less toxic pest management methods in schools through integrated pest management, although the definitions vary considerably.

NCAMP's study evaluates five categories covering critical areas of protection, including: (i) restricted spray (buffer) zones around schools to prevent drifting of chemicals on to school property; (ii) posting warning signs for indoor and outdoor pesticide applications; (iii) prior written notification of pesticide use to parents and school staff; (iv) prohibiting when and where pesticides can be applied at schools; and, (v) use of integrated pest management (IPM) in deciding appropriate pest management approaches. Of the 30 states that offer protection in one or more of these categories, only 16

states address indoor use of pesticides. Overall the level of protection varies widely across the states.

The five categories of protection evaluated in the study are essential ingredients in a program to protect children from pesticides at school. No state has acted in every category and where steps have been taken, they are often much too limited.

The study signals a tremendous need for improved regulatory standards for protecting children from pesticides at their schools. While states need to take stronger action, it is time for the federal

government to step up to the plate and institute national standards. The study identifies a patchwork of laws that provide uneven and inadequate protection of children. Our children deserve more than this.



Study Findings

- Only six states recognize the importance of controlling drift by restricting pesticide applications in areas neighboring a school. These restricted spray zones range from 300 feet to 2 ½ miles. Only Arizona and New Jersey require buffer zones for both ground and aerial pesticide applications.
- Ten states require posting of signs for indoor school pesticide applications. Posted notification signs warn those in the school when and where pesticides have been or are being applied. Texas is exemplary in requiring posting indoor notification signs 48 hours before the application is to begin.
- Twenty-two states require posting of signs for pesticide applications made on school grounds. Rhode Island is exemplary in requiring signs to remain posted for 72 hours after the application commences. Seven states require posting for both indoor and outdoor pesticide applications at schools.
- Nine states have requirements to notify students, parents, and/or employees of the school *before* a pesticide application occurs. Arizona and Maryland require that the schools provide prior notification to each parent, guardian and staff member.
- Eight states require schools to inform parents or guardians of their right to be listed on a registry. Registries are viewed by the authors as a less effective notification method because they may eliminate individuals who do not know about toxic exposure. Two of the eight states, Louisiana and Pennsylvania, create the extra barrier of requiring medical verification to be listed

on a registry. This is even more limiting since it does not allow people to avoid exposure.

- Seven states restrict when and what pesticides may be applied in schools. These prohibitions on use are important in reducing pesticide exposure.
- A strong integrated pest management (IPM) program can eliminate the unnecessary use of toxic pesticides, thereby protecting children. Thirteen states define, recommend or require IPM in their state pesticide laws. Of these, only five states (Connecticut¹, Maryland, Oregon, Texas and West Virginia) require IPM², and only four states (Illinois, Louisiana, Maine and Montana) recommend it. Three states (Florida, Massachusetts and Pennsylvania) simply define IPM in their law.

As you know, children are at high risk to the adverse effects associated with pesticide exposure. Studies are numerous which document that children exposed to pesticides suffer elevated rates of childhood leukemia, soft tissue sarcoma and brain cancer. Studies link pesticide exposure to the alarming childhood asthma rate and respiratory problems. Because of their affect on the central nervous system, scientists increasingly are associating learning disabilities or attention deficit disorders with low level toxic chemical expo-

sure. The National Academy of Sciences, in its 1993 report *Pesticides in the Diets of Infants and Children*, recognized the increased vulnerability of children to pesticide exposure. The *Food Quality Protection Act*, passed in 1996, may result in additional restrictions on some pesticides to which children are now exposed in the schools. However, these changes are not focused on the five critical categories that are needed to stop children's involuntary exposure at school to toxic pesticides across the board. If the government were to institute these protections, it would no longer have to point to a lengthy pesticide registration and reregistration process, with often mostly incomplete data on children, as evidence of some possible future protection. This rulemaking would offer comprehensive protection for children in the near term.

The current situation cries out for federal intervention. On behalf of the children, we urge you to take immediate action to initiate rulemaking in these five areas and begin a process that can ensure that all children can have the benefit of a safe learning environment. We appreciate your commitment to the safety of children and look forward to achieving our mutual goals.

Sincerely, Jay Feldman, Executive Director; Kagan Owens, Information Coordinator

1. Note that Washington state was inadvertently omitted. Washington, like Oregon, requires IPM for state "institutions of higher education."
2. Connecticut requires IPM in "each state institution," only.

RESPONSE FROM THE ENVIRONMENTAL PROTECTION AGENCY / MARCH 5, 1999

Dear Mr. Feldman and Ms. Owens,

Thank you for your letter to Administrator Carol Browner concerning pesticides and schools. Since this office is responsible for pesticide regulation, Administrator Browner asked that I respond on her behalf.

The U.S. Environmental Protection Agency (EPA) shares your interest that pesticides be used safely in and around schools. Your letter lists several categories constituting "critical areas of protection" for which you request action to initiate rulemaking: the use of integrated pest management (IPM) in deciding appropriate pest management approaches; the creation of buffer zones to prevent spray drift of pesticides on to school property; the requirement to post warning signs and issue prior written notification of pesticide use at schools; and restricting when and where pesticides can be applied at schools. Over the next several months, the Office of Pesticide Programs (OPP) will examine this request to determine the scientific issues raised in this request.

The Agency has several projects ongoing to assess children's exposure to pesticides at schools, and also to encourage the use of integrated pest management at schools. Some of EPA's major projects concerning the use of pesticides at schools are discussed below.

EPA's major external research program, Science to Achieve Results (The "STAR program") allocated \$899,264 for a three-year school-based study, beginning March 1998, to document complex environmental exposures and related health effects in children. The study will measure children's chemical exposures, including exposures to pesticides, in two elementary schools in Minneapolis. EPA expects that the results from this study will provide important information about complex multi-pathway exposure to children. Such



information is critical for making more informed and reasonable decisions about comparative and cumulative risks, and can assist the Agency in determining what additional actions are needed to protect children's health from pesticides in the school setting.

EPA is also sponsoring, through a grant to Indiana University, an IPM in Schools Workshop on March 17-18. The goals of this workshop are to assess the status of IPM in schools and to encourage national coordination of efforts. Included in these goals will be discussion of the development of uniform policies and standards for schools and daycare centers, and to assess resources to foster national implementation through technical assistance, education, and training.

As you may know, EPA has created a national Directory of IPM in Schools, intended to assist individuals with finding specific information about each State program, as well as appropriate State contacts. By sharing resources and information, States can develop IPM approaches for their schools in a more efficient, coordinated approach. The National Directory is available at EPA's website at: <http://www.epa.gov/reg5foia/pest/matilla/ipm.html>. I have enclosed for your reference an Agency publication, "Pest Control in the School Environment: adopting Integrated Pest Management," which is designed to serve as a guide for schools interested in developing IPM programs.

We will keep you apprised of our work as we evaluate the issues raised in your letter. The protection of children's health from pesticide exposure, including the study of exposure to pesticides in the schools setting, is a very high priority, and I appreciate your interest in this area.

Sincerely, Susan H. Wayland, Acting Assistant Administrator

Please write to EPA and the Department of Education to support our petition. Administrator Carol Browner, U.S. EPA, 401 M Street, SW, Washington, DC 20460, phone 202-260-4700, fax 202-260-0279, email Browner.Carol@epamail.gov; Honorable Richard Riley, Secretary of Education, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202, phone (202) 401-3000, fax (202) 401-0596, email customerservice@inet.edu.gov.

The Politics of Cancer Revisited



Samuel S. Epstein, M.D. (East Ridge Press, 1998). Twenty years after its predecessor, *The Politics of Cancer Revisited* expands on the relationship between increasing cancer rates and a higher incidence of environmental pollution from the petrochemical industry, as well as the unresponsiveness to this obvious correlation by the National Cancer Institute (NCI) and the American Cancer Society (ACS). With a new analysis of scientific and public policy developments over the last two decades, Dr. Epstein incriminates the cancer establishment with the responsibility for losing the war against cancer. In the *Politics of Cancer Revisited*, Epstein delves into issues of preventive medicine and alternative therapies, wondering why these possibilities have not been thoroughly explored by NCI and ACS. While cancer incidence levels approach 50% of the U.S. population, NCI and ACS continue to focus their research on damage control, diagnosis, treatment and finding a cure without looking at cancer prevention. Although the results of finding a cure have been negligible since President Nixon's launching of the "War Against Cancer" in 1971, according to the author, NCI has proposed an increase in its budget from \$2.6 billion to \$5 billion by 2003. Dr. Epstein states, "The National Cancer Institute and the American Cancer Society have misled and confused the public and Congress by repeated false claims that we are winning the war against cancer – claims made to create public and Congressional support for massive increases in budgetary appropriations." Because NCI and ACS have failed to report to Congress available sci-

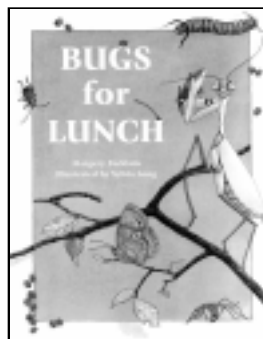
entific studies on a range of exposures to avoidable carcinogens in the air, water, workplace, and in consumer products, corrective legislative and regulatory action has not been taken, Epstein says. According to Epstein, the cancer establishment has also committed serious environmental justice crimes by failing to provide low income African Americans and other ethnic groups with information on avoidable carcinogenic exposure. He says these groups, which have disproportionately high cancer rates, have been denied their right-to-know, thus preventing them from taking action to protect themselves. Samuel Epstein, one of three winners of The Right Livelihood Award in 1998, also known as the "Alternative Nobel Prize," is the leading international champion for cancer prevention. Since his book, *The Politics of Cancer*, was first published in 1979, Epstein has campaigned against environmental pollution, which he has shown to be the cause of much avoidable cancer. In campaigning for a phase-out of environmental pollution, Epstein's Cancer Prevention Coalition has put pressure on governments and corporations to take responsibility for product safety and environmental protection. For a copy, send \$34.95 (hardcover) or \$21.95 (paperback) to Free Ridge Press, Main Street, Box 118, Fremont Center, NY 12736, 800-269-2921.

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Bugs for Lunch



or daughter's education on basic ecological issues and beneficial insects. *Bugs for Lunch* describes insects, animals and

Margery Facklam, illustrated by Sylvia Long, (Charlesbridge Publishing, 1999). This new book for young children will begin your son

plants that live by eating bugs, from spiders to a Venus Flytrap and even humans. This book explains the importance of insects in the ecological web, and also introduces children to different human cultures that regularly eat insects. Beautiful and accurate watercolor illustrations complement the clever rhymes in this engaging children's book. Included in *Bugs for Lunch* is a comprehensive key of all animals and insects mentioned in the book, informing your child of each animal's native habitat and interesting physiology. For a copy, send \$6.95 to Charlesbridge Publishing, 85 Main Street, Watertown, MA 02172, 800-225-3214.

Trouble On the Farm, Growing Up With Pesticides in Agricultural Communities

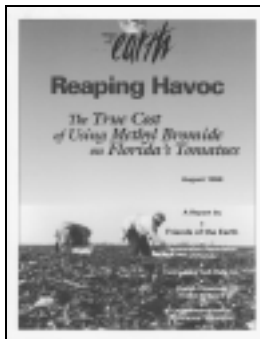


Gina M. Solomon, M.D. (Natural Resources Defense Council, October, 1998). The Natural Resources Defense Council (NRDC) is-

sued this special report on farm children and their unique pesticide exposure because children living in farming areas or with family members who work in agriculture are exposed directly to pesticides from the fields, in home dust, in the air and drinking water, and on parents' clothes. Children are generally more susceptible to toxins than adults because of their small size in relation to the exposure, have hand to mouth habits, and their developing organs, nerve systems and brains are more vulnerable to toxic damage. These risks are compounded when children live on farms and are consequently exposed to pesticides on a

daily basis. The report cites that 320,000 children under the age of six live on U.S. farms. It also reports detection of neurotoxic pesticides on farm children's hands at levels that could result in pesticide exposures above EPA designated safe levels. Based on its findings, NRDC recommends the designation of farm children as a "sentinel group" in need of special protection under the *Food Quality Protection Act* and the need for additional research on children and pesticide exposure. For a copy, send \$10.50 to NRDC, 40 West 20th Street, New York, NY 10011, 212-727-4486.

Reaping Havoc: The True Cost of Using Methyl Bromide on Florida's Tomatoes



(Friends of the Earth, August 1998). According to this report published by Friends of the Earth (FOE), the United States is the largest user of methyl bro-

mide, applying 46.5 million pounds annually. Of this total, 5.4 million pounds are used to fumigate Florida's tomato fields. There are many hazards associated with application of what EPA has labeled a Category 1 (highest) acutely toxic chemical, states the report. Florida's tomato farmworkers exposed to methyl bromide suffer from skin irritation, central nervous system, kidney, and lung damage, cancer, and even death, or have children born with birth defects. Studies in the report show that drift from methyl bromide treated fields comes in dangerously close proximity to many Florida homes, schools, churches, and retirement communities. Methyl bromide is

also 50 times more harmful to the earth's ozone layer than the already banned CFCs. Increased ozone layer depletion will allow higher levels of UV-B radiation to reach the earth's surface, which may in turn lead to increased cases of melanoma cancer.

At the time of printing, the report states that the Clinton Administration is considering a four year push-back of the phaseout date of methyl bromide from 2001 to 2005. Unfortunately, this push back was passed by Congress in late October 1998 and signed into law by the President. *Reaping Havoc* is full of important, relevant information in the form of case studies, tables, graphs and maps, and offers suggestions on safer, effective alternatives to this deadly pesticide. For a copy, send \$10 to Friends of the Earth, 1025 Vermont Avenue, NW, Suite 300, Washington, DC 20005, (202) 783-7400, or email Kate Simmons at ksimmons@foe.org.

Do You Know What You're Eating? An Analysis of U.S. Government Data on Pesticide Residues in Food



Edward Groth, et al. (Consumer Reports, January 1999). Consumer Reports has analyzed data collected for the government's Pesticide Data Program (PDP) and has found that "for a young child, even one serving of some fruits and vegetables can exceed safe daily limits." Consumers Union determined this by comparing the EPA's Reference Dose (RfD), an estimated daily dose of residues from one food, and the equivalent amount of residue ingested by

a 44 pound child eating 100oz (3.5 grams) of the food serving, with the EPA tolerance of the food/chemical pair. The RfD is the limit shown to cause no harm in animal tests.

Do You Know What You're Eating? offers "toxicity ratings" for foods, which are based on the combined factors of frequency of residue detection, average levels of residue, and the relative toxicity of the chemical. The organophosphate insecticide methyl parathion, now up for review under the *Food Quality Protection Act* (FQPA), is found to constitute the largest portion of total toxicity detected. One surprising finding is that certain domestic produce has more, or more toxic, pesticide residues than imported produce in two-thirds of the cases. The study also points out that "legal does not equal safe," citing that many food tolerances were set years ago, and do not account for the extra sensitivity of children. Certain fresh foods often consumed by children, such as winter squash, spinach, peaches and pears, are at the top of the toxicity rating list.

The group cautions parents to vary the kinds of fresh vegetables they serve their children, but certainly not to eliminate them from their diet. For example, spinach samples were found to contain 14 different types of pesticides, including some that are banned for use in the U.S., but the recommendation is to wash the spinach thoroughly or to consider buying organic. Some chemicals, such as the banned insecticide dieldrin, are absorbed into the pulp of fruits and vegetables and do not wash off. According to the report, the insecticide aldicarb is another such chemical, and is also one of the most acutely toxic pesticides — but its use by potato growers is on the rise. For a copy, contact Consumer Union, 101 Truman Avenue, Yonkers, NY 10703, 914-378-2000, or see www.ConsumerReports.org. A summary is published in the March issue of *Consumer Reports*.

Thank You to Our Conference Sponsors!

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WHEN: May 14-16, 1999

WHERE: La Casa de Maria retreat center, Santa Barbara, California, located in the foothills of the beautiful Santa Ynez Mountains, with a view of the nearby Pacific Ocean.

WHO: Join activists, farmers, scientists, farmworkers and policy makers in hearing from such great speakers as Sandra Steingraber, author of *Living Downstream*, and Dan Fagin, environmental writer for *Newsday*, and author of *Toxic Deception*. Other speakers include Ronnie Cummins, Campaign for Food Safety, David Chatfield, Californians for Pesticide Reform, and Shelley Davis, Farmworker Justice Fund.

WHY: To learn more about biotechnology, national pesticide policies, pesticides and children's health, sustainable agriculture, and more! Network with people from grassroots groups around the country and learn how to organize in your own community to *prevent* toxic pollution. And, to have fun!



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