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Thursday, June 05, 2008

Ottawa Citizen

No one can prove pesticides are 'safe'

Neil Arya  
Citizen Special

The Ontario government has recently concluded that we must ban cosmetic uses of most pesticides, for the health of Ontario's children. It made the right decision.

Dan Gardner missed the point, in suggesting that the recent Pest Management Regulatory Agency (PMRA) decision to re-register the weed killer 2,4-D should derail this legislation ("You read it here first ... but you shouldn't have," May 28).

Following the release of the 2004 Ontario College of Family Physicians report on the number of serious health problems associated with exposures to pesticides, the PMRA was taken to task for failing to take into account human exposure studies. As a result, I was appointed to represent the OCFP on the federal Pest Management Advisory Council. In 2005, we advised the PMRA to not say "safe" when referring to the pesticides that they registered for use in Canada as all pesticides have inherent hazards, as well as benefits when used in prescribed circumstances.

Science cannot say 2,4-D, or any other toxic chemical designed to kill a biological organism, is safe. Problems with DDT were found in peregrine falcons years before carcinogenicity had been definitively established in humans, and DDT and later other organochlorine insecticides were withdrawn from the market. We know of no safe levels of exposure to lead in children or of alcohol in pregnancy; we therefore minimize exposure. Sweden, Norway and Denmark have de-registered 2,4-D, citing the precautionary principle to protect their most vulnerable citizens, especially fetuses, infants and children, from environmental hazards.

Scientific evidence is immensely broader than the toxicologic (laboratory animal) risk assessment on which the PMRA primarily relies. Sadly, the PMRA demonstrates little understanding of the limitations of its methods, and has not developed a systematic process to incorporate epidemiology, studying humans in the real world, in risk assessment. In fact, until recently the PMRA has actually not even had an epidemiologist on staff.

Decisions are predicated on industry-supplied, highly controlled toxicology studies on genetically purified species with biological properties such as de-toxifying enzymes that are often quite dissimilar to human beings.

Epidemiologic data, on the other hand, need a high level of expertise since human beings are exposed to a wide range of chemicals, often working synergistically and antagonistically. Studies often rely on people employed in jobs where they are frequent users, or those that have been exposed accidentally or on cross sectional surveys of large populations, which may be subject to faulty recall of people, giving less clear, but more meaningful and relevant data.

In the recent 2,4-D decision, the PMRA demonstrated a basic misunderstanding of epidemiology. In discussing a large U.S. study of a type of non-Hodgkin lymphoma and pesticides, our regulator amazingly concluded that people using phenoxy herbicides (2,4-D is the most common chemical of this type) were less likely to develop the cancer. The PMRA limited its analysis of the study to comparing the group using phenoxy herbicides to a very small group using other pesticides, and concluded there was no risk.

But compared to the much larger group not using pesticides, those working on farms with these herbicides were about three times as likely to develop the cancer. Together with new knowledge of biological mechanisms and other recent studies linking 2,4-D to cancers and other health effects, there is ample

reason for caution.

Determination of "acceptable risk" involves not only science, but an assessment of what society finds acceptable. The Ontario government's decision to follow Quebec and many of Canada's major municipalities reflects a judgment as to what is acceptable that is more aligned with opinions of epidemiologists working with public health bodies and the Canadian Cancer Society.

At Health Canada, drug registrations are commonly reconsidered. Within 25 years of licensure at least 20 per cent of drugs receive "blackbox" warnings (potentially lethal) for some uses, or are withdrawn from market. As such, calling pharmaceuticals safe just because they are licensed would undermine the credibility of the Health Protection Branch.

Dan Gardner rightly opined that the media give undue attention to scaremongering. However, media may also be unduly influenced by corporate agenda. A few years ago, when governments decided to restrict smoking, studies by industry-financed toxicologists decrying "junk science" received much ink.

In 2002, the recently deceased Dr. Sheela Basrur, then medical officer of health (MOH) for Toronto and later Ontario MOH, reviewed the literature related to home and garden pesticides. Ottawa's MOH issued its report in 2005 shortly after the OCFP report; all three called for a ban on the cosmetic use of pesticides. The Registered Nurses of Ontario, the Ontario Public Health Association, CHEO and the Canadian Cancer Society are just a few other health organizations supporting such a ban.

The public trusts the family doctors of this country; they trust their nurses and hospitals. Many times, each and every day, family physicians advise patients on health risks of a wide variety of issues such as medication for blood pressure, cholesterol or depression and how to remain as healthy as possible as long as possible.

We assist people by interpreting large amounts of raw data and spin, incorporating judgment and experience. My own patients expect neither perfection from me, nor a perfect solution to their problems.

To acknowledge that all chemicals have risk, to be transparent, respectful of its own responsibility as regulator, to acknowledge its limitations, is what will regain confidence of Canadians in our regulator, rather than false attempts to reassure. PMRA can do better.

Dr. Neil Arya is a member of the Environmental Health Committee of the Ontario College of Family Physicians and an adjunct professor of environment and resource studies at the University of Waterloo.

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<http://tinyurl.com/64runa>

May 07, 2008 04:30 AM  
Thomas Walkom

Ontario says its proposed ornamental pesticide ban will be the toughest in North America. Perhaps that's true, although no one will know for sure until next spring when exact details are revealed.

But what is clear is that however stringent the new law, no municipality will be allowed to enact one that is tougher.

Environment Minister John Gerretsen let that cat out of the bag last week. In doing so, he contradicted Premier Dalton McGuinty, who had said the exact opposite.

Predictably, opposition MPPs pounced on the government for its inconsistency. But the point is not that the Liberals are inept. McGuinty's gaffe notwithstanding, the government knows what it is doing. It is establishing a regulatory ceiling for pesticides, not a floor.

Or, to put it another way, it is doing chemical manufacturers a favour by ensuring that no Ontario municipality enacts a total ban.

In doing this, it is also helping out the forestry industry, golf course industry and farmers - most of whom use pesticides on a massive scale, all of whom are exempted in the Liberal proposal.

Indeed, residential home-dwellers of the kind who would be affected by the Ontario ban account for only 4 per cent of pesticide use.

To understand the McGuinty bill, it is important to remember its context. It was introduced at a time when municipalities around the province were formulating their own bans.

Some would have been tougher. Guelph, for instance, banned all pesticides and herbicides for ornamental use. But its bylaw will now be superseded by a provincial law that is expected to focus on 300 named products.

So far, most of these municipal bans have excluded golf courses, farms and forestry. But there was no guarantee that such exemptions would

have continued, particularly if the neighbours complained.

It's easy to imagine a situation where local councils might be convinced to limit or even eliminate all commercial pesticide use within their boundaries.

The new Ontario law would ensure that none of this happens. The loggers whose forests lie within the borders of, say, Timmins will be free to continue spraying toxic chemicals from the air. In Durham and East Gwillimbury, farmers will still be allowed to use chemicals to zap their weeds.

In fact, by setting a regulatory ceiling, Queen's Park is doing the chemical industry a favour. Some companies may object. But others recognize that limited, clearly defined, province-wide regulations are better for business than a municipal hodgepodge.

As a Weedman lawn care spokesperson told the Guelph Mercury recently, regulation puts all firms on the same footing

**Ontario has used pre-emptive legislation before. In the late '90s, some rural municipalities attempted to regulate intensive hog farms. The aim was to keep the remarkably immense amount of manure produced by such operations out of the drinking water.**

**Queen's Park, horrified that these rules might impinge on agriculture, passed its own manure regulations and outlawed municipal bylaws that were more stringent.**

**So we should not be surprised by McGuinty's apparent confusion. He, like most reasonable people, probably assumed that, since toxic chemicals are toxic, municipalities that want to prohibit their use should be allowed to do so.**

**In a reasonable world, they might. But in a world where economics trumps health, regulation does not exist simply to protect citizens from industry. Its role is also to protect industry from citizens.**

Thomas Walkom's column appears Wednesday and Saturday.

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Potato fields, pesticides and Parkinson's

Carleton researcher trying to establish links between weed and bug killers and neurodegenerative disorders

ANNE MCILROY

From Friday's Globe and Mail

April 25, 2008 at 5:06 AM EDT

Steve Morris didn't notice his left arm had stopped swinging when he walked; a buddy pointed it out. But his symptoms, including a tremor in his left hand, soon worsened, and by the time the community college teacher went to see a doctor two years ago, he was pretty sure the diagnosis would be Parkinson's disease.

He was surprised, though, by the questions the neurologist asked after delivering the bad news. Had Mr. Morris grown up around farms? Had he ever worked on a farm? Did he ever drink from a well?

The answer to all three was an emphatic yes. Mr. Morris had spent his childhood in Florenceville, the heart of New Brunswick's potato country, and now lives in Woodstock, N.B., across the street from a potato farm. As a kid, he used to run outside to watch the spray planes and he remembers his father having to turn on the wipers to clear the pesticide residue off the windshield. His doctor thought there could be a connection.

"I'm not a neurosurgeon, so I can't find cause and effect. But I grew up surrounded by pesticides," the 52-year-old says.

Mr. Morris was encouraged this week when Ontario Premier Dalton McGuinty announced a ban on the sale and use of domestic pesticides and says it's a sign governments are starting to recognize the risk of using these kinds of chemicals.

While a lot of research on pesticides and disease has focused on cancer, including childhood cancers, there is growing evidence that exposure to weed and bug killers is linked to Parkinson's disease, a neurodegenerative disorder with a wide array of symptoms including tremors, stiffness, poor balance, loss of speech and diminished muscle control.

So far, most of that evidence is epidemiological; studies show that workers exposed to regular low doses of pesticides on the job, such as farmers, suffer from sharply higher rates of the disease.

In his lab at Carleton University, Shawn Hayley is trying to establish how pesticides cause the kind of brain damage seen in people with Parkinson's.

The disease occurs when most of the cells in a part of the brain called the substantia nigra die. Normally these cells produce the chemical dopamine, which allows the smooth, co-ordinated function of the body's muscles.

Obviously, not everyone who is regularly exposed to pesticides gets the disease. Genetics are probably a factor; a number of studies have suggested people with particular versions of a gene involved in dopamine transport may be more vulnerable. Other toxins may also play a role.

When doctors perform a postmortem on patients with Parkinson's, they can find the same kind of damage in almost every patient. The substantia nigra, located in the midbrain, is normally black. In people with Parkinson's, it is white, a sign that dopamine-producing cells have died.

If you give mice multiple injections of paraquat, a commonly used commercial herbicide, they develop a shuffling gait and move around less. When scientists look at their brains, they see the same whitening.

The pesticide activates immune cells in the brain known as microglial cells, Dr. Hayley says. They produce nasty chemical agents that cause inflammation and damage healthy cells.

Once the microglial cells have been activated, he says, they are more sensitive to subsequent exposures to pesticides.

But how does paraquat activate the microglial cells? Dr. Hayley had identified two messenger proteins that are involved. Both are cytokines, which are like orchestra conductors, bringing cells together and telling them how to perform. He also found preliminary evidence that blocking production of these two cytokines limits the damage. His findings could one day lead to drugs - possibly anti-inflammatories - that could protect people at a high risk of getting the disease.

Dr. Hayley gets about 15 per cent of his funding from Parkinson Society Canada and most of the rest from government granting agencies.

His theory is that multiple exposures to pesticides trigger the disease in people who are genetically predisposed to get it.

They are probably most vulnerable early in life, during developmentally sensitive times, he says, or late in life when the body's detoxification systems no longer work that well.

He, too, welcomed Ontario's new ban. It is a good idea to reduce our exposure to pesticides, he says, even if most gardeners use only low levels of herbicides and insecticides.

It makes sense to Mr. Morris, who hopes scientists like Dr. Hayley can figure out what role pesticides play in Parkinson's disease.

"I'm not angry, and I'm not looking to blame anyone. But in my mind, there is a connection."

Parkinson's 101

An estimated 100,000 Canadians are living with Parkinson's disease, according to the Parkinson Society Canada. Here are a few facts about the progressive neurological disorder:

#### AGE RISK

The average age of onset is 60, but it can occur in younger people.

#### SYMPTOMS

It affects patients in different ways, but symptoms can include tremors, stiffness and difficulty with balance.

In some cases, the progression is slow, and takes 20 years or more.

Thirty to 40 per cent of patients develop dementia.

#### TREATMENT

There is no cure, but a number of medications are available that can keep some of the symptoms, such as tremors, under control.

Anne McIlroy

<http://www.thestar.com/printArticle/417300>

Toronto Star

Cities free to toughen pesticide ban

TheStar.com - Ontario - Cities free to toughen pesticide ban

Legislation to become law by next spring excludes farms, managed forests and golf courses

April 23, 2008

Robert Benzie

Queen's Park Bureau Chief

Ontario's new ban on cosmetic pesticides for gardening will still allow cities and towns to enact even tougher environmental bylaws, says Premier Dalton McGuinty.

McGuinty and Environment Minister John Gerretsen marked Earth Day by introducing legislation yesterday outlawing the sale and use of such lawn and garden pesticides by next spring.

While the law does not apply to farms, managed forests or golf courses, the premier said municipalities could go further than the provincial standard.

"Nobody will be able to have standards lower than ours," he said.

"If you're asking if municipalities can exceed the provincial standard we put in place, yes they can when it comes to use."

McGuinty was driven to the early morning Earth Day event in an SUV even though he lives only a few streets away from the home where it was held.

"We generally get around by car - you'll know it's a hybrid.

"A hybrid is better than other things," he said, defending his mode of transport.

Gerretsen, in contrast, walked to the news conference held in a midtown Toronto backyard near his St. Clair Ave. W. office.

The government's anti-pesticide measure was widely hailed.

Gideon Forman, executive director of the Canadian Association of Physicians for the Environment, said it would be the toughest legislation of its kind in North America and should be especially helpful in protecting children.

"We're delighted," said Forman, adding the ban should encompass more than 300 different toxic products currently available and is more wide-ranging than Quebec's law.

Almost half of all Ontarians already reside in municipalities that have banned cosmetic pesticides, including Toronto, Markham, Oakville and Vaughan.

Progressive Conservative MPP Toby Barrett (Haldimand-Norfolk) said, while his party supports eliminating "the non-essential use of pesticides," care must be taken in fine-tuning the legislation.

"This is a very important issue, not to be decided on emotion or based on a gimmick presented during the very important Earth Day celebration that goes back decades and not to be rushed through as a mere three-page bill," said Barrett.

New Democrat MPP Peter Tabuns (Toronto-Danforth) said the government must ensure the law "has the teeth to deliver the ban."

"It is not good enough to simply put a law on a table, declare a virtue and walk off," Tabuns added.

"The other steps have to be there."

In a statement, Barry Maynard, vice-president and general manager of Scotts Canada, makers of Miracle-Gro and other lawn-care products, said the company would work to help Ontarians adapt to the weedy new reality.

"Home gardeners will be challenged by the prospect of creating and maintaining healthy green spaces without the help of many of the pest control products with which they are familiar," Maynard said.

He noted his company also manufactures green "EcoSense" products.

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Thu 24 Apr 2008

Guelph Mercury

Adjusting to a new reality

Premier Dalton McGuinty has challenged communities that wish to do so to come up with pesticide bylaws of their own that are even more stringent than the provincewide restrictions trotted out this week. Guelph council should be vigorous in following up on that challenge when it fine-tunes the city bylaw this Monday.

With words more felicitous than they sound when put into context, McGuinty -- in his Earth Day announcement -- said "nobody will be able to have standards lower than ours," explaining that cities and towns will still be able to fashion their own tough regulations. And the made-in-Guelph solution of allowing the limited application of insecticides for the control of certain pest infestations seems eminently sensible.

The legislation introduced Tuesday has yet to go through the usual debate process, but an issue that was once extremely contentious is far less so today because so many municipalities have already set out on their own to make their communities zones that are hostile to the cosmetic use of pesticides to keep lawns in the green.

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Fri 25 Apr 2008

The Globe and Mail

My chemical romance; As Ontario prepares to go pesticide-free, gardening diehards are fighting a ban they say puts their perfect lawns in jeopardy. But it'll take more than a bylaw to stop the most resourceful from keeping their grass greener. Hayley Mick reports

by Hayley Mick

Gary Megaffin is the type of guy who likes his lawn putting-green perfect.

The Kitchener, Ont., resident owns a lawn tractor, a power trimmer and a leaf blower. He believes mowing a lawn without trimming its perimeter is like "wearing a tux with dirty shoes."

Every spring and summer, he raids his shed for chemicals: some for bugs, some for grubs and some for dandelions he likes to squirt and watch shrivel. "It's a lot easier than getting on your hands and knees," says Mr. Megaffin, who is 71 and has arthritis.

Soon, however, it'll be goodbye to chemical killers for Mr. Megaffin and the approximately 6.6 million other Ontario residents living in communities that don't already have anti-pesticide bylaws. This week, the province announced a sweeping ban on the use of traditional pesticides and herbicides on residential lawns and gardens, similar to one already in place in Quebec. Home Depot has promised to voluntarily yank products such as Killlex and Grub-B-Gon from Canadian stores by the end of the year, and Canadian Tire is doing the same in Ontario.

But some lawn-loving diehards are not ready to surrender. "I don't want a pile of weeds in my yard," said Fred Snider, 46, who did professional yard work around Kitchener-Waterloo before getting out of the business 10 years ago. "I know where to get my own stuff. I don't care if they have a ban or not."

Asked if he'd adhere to the Ontario ban after it kicks in next spring, Mr. Megaffin would only say: "You're not supposed to speed over 100 kilometres per hour on a highway ... but look what happens."

The ban has highlighted a long-standing turf war among gardening enthusiasts over how their yards should look - and how it should be achieved.

On one side are naturalists who say pesticides are unnecessary and harm the environment and humans. Those arguments have persuaded an estimated 140 communities across Canada to try to eliminate pesticide use through local bylaws, as well as the bans in Ontario and Quebec. Prince Edward Island may soon follow.

On the other side are turf lovers who say chemicals keep their yards free of bugs and weeds. They point out that Health Canada says home pesticides pose "no unacceptable health or environmental risks." And they complain that with so many watering and pesticide bylaws already in place, this is just one more government-sanctioned crimp on their yard work.

"I'm just saying it's a double standard," says Mr. Snider, protesting the inequity of having to quit his twice-annual ritual of treating his lawn with weed killer, while his local golf course can continue to use it under the new Ontario rules.

After Quebec declared an end to pesticide use in 2006, hardware stores across the border in Ontario reported that Quebeckers were buying cartloads of products such as Roundup and sneaking them back home.

The stream of customers seeking their pesticide fix hasn't stopped, said Jean-Francois Bertrand, owner of the Home Hardware in Hawkesbury, Ont., about 100 kilometres west of Montreal.

"We see people with baskets full of [pesticide] products," he said, predicting there "might be some stockpiling" on the Ontario side, too.

Thom Bourne, owner of Ottawa lawn care company Nutri Lawn, says he received a half-dozen calls from dismayed clients when news of the

Ontario ban broke on Tuesday. Mr. Bourne offers his clients organic yard treatments, but 70 per cent opt for traditional herbicide and pesticide programs because they're more effective, he said.

"People are going to have to come to terms with the fact that their lawn's not going to be as good," he said. "People want a nine out of 10. Now what they're going to have to accept is a six out of 10."

Others say turf lovers will come around - eventually. When Toronto first announced its pesticide ban in 2004, the city was flooded with almost 1,700 complaints about pesticide violations, mostly lodged by community vigilantes on the lookout for wilted dandelions and other signs of pesticide use.

But last year - the first year people could be hit with fines of up to \$5,000 after a three-year grace period - the number of complaints plummeted to about 100, likely because a potential financial hit motivated people to comply, said Peter Gauthier, who manages Toronto's enforcement of its pesticide bylaw.

An education campaign also heightened awareness about organic alternatives, he said.

Rob Witherspoon, director of the Turfgrass Institute and Environmental Research Centre at the University of Guelph, said there are several things people can do to keep their lawns tidy but chemical-free.

Instead of pesticides, people can use microscopic worm-like creatures called nematodes to help keep grubs at bay. Instead of herbicides, it helps to sprinkle seeds of another grass species, such as perennial ryegrass, to out-compete weeds for space and nutrients, he said.

A crappy lawn is exactly what Donald Cangiano, 73, expected to see last summer when he reluctantly switched to organic products for his carefully manicured lawn.

Since moving to his Oakville home seven years ago, he has lovingly tended his grass, even hiring professionals five times a year to treat it with pesticides and fertilizers. But when Oakville announced its plans to implement a municipal pesticide ban last year, he decided to switch.

"The lawn looked surprisingly good," Mr. Cangiano said of his green grass, adding only time will tell if it lasts.

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#### Organics 101

Searching for a less toxic solution to your bug and weed problems? Here are a few:

##### For pests

Use biological pesticides such as *Bacillus thuringiensis*, a micro-organism that is toxic to certain insects, or tiny parasitic worms called nematodes.

Insecticidal soaps contain fatty acids, which are mostly used to kill soft-bodied insects such as aphids and spider mites.

Ferric phosphate is a common mineral salt used to eliminate slugs and snails.

##### For weeds

Acetic acid, or vinegar, is a key ingredient in some organic herbicides.

Perennial ryegrass sprinkled on patchy lawns can fill in holes before weeds move in.

Corn gluten meal, a natural herbicide, works by inhibiting the root formation of germinating weeds.

Source: City of Toronto

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Markham says "Thank you Mr. Premier - you've made it a great Earth Day!"

Markham, ON - Markham Mayor Frank Scarpitti welcomes today's announcement of a province-wide ban on the sale and cosmetic use of pesticides.

"Markham recently passed one of the most progressive pesticide bylaws in the province. We are very pleased that Ontario is now taking this step to eliminate province-wide use of pesticides," said Mayor Scarpitti.

Markham is a leader in eliminating the non-essential use of pesticides. The Town has been pesticide free on its parks and sportsfields for more than 15 years. Markham's bylaw, which came into effect January 1, 2008, is the toughest in the Province. It regulates the outdoor use of herbicides, insecticides and fungicides on public and private lawns, trees and gardens. Bylaw violators can expect a fine of \$360.

"Earlier this year, I called on the Province to ban the use of pesticides in all communities and now it's happened," said Councillor Erin Shapero, Chair of Markham's Environment and Sustainability Committee. "The ban on the sale of pesticides is key to protecting our residents, our children and our environment. We will be healthier and safer because of it, not just in Markham, but across the Province. We will be pesticide free across the province by Earth Day next year." Markham is encouraging the Province to provide flexibility in the coming legislation to allow municipalities to impose greater restrictions if they see fit.

Markham has initiated an education and enforcement program for its pesticide bylaw, offering residents, companies and lawn care providers information on natural lawn care practices and alternate products which can be used to maintain strong, healthy and safe lawns and gardens. People who observe violations of Markham's pesticide bylaw may report the matter to the Town for investigation by staff. To provide education and enforcement, the Town will have bylaw enforcement officers in the field during the summer to follow-up on complaints and help residents understand how they can comply with the bylaw.

Markham has also developed a hazardous waste program for the collection and proper disposal of pesticides. Information on the pesticide bylaw and program is available at [www.markham.ca](http://www.markham.ca).

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Media Contact: Markham Mayor Frank Scarpitti - 905-475-4872  
 Markham Councillor Erin Shapero - 905-479-7756

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 Media Release -CELA  
 Ontario Plans to Ban Sale and Use of Cosmetic Pesticides  
 Happy Earth Day Ontario!

Apr 22 2008

Toronto: Chock up another victory for pesticide reduction and, in time for Earth Day, a green-tinged government responding to public aspirations. "With polls consistently showing over 70% support for banning cosmetic pesticide use, the Ontario government today introduced what may become the most progressive legislation of its kind in the world," noted Kathleen Cooper, Senior Researcher with the Canadian Environmental Law Association (CELA).

"We need to review the details, including key implementing regulations, but Ontario's proposed law provides for a comprehensive ban. It also addresses a key shortcoming of pesticide bylaws with a ban on sales of those products that are solely for cosmetic purposes," Cooper noted.

In support of this initiative, CELA has participated in a broad coalition of health professionals, experts in environment and public health and thousands of Ontario residents. The coalition issued a joint statement in January calling for a comprehensive approach including a ban on use and sales and complementary educational work. "With planned implementation to take effect in 2009, educational work to ensure a smooth transition must start immediately," stated Cooper.

The government heard us and has introduced an excellent piece of legislation. It builds on many years of work by health and environmental organizations and thousands of concerned citizens in municipalities across Ontario whose efforts have been so instrumental in helping to eliminate needless pesticide use in Canada.

"We were also very happy to hear Premier McGuinty indicate at this morning's announcement in Toronto that municipalities will continue to have the power to pass stricter bylaws in response to local circumstances and public concerns. We look forward to seeing these bylaw-making powers ensured in the final text of this new law," Cooper stated.

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For more information:

Kathleen Cooper, Senior Researcher, 705-341-2488 (cell) [kcooper@cela.ca](mailto:kcooper@cela.ca)

Pour des entrevues en français, veuillez contacter Christopher Waffle, 416-960-2284, ext. 226 [cwaffle@cela.ca](mailto:cwaffle@cela.ca)

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 April 24, 2008

Belleville Intelligencer

Belleville applauds proposed ban on cosmetic pesticides

By W. Brice McVicar

A provincial promise to ban cosmetic pesticides by next year is being met with open arms in Belleville.

Earlier this week, Premier Dalton McGuinty said the new bill, if passed, will come into effect in approximately one year.

Terry Murphy, general manager of Quinte Conservation, said the local conservation authority supports the move. In fact, he said, Quinte Conservation has been lobbying the provincial government to ban pesticides used for cosmetic purposes.

"There's environmentally-friendly products that can be used and I see stores are already carrying them," he said.

Murphy said the City of Toronto has had a pesticide bylaw in place for more than a year and he has been told lawn care companies there are busier than before. He said the environmentally-friendly products these companies are using won't hurt the environment the way synthetic pesticides could.

"If you put a tablespoon of those pesticides in your bottle of water are you going to drink it? If you said 'no' then why is it OK to let it run off your lawn and into the Bay of Quinte? Nobody knows the long-term effects these products can have," he said.

John Ladds, operations manager at Turf Management Systems Inc., the franchiser for lawn-care company Weed Man, said his firm also endorses McGuinty's move. He said a provincewide ban is much better than having municipalities enacting their own bylaws.

"Municipal pesticide bylaws are inadequate in that they don't effect retail sales. The province, on the other hand, is taking an approach that will effect retail sales and will, essentially, level the playingfield," Ladds said.

Creating that level playingfield means lawn-care companies across Ontario will have to rely solely on environmentally friendly products. The nice thing about that, he said, is it means little change.

"We're well prepared to move on to further approaches," Ladds said. The move comes just over a year after Belleville city council ended a lengthy debate regarding the possible creation of a bylaw to ban cosmetic pesticide use in the city. Over the course of three months, countless deputations appeared before council arguing the validity of pesticides or their dangerous impact on health and the environment.

Council, at its March 26, 2007 meeting, ended the debate when Coun. Garnet Thompson introduced a motion which moved the responsibility of banning pesticides from the municipal level to the two higher levels of government. It was supported by council and ended the debate in council chambers.

Thompson said he was glad to see the province move on the controversial issue.

"I think it's well timed," he said. "As a city we knew to make it a proper bylaw that it should be in place across the province."

Thompson said McGuinty's action means every municipality in the province will have the same rules and regulations.

"I was very, very happy when I heard the announcement. This goes to point that the city was looking ahead," he said.

[bmcvicar@intelligencer.ca](mailto:bmcvicar@intelligencer.ca)

<http://www.intelligencer.ca/ArticleDisplay.aspx?e=998822>

Wed 16 Apr 2008

Stratford Beacon-Herald  
Applause greets pesticides ban

BY LAURA CUDWORTH, STAFF REPORTER

Insecticides, fungicides, herbicides and any other pesticides are officially banned in the city as of next year.

Council took the final step Monday night and voted in favour of the pesticide ban\*.

The ban comes into effect March 1, 2009, but the focus will be on education rather than enforcement. Enforcement will follow in 2010.

Coun. Bonnie Henderson asked that, "the City of Stratford show leadership and ban pesticides on city property in 2009."

Council agreed, and citizens applauded.

Early on council was reluctant to ban cosmetic pesticides because the province was promising a ban. However, a strong lobby, particularly from the medical community, helped push the bylaw forward.

Coun. Henderson, a strong supporter of the bylaw, thanked everyone for their hard work.

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\*The pesticide vote was 10 councillors in favour and 1 against for a city-wide pesticide ban.

Tuesday, January 01, 2008

The Plain Dealer

Low-grow (even no-mow) lawns tested by city

by Michael Scott  
Plain Dealer Reporter

Don't toss out your Toro or fire the landscapers just yet, but get ready for the next thing in green living by next summer: Low-mow (even no-mow) lawns.

Yep, the green revolution is sowing seeds of environmental change even among the lush, green grasses of suburbia.

Low-mow -- and its even more ecologically minded brother, no-mow -- refer to limited-growth grass seed mixes. The seeds grow into lawns that need less water, need no fertilizers or weed killer and stay reasonably short, 6 to 8 inches, even if mowed only once a month or less.

They're already taking root in Cleveland.

The Cleveland Botanical Garden and several city departments are testing a handful of low-growth grass mixes -- some already available, while others are new mixes developed at the garden. The grasses would be planted initially only in city-owned vacant lots.

Five mixes sprouted with mixed results when planted in pilot strips last summer in front of the Botanical Garden's East Boulevard building. The most promising blend topped off between 6 and 8 inches high when being cut only once a month.

Other Northeast Ohio lawns probably grew that much in a single week this past summer when the rains came.

Supporters say that's what will make these low-mow grasses an increasingly popular option, even though some disdain their small flowers, and most varieties look shaggier than well-manicured yards.

"The perfect American lawn is going through a volatile period in its history," said Case Western Reserve University environmental history professor Ted Steinberg of Shaker Heights. "Of course, I'm the guy who thinks any lawn maintenance is a waste of time."

Steinberg, author of "American Green: The Obsessive Quest for the Perfect Lawn," said there is "an anti-perfect lawn revolution under way in Canada." He said more than 120 cities there have enacted limits on the use of pesticides on yards, for example.

He said low-mow lawns are part of that larger movement away from chemically supported and perfect-looking lawns.

The test lawn outside the garden certainly drew plenty of attention around University Circle this past summer, said Christin DeJong, the Garden's urban botanist, who is running the experiment.

"The Cleveland Botanical Garden's mission is - in every sense of the word - conservation," said Garden Executive Director Natalie Ronayne. "This project can play a role in urban greening, which improves sustainability and helps in economic development. It's more aesthetically pleasing and easier to market a green city."

The low-mow lawn test will continue through next spring on four parcels in the city's Fairfax neighborhood. Contractors for the city planted the new seed mix on half of each of the bare-dirt lots. The other half got a traditional, faster-growing lawn mix.

City workers will mow it monthly next summer and measure the height difference each time between the two sides.

Ultimately, the grass could be used to reseed many of the city's 8,000 parcels of available land.

"That's the bottom line with us - if it saves money on maintenance," said Nate Hoelzel, the city's brownfields program manager. "Green lots help a neighborhood more than plain dirt."

Ronayne and Hoelzel said they could envision the low-grow also being marketed to park systems and maybe the Ohio Department of Transportation for median strips. Because none of the mixes include taller - and hardier - grasses like rye, they won't hold up under heavy traffic, DeJong said.

Landscapers who make part of their living mowing others' lawns aren't too worried - yet.

"Quite honestly, it's really not on our radar at this time," said Sandy Munley, executive director of the Ohio Landscape Association in Broadview Heights. "It sounds pretty cool for some uses, but I think it would depend on what it looks like and feels underfoot."

Brad Copley, vice president of marketing for MTD Products, Ohio's largest lawn care equipment manufacturer, said his company would welcome the idea.

"I don't think this is the end of lawnmowers as we know it," he said, laughing. "Anything that would contribute to the greening of the landscape and the generation of more oxygen - as opposed to concrete or asphalt - is a good thing."

To reach this Plain Dealer reporter:

[mscott@plained.com](mailto:mscott@plained.com) , 216-999-4148

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<http://www.cleveland.com/news/plaindealer/index.ssf?/base/news/1199180057154790.xml&coll=2>

Oct 5, 2007

#### The Hamilton Spectator

##### Burlington bans cosmetic use of pesticides

The city will ban cosmetic use of pesticides beginning Jan. 1, 2009, unless the Ontario government first passes a provincewide law as Premier Dalton McGuinty has promised.

City residents will be consulted further about details of the city bylaw before it is passed.

Councillor Rick Craven, who put forward the motion passed by council this week, says staff will arrange a series of public meetings to hear from residents and lawn-care businesses before drafting the bylaw.

"The key point here is we have passed the question of whether there will be a bylaw. It's simply a matter now of approving the text. A majority of council has voted twice (in committee and at council)."

Last week, Hamilton council enacted a bylaw that goes into effect Jan. 1, 2008, with only warnings to be issued the first year. No charges will be laid until 2009.

The two municipalities will join more than 100 across Canada in restricting use of lawn and garden pesticides to protect human health.

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<http://www.thespec.com/News/Local/article/259644>

Oct 03, 2007

#### Niagara This Week

##### Pesticide ban right step

The Canadian Cancer Society congratulates the City of St. Catharines for passing a bylaw restricting the use of ornamental pesticides and protecting residents' health and the environment.

St. Catharines has now joined over 133 municipalities across Canada, including 25 in Ontario, which have adopted ornamental pesticides bylaws.

Since the ornamental use of pesticides has no countervailing health benefit and has the potential to cause harm, the Society supports the banning and use of pesticides on lawns and gardens, especially when safer alternatives exist.

The Society is concerned about the effects of using potentially cancer-causing substances to enhance the appearance of gardens, lawns, parks and recreational facilities. We base this concern on the International Agency for Research on Cancer that states that some substances used in pesticides are classified as known, probably or possible carcinogens.

It is worth noting that the City of Peterborough passed a model bylaw restricting the use of ornamental pesticides in 2005. This strong bylaw has few exemptions allowing for the use of pesticides.

For example, it does not contain an infestation clause and only allows exemptions if, and only if, there is a threat to human health.

Peterborough's bylaw is simple for residents to understand as it is specific in its terminology regarding pesticide use. It is easy to enforce and has worked very well since its implementation.

The Canadian Cancer Society encourages other municipalities to model their bylaw to the Peterborough example.

The implementation of a strong bylaw will allow St. Catharines to join neighbouring municipalities as a leader in health promotion and environmental protection.

Tanya Nixon, Unit Manager

Canadian Cancer Society Niagara Unit

<http://www.niagarathisweek.com/opinions/article/125533>

September 25, 2007

ERIC MCGUINNESS

THE HAMILTON SPECTATOR

(Sep 25, 2007)

A partial ban on lawn and garden pesticides will go into effect in Hamilton on Labour Day 2008 -- but no charges will be laid the first year.

Explaining how the ban works will be a priority that first year.

The board of health, which consists of all council members, voted 11-2 in favour of the ban yesterday.

That means passage of the bylaw is all but certain when council meets tomorrow -- the day Burlington council deals with a similar measure.

The only opposition to the Hamilton law came from councillors Lloyd Ferguson, who represents Ancaster, and Dave Mitchell, representing Glanbrook and rural Stoney Creek.

West Flamborough Councillor Robert Pasuta failed to win a blanket exclusion for rural lands, but stood with the majority in favour of the bylaw as drafted.

Ferguson said: "I take real issue with government taking a heavy-handed approach. I can imagine a little granny out there whacking weeds with Killlex, suddenly exposed to a \$100,000 fine and bankrupt."

Mayor Fred Eisenberger, a strong proponent of the bylaw, was absent, along with councillors Margaret McCarthy and Scott Duvall.

The board's approval -- capping a grassroots campaign underway for at least a dozen years -- was applauded by Christine Brown of the Hamilton Coalition Against Pesticides and Alison Healing of the Conservator Society of Hamilton.

Brown said: "I am so pleased to see that much buy-in. We knew those two would be against it, but I'm really pleased with the way the city worked."

Healing said: "It's not the strongest bylaw, but a good start ... but I have some disappointment about not having sports fields included. That's something we can look at again in the future."

West Mountain Councillor Terry Whitehead, who complained at length that staff haven't yet come up with details and costs of an enforcement strategy, said he was worried the bylaw will be hard to enforce.

In reply, city lawyer Ron Sabo said: "Is this the easiest bylaw to enforce? No. It will take some expertise to enforce. You shouldn't expect there to be hundreds or thousands of charges.

"Efforts will be directed at education the first year and even after that, it's common for inspectors to issue warnings before laying charges."

Councillor Brian McHattie, who chairs the pesticides subcommittee that worked on the bylaw, said a public health survey in Toronto, where a similar law is in effect, shows a clear reduction in pesticide use "and interestingly more use of lawn-care companies that use alternate forms of control."

[emcguinness@thespec.com](mailto:emcguinness@thespec.com)

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Know your opponent

Most common industry excuses to avoid protecting human health and the environment:

1. - Council has been misinformed on the dangers of pesticides
2. - Health Canada has stated that pesticides do not cause cancer
3. - Instead of banning pesticides make the Garden City a green model and that only lawn care companies can use pesticides
4. - PMRA ensures that pesticides are safe to use
5. - Lawn care companies only use products that are registered pesticides
6. - IPM - integrated pest management is a multi-disciplinary approach to management of plant health problems
7. The IPM program requires a third-party audit of lawn care professional to show a reduction in pesticide use annually
8. - Request Council to consider only allowing IPM companies to operate
9. - Council did not listen to both sides of the argument before deciding to ban pesticide use
10. - Council only listened to the rhetoric of special interest groups that don't understand the use of pesticides
11. - Request the municipal by-law become null and void should the Province introduce legislation
12. - Small businesses are part of the community, many jobs will be lost

13. - People will apply the wrong products on their own if lawn care companies can't apply products
14. - Cancer Society says that produce does not have the residue of pesticides
15. - Heart worm pills for dogs have the same pesticides
16. - Antibiotics are designed to kill
17. - Employees of lawn care companies using pesticides can have blood tests to check for ill effects
18. - Organic solutions don't provide the same results
19. - Taxpayers should be allowed to use legal pesticides
20. - City can't afford to lose more businesses
21. - Banning products is not in Council's mandate

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Fri 25 May 2007

The Guelph Tribune - Viewpoint

Quiet end to debate

The debate over use of cosmetic pesticides has been going on so long here that many residents must be surprised the new council has approved a pesticide bylaw just a few months into its four-year term, with a minimum of muss and fuss and a lot of quiet determination.

Much has changed since the issue arose in a highly controversial way during Mayor Karen Farbridge's first term in 2000-03. Guelph was then on the leading edge of the debate. Then, for three years, the council led by former mayor Kate Quarrie more or less sat on the issue.

Guelph is no longer on the leading edge. It becomes the 127th Canadian municipality to pass a pesticide bylaw. As Tuesday's council meeting made clear, the city still has a lot of work to do in fine-tuning the bylaw before it fully comes into effect for residents in 2009.

A lot of homeowners might not pay much attention until they find they can't hire a lawn-care company to apply cosmetic pesticides. They should, though. With the environment as pressing an issue as it is, and with the potential health risks of pesticides to humans, this is an issue that merits close attention and a careful consideration of the healthier alternatives to spraying.

<http://tinyurl.com/25qwr6>

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Thu 26 Apr 2007

Peterborough Examiner

Township bans lawn pesticides

by RACHEL PUNCH

Sheila Potter is grateful she will no longer have to pick up her two young daughters and carry them past lawns sprayed with pesticides.

The Smith-Ennismore-Lakefield resident watched township council pass a bylaw restricting the cosmetic or non-essential use of pesticides Monday.

"I'm grateful to our councillors for being willing to take this forward," said the biologist.

Potter and Jo Hayward-Haines organized a campaign to encourage council to pass a pesticide bylaw.

"To me having to dance around those little white signs (warning pesticides have been sprayed) is stressful for a mom," she said.

"It was always an important issue for me because I'm a biologist and I appreciate our beautiful environment ... but as a mom it became critical."

Potter said the help of Deputy Reeve Mary Smith and access to the City of Peterborough's bylaw were both critical to the campaign.

"(Peterborough's bylaw) is very well written, it's very practical and very effective. It was very easy for us to take that and adapt it to our needs," Potter said.

Lesley Parnell, the township's acting deputy clerk, said the bylaw passed 3-2. It was supported by Smith, Smith Coun. Sherry Senis and Lakefield Coun. Anita Locke.

Reeve Ron Millen and Ennismore Coun. Donna Ballantyne voted against.

"They wanted to exclude golf courses," Parnell said.

The bylaw goes into effect March 1. Golf courses must be actively enrolled in an integrated pest management certification program as of Jan. 1. They must be fully accredited by March 1, 2009.

"It's very strongly based on the City of Peterborough bylaw, which is highly regarded across the country in the research I have done," Parnell said.

Senis asked staff to send a copy of the bylaw to all municipalities in Ontario who do not have a pesticide bylaw, as well as encourage all cities and towns to put pressure on the province to pass legislation.

"I feel that any time we can stop using these pesticides it will make for a much healthier community," Senis said.

The township plans an education campaign on the bylaw for the public.

The township is the first in the county to pass a pesticide bylaw.

"I think it's a very progressive step and I applaud council," Smith said. "I'm pleased to see that we are a leader in the county."

"I think that this follows the smoking ban," Senis said, adding many municipalities passed non-smoking bylaws before the government legislated a province-wide ban.

"This is much along the same lines. It effects health and the environment."

Senis said the bylaw was so important in the township because it has so many wells and lakes.

"I feel that any time we can stop using these pesticides will make for a much healthier community," she said.

Smith said it is a health issue.

"This is one way we as a municipality can help to ensure the future health of our residents," she said.

The township will be educating the public on the bylaw.

Smith said the education campaign done by the city of Peterborough will help the residents adapt.

"It's not a new thing for more people. I believe that the citizens are prepared for this," she said.

The township is the first in the county to pass a pesticide bylaw.

"I think it's a very progressive step and I applaud council," Smith said. "I'm pleased to see that we are a leader in the county."

Parnell said 127 municipalities in Canada have pesticide bylaws, including 22 in Ontario.

rpunch@peterboroughexaminer.com

<http://tinyurl.com/3cwzxb>

Thursday 22 March 2007

Environment Policy Section

Danish lessons on pesticides

Denmark's success in reducing pesticide use over the past 20 years was the focus of a debate organised by the Liberal Democrats in Parliament on 21 March 2007.

Background:

Denmark has been one of the most successful states over the past 20 years in reducing pesticide use. The first Pesticide Action Plan was introduced in 1986,

prompted by a rapid use in pesticides in the early 1980s and a corresponding loss of biodiversity.

The frequency of application is the calculated number of pesticide applications in agriculture per year, provided a fixed standard dose is used. Danish efforts saw the frequency of pesticide-use drop from 3.1 in 1990-93 to 2.1 by 2001-2003. Currently, the country is in the middle of its third Action Plan 2004-2009, with a target of reducing frequency of pesticide use to less than 1.7 by 2009.

Issues:

Ms. Lene Graversen, head of the pesticides division in the Danish environment ministry, outlined the most important measures that Denmark has learned in use- reduction, and which she said should be included in the Commission's proposed 'thematic strategy' on the sustainable use of pesticides:

\* Thorough economic analyses have demonstrated that pesticide use can be reduced without cost in Denmark, and this maybe the case in other member states, and;

\* quantitative-use reduction goals should be included, which can be understood and implemented at farm level, in this way gaining farmers'

support.

She noted that compared with other member states, relatively few pesticides are available in Denmark, "but it hasn't been an obstacle to a highly productive agricultural sector", she stressed.

Positions:

Sofia Parente of the Pesticide Action Network (PAN), supported Graversen's view that the inclusion of all stakeholders in the debate had also been important in Denmark's success, as well as the existence of a well-funded advisory service to assist farmers on how to reduce pesticide use - this was supported largely by a tax on pesticides.

Paul Henning Petersen, a senior adviser with the Danish Agricultural Advisory Service, which is owned by Danish farmers, said that since field trials carried out by his service were paid for by farmers and sponsored by chemical companies, "farmers were willing to trust the results".

However, he added that Danish farmers, having achieved the frequency of application target of 2.0 for the last action plan ending 2000, and now set with a new target of 1.7, were beginning to think "that politicians can never have enough".

Frequency of application has actually risen over the past few years, however, rising to 2.3. Petersen said that the growth of large farms had meant that farmers had less time to focus on each hectare. He added that fields were changing, with new pests emerging, and that "the scope for further reduction is more research" and in that light he said that the use of 'patch spraying' should be explored further, ie the identification of specific areas to be sprayed, rather than spraying the whole field.

Latest & next steps:

The Commission's proposals on the sustainable use of pesticides will be examined by the Agriculture Council in June 2007.

Links

Governments

\* Danish Environmental Protection Agency: Pesticides  
<http://glwww.mst.dk/homepage/>

Other

\* Danish Agricultural Advisory Service  
<http://www.lr.dk/applikationer/kate/viskategor.asp?ID=lr0030000200>

NGOs

\* PAN Europe: Danish Pesticide Use Reduction Programme  
 \* PAN Europe: Europe's children "paying the price" for current pesticide use

<http://www.euractiv.com/en/environment/danish-lessons-pesticides/article-162676>

Tuesday, March 13th, 2007

Collingwood bans pesticides by Mark Beaton

No pesticides in Collingwood.

Council has approved that on January 1, 2008 the residential use of pesticides in the town will be banned.

A motion came forward to start the ban of pesticide use on April 22 this year on Earth Day but council did not pass the motion.

The motion they did pass says on April 22, council will announce the ban and will educate the public on pesticide use to its eventual elimination on January 1st.

Councillor Ian Chadwick says he wanted the ban implemented right away because he believes the public are aware of the issues and concerns with pesticide use.

Deputy Mayor Sandra Cooper says talking to residents of the community, she believes some of them were not aware of the health concerns associated with the use of pesticide use.

Cooper says she is happy the ban is not being implemented right away and how the public will have time to be informed about pesticides until the total ban of it on January 1st.

She says the most important thing is the health of the residents not the health of the lawn.

<http://www.radioowensound.com/news.php?id=3724>

Tue 13 Feb 2007

The Toronto Star

Oakville bans the use of pesticides

by Jim Wilkes

Oakville council voted overwhelmingly last night to pass a bylaw banning the cosmetic use of pesticides.

Councillors voted to approve the bylaw that would prohibit most outdoor use of pesticides, after more than 10 hours of debate and presentations on the issue over two nights last week.

"After six years and literally hundreds of hours of discussion and debate, we finally have a bylaw that will protect the public health and the interests of our community," said a smiling Ward 5 Councillor Jeff Knoll, who proposed the bylaw to ban most uses of the chemicals.

Oakville is the 127th Canadian municipality to restrict pesticide use. "It's a great day for Oakville, especially the children of Oakville," Renee Lehnen, a nurse who heads the Oakville environmental group Gardens Off Drugs, said outside the council chamber. "It will give them an extra measure of protection against chemical pesticides that can harm their health."

Liz Benneian, volunteer president of Oakvillegreen, a pro- environment citizens group, agreed.

"Citizens have been fighting for this bylaw for more than six years," she said. "I'm glad to see that the deep pockets of the pesticide industry were not able to buy votes in this community."

Knoll had said he was heartened by the debate, which included pesticide industry lobbyists, science professionals and ordinary folks.

"We've seen a 'yes' side populated by mothers, fathers, scientists, doctors, environmentalists and average people from all walks of life," he said. "On the 'no' side we've seen the industry, the industry, the industry and two citizens, one of whom believes children shouldn't be allowed on neighbours' lawns."

Council rejected a similar bylaw in 2003 and voters narrowly defeated one in a referendum during that fall's municipal election. Council proposed another anti-pesticide bylaw in 2004, but deadlocked in a six-to-six vote.

The new bylaw, passed by a 10-3 margin, will take effect next January.

The bylaw bans pesticide use outdoors except in public or private swimming pools, when used to purify water for humans or animals, and on land used for the commercial production of food. It also makes exceptions to allow pesticide use on specially certified golf courses or to control, destroy or repel animals and plants harmful to human health. Other exemptions added to the bylaw last week allow use of pesticides to control termites and rodents.

Another important new exemption, according to Ward 4 Councillor Allan Elgar, will permit the town to attack pests that devastate trees, including the gypsy moth caterpillar and emerald ash borer.

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<http://www.thestar.com/News/article/181031>

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### **Banned pesticides widely used in Canada**

David Suzuki Foundation

News Release

Banned pesticides widely used in Canada: Minister of Health obliged to initiate review under new pesticide act.

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January 25, 2007

CBC News

Home and garden pesticides move behind counter

Zapping insects in your house and backyard is getting more complicated on P.E.I., as the province moves to control the sale of domestic pesticides.

"It's going to be an ongoing cost each year for us."- Jamie Lewis, Home Hardware

Many domestic pesticides will no longer be available for customers to just grab off the shelf of the local hardware store. Starting March 1, they will have to go to the counter and ask for them.

"It's like a drug store. There's over-the-counter and ones you have to get from a pharmacist," said Environment Minister Jamie Ballem.

Lawn pesticides will no longer be available off the shelf. Lawn pesticides will no longer be available off the shelf.

"They will have to get a certain class of pesticides from an employee of the store who has been trained in dealing with pesticides, and they will give you some advice on how to use it."

Jamie Lewis, the manager Charlottetown's Home Hardware, said there will be some costs involved for the store to meet regulations.

"We have to look at purchasing some shelving units to help secure the pesticides that are on the controlled substance part of it," he said.

"It's also going to involve training for the staff. In a garden section we do have renewing staff each year, but we also have turnover, so it's

going to be an ongoing cost each year for us."

The first information session for retailers will be held next Monday at the Agriculture Canada research station in Charlottetown. There will be other information sessions across the province over the next few weeks.

<http://tinyurl.com/3yrs7e>

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Sunday, January 14, 2007

EarthTalk: Green-friendly Alternatives to Conventional Lawns  
Environment

Dear EarthTalk: I'm sick of having to maintain my lawn, and I'm sure that all the chemicals I'm using are no good for the environment. What alternatives can I explore that will save time and money while keeping the property looking nice? -- Sarah, Bethesda, MD

Westport, CT - E/The Environmental Magazine - infoZine - Grass lawns first appeared in Europe in medieval times, status symbols for the rich that had to be kept trimmed by fairly labor-intensive methods, often by grazing livestock and certainly not by polluting lawn mowers and poisonous weed killers. Lawns actually did not become popular in North America until the middle of the 20th century, but are now as common as the middle class suburban homes they surround.

Besides hogging public water supplies--over 50 percent of U.S. residential water usage goes to irrigating lawns--a 2002 Harris Survey found that American households spend \$1,200 per year on residential lawn care. Indeed, the booming lawn care industry is more than eager to convince us that our grass can be greener--and then sell us all the synthetic fertilizers, toxic pesticides and leaky lawnmowers to make it so.

According to Eartheasy.com, which offers online insights on a host of environmental issues alongside books and green products for sale, there are many alternatives to a carpet of monochromatic grass for one's property. They recommend groundcover plants and clover, which spread out and grow horizontally and require no cutting. Some varieties of groundcover are Alyssum, Bishops Weed and Juniper. Common clovers include Yellow Blossom, Red Clover and Dutch White, the best suited of the three for lawn use. Groundcover plants and clovers naturally fight weeds, act as mulch and add beneficial nitrogen to the soil.

Eartheasy also recommends flower and shrub beds, which can be "strategically located to add color and interest while expanding the low maintenance areas of your yard," and planting ornamental grasses. Ornamental grasses, many which flower, have numerous benefits over conventional grasses, including low maintenance, little need for fertilizer, minimal pest and disease problems and resistance to drought.

According to David Beaulieu, About.com's Guide to Landscaping, moss plants should also be considered, especially if your yard is shady: "Because they are low-growing and can form dense mats, moss plants can be considered an alternative ground cover for landscaping and planted as 'shade gardens' in lieu of traditional lawns." Moss plants do not possess true roots, he points out, instead deriving their nutrients and moisture from the air. As such they like wet surroundings and also soil with a pH that is acidic.

In all fairness, lawns do have a few plusses. They make great recreational spaces, prevent soil erosion, filter contaminants from rainwater and absorb many kinds of airborne pollutants. So you might still keep a short section of lawn, one that can be mowed with a few easy strokes. If you do, the U.S. Environmental Protection Agency (EPA) recommends avoiding traditional synthetic fertilizers, herbicides and pesticides. A number of all-natural alternatives are now widely available at nurseries. Natural lawn care advocates also advise mowing high and often so that grass can out-compete any nascent weeds. Also, leaving clippings where they land--so they can serve as natural mulch--also helps prevent weeds from getting a foothold.

## Related Links

Eartheasy.com

EPA's Healthy Lawn, Healthy Environment ( PDF )

Got An Environmental Question? Send it to: EarthTalk, c/o E/The Environmental Magazine, P.O. Box 5098, Westport, CT 06881; submit it at: [www.emagazine.com/earthtalk.html](http://www.emagazine.com/earthtalk.html), or e-mail: [earthtalk@emagazine.com](mailto:earthtalk@emagazine.com).

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Banned pesticides widely used in Canada

David Suzuki Foundation

News Release

Banned pesticides widely used in Canada: Minister of Health obliged to initiate review under new pesticide act

June 28, 2006

Vancouver -- More than 60 pesticides banned in other industrialized countries but still widely used in Canada should immediately be subject to a special review under the new federal Pest Control Products Act, according to the David Suzuki Foundation.

The new Act, passed in 2002, comes into effect today - replacing what was widely considered to be badly outdated legislation. And according to an extensive new David Suzuki Foundation review of pesticide use in Canada and other OECD countries, Canada has a long way to go to catch up to the rest of the industrialized world.

"While most industrialized countries have been working to protect human health and the environment by banning dangerous pesticides, Canada has been slow to change," says review author and environmental lawyer David R. Boyd. "The new Act is the federal government's opportunity to step up and protect the health of all Canadians. We urge the Minister of Health to initiate a special review of these pesticides."

A total of 61 pesticides associated with adverse human health effects, including: increased risk of cancer, acute toxicity, developmental disorders, reproductive problems, organ damage and interference with human hormone systems, are still allowed in Canada, while banned elsewhere. For example, two of the most heavily used pesticides in Ontario in 2003, atrazine and 1,3-dichloropropene, are banned in other OECD countries. Other pesticides listed in the review that are commonly used in Canada include 2,4-D, diazinon and amitrole.

Mr. Boyd notes that under the new Act, the Minister of Health has an obligation to initiate a special review of products that contain active ingredients banned by other OECD countries. Under that special review, the onus is placed on pesticide manufacturers to prove that their products do not threaten human health.

"Canadians shouldn't be treated like second-class citizens," says Ann Rowan, director of the David Suzuki Foundation's sustainability program. "If enforced by the federal government, the new Act could finally move Canada's pesticide regulation in line with the rest of the developed world."

The David Suzuki Foundation has submitted a request to the Minister of Health for a special review of the 61 pesticides banned in other OECD nations. A copy of the request and a full listing of the 61 pesticides and their associated health effects are available at:

<http://www.davidsuzuki.org/WOL/Publications.asp>

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**Newmarket bans pesticide use on lawns**

June. 27, 2006. Toronto Star

GAIL SWAINSON STAFF REPORTER

Newmarket has become the second municipality in Greater Toronto to ban cosmetic pesticide use on lawns and in gardens.

"I am doing this because I want to give my children - your children - a healthy, pesticide-free life," Councillor Joe Sponga told council before the sweeping ban passed 9-0 last night.

Angry lawn care company owners stormed out of the meeting just before the vote.

"They have passed a bylaw that has been shown time and time again will shift use back to the homeowner," Landscape Ontario's Ken Pavely said later.

The bylaw, which comes into effect Sept. 1, 2008, is patterned after Toronto's, and bans most pesticide use within Newmarket borders.

Environmentalists gave council a standing ovation.

"This is the start of something big in York Region," crowed Gloria Marsh, chair of the York Region Environmental Alliance.

Officials with the lawn care industry warned council that banning lawn pesticides will do little to prevent their surreptitious use by untrained homeowners.

"Really, what you are trying to do is put me out of business," Kyle Tobin, owner of Lawn Savers Plant Health Care Inc., told Newmarket council last night.

"In the city of Toronto, I lost 50 per cent of my business, but all that happened is that the homeowners started doing it themselves," Tobin added.

Almost 100 residents and lawn care industry insiders turned out to hear Newmarket council debate the pesticide ban on private property.

Supporters told council the studies are clear: Pesticides pose a very real risk to public health and should be prohibited.

"It is too long that those who poison our children and dogs have all the rights," said Sari Merson, spokeswoman for Pesticide Free Ontario. "Don't listen to strong-arm tactics of the poison peddlers."

Tobin said the comment that he sells poisons "is a ridiculous notion. I take great offence to that."

The lawn care industry has aggressively fought the proposed Newmarket bylaw with a phone campaign warning residents of the proposed prohibition.

Toronto was the only GTA municipality with a sweeping ban on the use of cosmetic pesticides on private property.

In Toronto, lawn care companies face \$255 fines if they use banned products such as herbicides, insecticides and fungicides.

Starting in September 2007, homeowners can also be fined for breaking the bylaw. The lawn care industry appealed the Toronto ban to the Supreme Court, but lost.

The town of Caledon has a limited prohibition, allowing for spot distribution of pesticides. Markham is also looking at a ban.

Last year, Newmarket politicians asked staff to investigate a number of proposals to regulate the lawn care industry.

A series of public meetings was held over the winter and the lawn care industry was invited to respond.

Staff later recommended that council institute a ban similar to Toronto's.

<http://tinyurl.com/ff5ug>

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### Timeline on Pesticide By-laws & Non-essential Use in Canada

**June 28, 2006** - The 5th Anniversary of the Supreme Court of Canada Hudson Decision

**June 28, 2006** - New Pest Control Products Act (PCPA) will come into force on June 28, 2006

**June 28, 2006** - Deadline for public comment on the Proposed Acceptability for Continuing Registration for the re-evaluation of the lawn and turf uses of the herbicide (4-chloro-2-methylphenoxy) Acetic Acid (MCPA) in Canada.

**June 12, 2006** - The City of London adopts a pesticide bylaw restricting non-essential use on lawns and gardens with a 13 to 6 vote in favor becoming the 117th municipality in Canada to do so.

**June 7, 2006** - Health Canada's Pest Management Regulatory Agency's relationship with the pesticide industry is questioned in a Globe and Mail's investigative report involving the circulation of an internal document concerning the safety of 2,4-D.

<http://ctv.globetechnology.com/servlet/story/RTGAM.20060607.gtherbicide07/tech/Technology/techBN/ctv-technology>

**May 16, 2006** - An NDP opposition motion concerning restrictions on non-essential pesticide use designed to protect the health of all Canadians from the unwanted exposure to synthetic lawn toxins fails to receive the sufficient support of the current federal government. Former Prime Minister Paul Martin, former Minister of Health, The Honourable Ujjal Dosanjh and the former Minister of State, (Public Health), The Honourable Dr. Carolyn Bennett all vote in support of the NDP motion. The breakdown by party of the vote is as follows:

Yeas	Nays	Party
28	0	New Democratic Party
59	32	Liberal
0	124	Conservative
0	50	Bloc Québécois
0	1	Independent
87	207	

[http://www.parl.gc.ca/39/1/parlbus/chambus/house/debates/024\\_2006-05-16/HAN024-E.htm](http://www.parl.gc.ca/39/1/parlbus/chambus/house/debates/024_2006-05-16/HAN024-E.htm)

**April 24, 2006** - Pat Martin MP for Winnipeg Centre introduced Bill C-225, an act to amend the Pest Control Products Act (prohibition of use of chemical pesticides for non-essential purposes). This is the fifth time that such a Bill has been introduced in the House of Commons since 1999.

[http://www.parl.gc.ca/39/1/parlbus/chambus/house/bills/private/C-225/C-225\\_1/C-225\\_cover-E.html](http://www.parl.gc.ca/39/1/parlbus/chambus/house/bills/private/C-225/C-225_1/C-225_cover-E.html)

**April 24, 2006** - A report in the 'Journal of Paediatrics and Child Health (Volume 11, Number 4, April 2006)' directly contradicts a recent re-assessment of 2,4-D by the federal Pest Management Regulatory Agency, which found the product does not cause cancer and can be used safely on lawns if directions are followed. The new study of the most commonly used weed killer on Canadian lawns and gardens - known only as 2,4-D - is "persuasively linked" to cancer, neurological impairment and reproductive problems. "The 2,4-D assessment (by the federal agency) does not approach standards for ethics, rigour or transparency in medical research," said medical writer Meg Sears, speaking for co-authors Robin Walker, Richard van der Jagt and Paul Claman.

**April 3, 2006** - The final stage of the Pesticide Code of Quebec has come into effect. This means that 20 pesticide active ingredients, including 2,4-D, are banned for sale and use for lawns across the Province of Quebec. These ingredients are contained in 210 products that will be prohibited for sale and use for lawns all across Quebec.

<http://www.mddep.gouv.qc.ca/pesticides/permis-en/code-gestion-en/code-enbref.htm>

**November 17, 2005** - The Supreme Court of Canada rejects CropLife Canada's challenge of Toronto's Pesticide By-law. There is no further legal avenue for Crop Life to challenge Toronto's pesticide by-law.

[http://scc.lexum.umontreal.ca/en/news\\_release/2005/05-11-17.3.wpd/05-11-17.3.wpd.html](http://scc.lexum.umontreal.ca/en/news_release/2005/05-11-17.3.wpd/05-11-17.3.wpd.html)

**September 22, 2005** - Dr. Karen Dodds, Executive Director of the Pest Management Regulatory Agency addresses CropLife Canada's 'GrowCanada' conference stating that: "I'm a firm believer in priorities," she said. "Yes, we're a regulator and yes, we have cost recovery, but first and foremost we're public servants and we provide advice and recommendations that serve the public good." An examination of the agency's 2003-2008 strategic plan pinpointed three primary objectives which Dr. Dodds described as "solid and enduring for the agency: to protect human health and the environment, to build an open, transparent regulatory system and to make sure that the agency is a workplace of choice so we have that strength internally."

**May 16, 2005** - Deadline passed with no federal action on the House of Commons Committee recommendation to "phase out of pesticides used for cosmetic purposes" on lawns and gardens across Canada

**April 11, 2005** - The Chair of the House of Commons Standing Committee on Health found the PMRA headline concerning 2,4-D on February 21, 2005 to be quite misleading to the public and recommended that a second press release be issued to correct the false impression. The Executive Director of the Pest Management Regulatory Agency responded to the Chair stating: "We are working to clarify our communications" and will make this available to the public. As of June 25, 2006 no such clarification on the misleading statements by the PMRA concerning the safety of 2,4-D has been issued to the public that I am aware of.

**February 21, 2005** - Canada's Pest Management Regulatory Agency (PMRA) issues a press release with the headline "The PMRA Determines that 2,4-D Can Be Used Safely on Lawns and Turf".

**October 12, 2004** - Mr. Gary Schellenberger MP for Perth -Wellington presented a petition concerning cosmetic pesticide use on behalf of his constituents. Since 2001, twenty-four (24) similar petitions have been presented and read by MPs in the House of Commons on the use of chemical pesticides in our communities across Canada. They have called upon Parliament to enact an immediate moratorium on the cosmetic use of pesticides until they can be scientifically proven safe for use.

**April 23, 2004** - The Ontario College of Family Physicians (OCFP), which represents more than 6,700 family physicians in Ontario, has completed Canada's most comprehensive review on pesticides. Their findings reveal consistent links to serious illnesses such as cancer, reproductive problems

and neurological diseases, among others. The study also shows that children are particularly vulnerable to pesticides.

<http://www.ocfp.on.ca/English/OCFP/Communications/CurrentIssues/Pesticides/default.asp?s=1>

New Pest Control Products Act

**December 23, 2002** - A Health Canada press release quotes the Minister of Health stating that "The new Pest Control Products Act modernizes Canadian regulation of pesticides and will better safeguard Canadians - especially children - from health and environmental risks."

Furthermore the new Act provides "the Minister with the authority to remove pesticides from the market if required data are not supplied."

The release also states that: "the new PCPA will enhance public confidence, here and abroad, that Canadian agri-food, forestry and other products are safe."

[http://www.hc-sc.gc.ca/english/media/releases/2002/2002\\_84.htm](http://www.hc-sc.gc.ca/english/media/releases/2002/2002_84.htm)

**December 12, 2002** - The new Pest Control Products Act (2002) receives Royal Assent.

<http://www.pmra-arla.gc.ca/english/legis/pcpa-e.html>

**May 21, 2002** - Mr. Basil Stapleton, Legal Counsel for the Department of Justice stated to the Standing Committee on Health reviewing the proposed Pest Control Products Act that the bill entails "a precautionary approach to the decision-making on registrations, it in fact uses a precautionary approach that provides a much higher level of protection to health, safety, and the environment than, for example, would the use of the Rio declaration approach."

**June 28, 2001** - The Supreme Court of Canada, was dismissed Chemlawn and Spraytech challenge against the Town of Hudson, Quebec. In an unanimous judgement, Justice Claire L'Heureux-Dube wrote for the court "It is reasonable to conclude that the town bylaw's purpose is to minimize the use of allegedly harmful pesticides in order to promote the health of its inhabitants". She also stated "Permitting the town to regulate pesticide use is consistent with international law's 'precautionary principle,' which states it is better to be overly cautious than to create a potential risk to the environment."

The judges noted that Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Northwest Territories and Yukon all have similar provisions enabling their municipalities to make such bylaws.

[http://scc.lexum.umontreal.ca/en/news\\_release/2001/01-06-28.3/01-06-28.3.html](http://scc.lexum.umontreal.ca/en/news_release/2001/01-06-28.3/01-06-28.3.html)

**May 16, 2000** - A House of Commons Committee report titled 'Making The Right Choice for The Protection of Health and the Environment' called for a "five-year phase out of pesticides used for cosmetic purposes" on lawns and gardens across Canada.

**March 19, 2000** - At the annual convention of the Liberal Party of Canada on March 16-19, 2000, in Ottawa, party delegates adopted priority resolution #113 concerning the cosmetic use of pesticides which states:

"Be it resolved that the Liberal Party of Canada urge the federal government to introduce an immediate moratorium on the cosmetic use of chemical pesticides until such time as their use has been scientifically proven safe and the long-term consequences of their application are known."

**June 13, 2006 London Free Press**

**London bans pesticides**

**The 13-6 vote, after a two-hour debate, allows exemptions such as sports fields and farms.**

By **JOE BELANGER**, FREE PRESS CITY HALL REPORTER

In two years, Londoners won't be allowed to kill their dandelions -- or any other weeds -- with pesticides.

Sensing the political winds in an election year, city council voted 13-6 last night in favour of a bylaw banning the cosmetic use of pesticides.

The bylaw takes effect in September 2008, giving industry and residents three growing seasons to adjust.

"It's the right thing to do," said an elated Coun. Bill Armstrong, who led the push for a bylaw.

Two key issues to be resolved are how the bylaw will be enforced and the breadth of a public education campaign.

City staff estimate enforcement will cost up to \$300,000 a year, while an education campaign could cost \$300,000 -- nearly \$1 million over three years.

Last night's vote came after a two-hour debate with most council members speaking.

Council first voted on a series of four proposed amendments, including one calling for a total ban. The only one that passed was an exemption for playing fields and lawn bowling centres proposed by Coun. Cheryl Miller.

"It was that one final compromise to make it a good majority of councillors to pass the bylaw," said Sean Hurley, spokesperson for the Coalition Against Pesticides in London. "I think they've made a good decision. It's a good bylaw."

Other exemptions in the bylaw -- mostly a blend of bylaws passed in Toronto and Peterborough -- include golf courses, farms, swimming pools, utility rights of way and for threats to human health and insect infestations.

John Matsui, spokesperson for the lawn-care industry, said he wasn't surprised by the vote.

"It's clear Imagine London is in control of the majority of city council and they're to be congratulated," Matsui said.

"That's what London should get used to."

Sam Trosow, the driving force behind the citizens' group Imagine London, which also successfully appealed to the Ontario Municipal Board for a new 14-ward electoral system, said he's happy with the bylaw, except the phase-in. "But it's a real victory for those of us working for a meaningful bylaw for London."

The debate was mostly civil, but Deputy Mayor Tom Gosnell raised eyebrows when he described council's pro-ban members as "idealoguees."

"I hear a lot of opinions, but don't see a lot of facts," Gosnell said. "We've heard just a lot of people scare-mongering. You have to have evidence and you have to have empirical evidence."

Gosnell echoed the lawn-care industry's position that scientists at Health Canada and similar agencies around the world have approved pesticides for use, including 2,4-D, the main herbicide used by the lawn-care industry, saying they pose an acceptable risk if used as directed.

Ban supporters concede there's little or no scientific evidence showing a direct link between pesticide use and health issues, but argue banning cosmetic use of the materials is needed as a precaution because of casual links and associations between various ailments and pesticides.

Council defeated a bylaw last November that would have allowed spraying of pesticides on up to 20 per cent of a property owner's lawn, reducing that to 10 per cent by 2010.

But the debate was renewed in the wake of a poll by the Canadian Cancer Society and the Canadian Association of Physicians for the Environment that found 74 per cent of Londoners favoured phasing out pesticides.

"I think that poll really helped make council realize we do have public support," said Trosow.

Meanwhile, council began to feel the pressure as political observers warned the pesticide issue was emerging as a major issue for the Nov. 13 election.

Laura Wall, manager of the Elgin-Middlesex unit of the cancer society, was pleased.

"We recognized the weight that poll would carry, and that's why we worked so hard the last four or five months to answer questions for council and the public," Wall said, adding the group will now shift focus to the public information campaign.

#### HOW COUNCIL MEMBERS VOTED

- In favour of a pesticide ban: Mayor Anne Marie DeCicco, Controller Gord Hume and councillors Fred Tranquilli, Bernie MacDonald, David Winninger, Susan Eagle, Sandy White, Judy Bryant, Ab Chahbar, Cheryl Miller, Joni Baechler, Bill Armstrong and Harold Usher.

- Opposed: Deputy Mayor Tom Gosnell, controllers Bud Polhill and Russ Monteith and councillors Roger Caranci, Rob Alder and Paul Van Meerbergen.

<http://lfpres.ca/newsstand/News/Local/2006/06/13/1628904-sun.html>

#### Armstrong lauded over pesticide ban

By **JONATHAN SHER**, FREE PRESS CITY HALL REPORTER

Supporters of a pesticide ban tipped their hats yesterday to a city councillor who pushed the issue even when many thought it was dead. Ward 4 Coun. Bill Armstrong drew stares of disbelief, when, in February, he pushed for a ban even though a less stringent measure had been rejected three months earlier.

A supporter of the ban, London Mayor Anne Marie DeCicco, said then she was resigned to letting the next council consider the issue.

Last night, a smiling DeCicco was singing a different tune.

"Good for (Bill). I'm delighted council finally saw reason," she said.

The debate on pesticides here began in 2001, but the tide turned this year, when the Canadian Cancer Society released a survey suggesting 74 per cent of Londoners wanted to phase out pesticide use on private property.

"We definitely feel the survey reinvigorated the debate," said Laura Wall of the society's Elgin-Middlesex unit.

"It gave councillors the assurance a majority of Londoners wanted this," she said.

But it took Armstrong to take the results and ask for a ban, she said.

"He showed a lot of courage . . . He seized the moment and pushed it forward," she said.

Asked about his role, Armstrong downplayed his contribution, saying the ban came after a "team effort."

It was not the first time Armstrong had championed a cause his colleagues thought was lost, he said.

But that was more the reason to keep pushing, he said. "If you don't give up, you win sooner or later."

<http://lfpres.ca/newsstand/News/Local/2006/06/13/pf-1628919.html>

#### Altered breast tissue development in young girls linked to pesticides

Filed under Research, Health, Environment, Sciences, Hispanic on Wednesday, June 7, 2006.

GAINESVILLE, Fla. - Exposure to pesticides crosses the generations, according to a new University of Florida study that finds daughters of mothers who lived near areas of heavy agricultural spraying may be unable to nurse their children.

The research was conducted in Mexico, but many of these pesticides, although they go by a different name, have the same ingredients and are used in the United States, potentially giving Americans the same risks, said Elizabeth Guillette, a UF anthropology professor who led the research.

The connection from mother to child was found among Sonoran Mayan girls whose mothers were exposed to chemical spraying. They did not develop the ability to produce milk, unlike their counterparts who lived a more organic lifestyle, she said.

"The results underscore the importance of women protecting themselves from manufactured chemicals beginning at birth because they stay in the body," said Guillette, whose research is published in the March issue of Environmental Health Perspectives.

The study found changes in breast development when comparing pre-adolescent girls whose mothers grew up in an agricultural valley where heavy doses of pesticides were sprayed with those who were raised in surrounding foothills where none were used. Some of the girls in the agricultural valley had no mammary tissue or a minimal amount.

Although several studies have examined the effects of pesticides on when puberty begins, none have looked at how exposure influences the development of mammary gland tissue, she said. To investigate the question, Guillette found two population samples about 50 miles apart in the northwestern Mexican state of Sonora's Yaqui Valley that were almost identical except for their exposure to pesticides.

The Sonoran Mayan people of the valley split philosophically over the use of pesticides and other modern agricultural techniques during the country's Green Revolution of the early 1950s, when large-scale pesticide-based agriculture came into practice. Valley residents embraced pesticides, herbicides and other agricultural chemicals, including spraying in homes, while the other group, which moved to the foothills, avoided them entirely.

"These groups were the same in every respect, culturally, genetically and socio- economically, except for their use of pesticides," Guillette said.

"They had the same diet, the same child-rearing practices and the same school system."

Although the farmers in the valley and the ranchers in the foothills had cousins and other extended family members living in the other community, they never intermarried because of their strong differences over pesticides, she said.

Guillette began her research in 1966, comparing the physical coordination and mental development in preschool children from the two communities. In an earlier published study, she found that valley children were less adept at catching a ball, reflecting poor eye-hand coordination, and showed dramatic differences in their ability to draw a person.

Her more recent study focused on breast development in girls between the ages of 8 and 10 and involved 30 girls from the valley and 20 girls who lived in the foothills. Guillette and local nurses measured total breast diameter and mammary diameter.

While breast size was much larger in the girls in the valley, they had much less mammary tissue, and sometimes none at all, than the girls in the foothills, Guillette said.

Mammary tissue could not be palpated in about 19 percent of the girls from valley towns who showed signs of breast development. In contrast, none of the girls from the foothills who had reached this stage lacked mammary tissue.

"With the foothill girls, there was a direct correlation between breast size and mammary development, whereas with the pesticide-exposed girls there was none," Guillette said. "In fact, we saw girls who were fairly well developed with absolutely no mammary glands."

Because the Yaqui Valley was in its fifth year of a drought at the time of the study, with most farmers moving into ranching and stopping pesticide use, the results point to earlier exposure, probably transferred from the mother before birth, she said.

Various pesticides, mainly organophosphates and organochlorines, were used extensively to farm the Yaqui Valley near the time of the girls' birth, between 1992 and 1994, and many of these compounds are known to cross a pregnant woman's placenta to the developing child, Guillette said. A study of newborn children from the valley that was done close to the time these children were conceived found elevated pesticide levels, she said.

"Many of these pesticides are popular in the United States, both for agriculture and for home use and lawn care," she said. "We know the age for breast development in girls is occurring earlier and there is the potential that pesticides may be playing a similar role in the United States as found in Mexico."

Writer Cathy Keen, [ckeen@ufl.edu](mailto:ckeen@ufl.edu), 352-392-0186

Source Elizabeth Guillette, [eguillet@anthro.ufl.edu](mailto:eguillet@anthro.ufl.edu), 352-375-5929

<http://news.ufl.edu/2006/06/07/breast-changes/>

Health study underlines weed killer concerns

Apr. 25, 2006. 01:00 AM

DENNIS BUECKERT CANADIAN PRESS

<http://www.thestar.com>

OTTAWA—The most commonly used weed killer on Canadian lawns and gardens — known only as **2,4-D — is "persuasively linked" to cancer**, neurological impairment and reproductive problems, a new study says. The report in the journal *Paediatrics and Child Health* contradicts a recent re-assessment of 2,4-D by the federal Pest Management Regulatory Agency, which found it does not cause cancer and can be used safely on lawns if directions are followed. Found in many pesticides, it's been controversial for decades. The study appeared the day MP Pat Martin (NDP-Winnipeg Centre) tabled a private member's bill to ban pesticide use for cosmetic reasons. Martin says more than 50 million kilograms of pesticides are still used in Canada each year. His bill would require pesticide makers to prove their products are safe before being placed on the market, rather than regulators being required to prove the products are dangerous. Authors of the new study say the federal re-assessment is largely based on animal studies, which cannot predict consequences in humans. They say many are confidential, supplied by pesticide makers. "The (agency) 2,4-D assessment does not approach standards for ethics, rigour or transparency in medical research," said medical writer Meg Sears, speaking for co-authors Robin Walker, Richard van der Jagt and Paul Claman. Van der Jagt chairs the Canadian Leukemia Studies Group. Walker is past president of the Canadian Pediatric Association. Claman is a University of Ottawa professor of reproductive medicine.

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Industry Issue

Beet juice extract alternative to traditional spraying

by Linda Erskine

Paul Gaspar of Weed Man - Toronto is in a unique position. As owner of a Weed Man franchise that covers only the GTA, Gaspar works completely under the City of Toronto anti-pesticide by-law that bans the use of herbicides for cosmetic use. So, he's had to look for alternatives.

Gaspar provides lawn care services to the grounds of St. Michael's College at the University of Toronto in downtown Toronto, and it's here that he's conducted trials using beet juice extract as a fertilizer. Its secondary benefit: a weed inhibitor. Gaspar has been applying beet juice extract for the past three seasons on two test plot areas, with some wonderful results - a visible reduction of weeds on the lawns treated with the extract.

The 15,000- to 16,000-sq-ft. test plots have already had two beet juice applications, with another two scheduled for the summer and fall. The plots have been aerated, but have not received any applications of granular fertilizer.

How it works

The formulation of sugar beet extract and seven organic elements (18-0-5) is mixed in one part extract to three parts water and applied to the area, with one litre covering 100 sq. m. The extract binds to the soil, feeding the lawn over a much longer period than traditional fertilizers. The best juice extract is absorbed by the weeds and stored in the leaf's veins, resulting in a browning of the other edge of the leaf and eventual death. It's effective on broadleaf weeds like dandelion and clover, but can also control quack grass and tall fescue, says Gaspar. However, it does not control turfgrass insects or diseases.

Billed as a turf management tool, beet juice extract is registered as a fertilizer that just happens to help in the control of turfgrass weeds, explains Gaspar. Eight hundred Toronto-area Weed Man customers are on the beet juice program, with more expected to sign on as the by-law comes into effect this September. It's a little more expensive than traditional spraying - about 23 per cent higher in price - and it takes longer to see the benefits, but it's an alternative that fits in with the city's new pesticide by-law.

To get an indication of how well the beet juice extract worked on the campus grounds, the remaining property at St. Michael's College remains untreated, with the university's maintenance department performing routine mowing, aerating and the occasional overseeding duties.

Timely application tips

Are there any rules for applying beet juice extract? Yes, says Gaspar, the weather. First there must be rain in the forecast for the extract to be delivered into the soil and to allow for the absorption of extract by the roots.

Avoid applying the beet juice extract on newly overseeded lawns, and when temperatures reach 27 C or higher, as the extract can burn the turf. Applying the extract correctly and at the right time encourages good root activity.

The downside

The cost is higher than traditional programs. And, says Gaspar, it's a lot easier and faster to do one or two applications of traditional control products than the four or five applications needed for the extract.

Beet juice extract can also be a little tacky when first applied, although this problem seems to be alleviated with the latest formulations from the manufacturer, BJE of Montreal, Que. ([www.bje-distri-organic.com](http://www.bje-distri-organic.com)).

Beet juice extract also has a slight odor. However, the trade-off comes when adults, children and pets can walk, run and play on the lawn immediately after application, says Gaspar.

For Gaspar, the benefits outweigh the disadvantages, especially considering the limitations lawn care providers will find themselves subjected to after September 1. "It's a fact of life in the City of Toronto, and we have to realize that we're never going to get rid of all weeds."

Landscape Ontario

Horticultural Trades Association

7856 Fifth Line South, RR4,  
Milton, ON  
L9T 2X8  
TF: (800) 265-5656  
Phone: (905) 875-1805  
Fax: (905) 875-3942  
<http://www.horttrades.com/>

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Thu 14 Jul 2005  
CBC.CA News  
Arctic bird droppings spread pollutants from ocean to land

Bird droppings are a major route used to spread chemical contaminants such as mercury and DDT to the High Arctic, Canadian researchers have found.

Scientists had assumed atmospheric winds were the main way that the chemicals spread.

Seabirds seem to be inadvertently causing 60 per cent higher concentrations of contaminants, including some like DDT that are no longer in use in North America but persist in the environment.

The results could explain why people living in the Arctic show such high levels of pollutants although they aren't near industries producing the chemicals.

Researchers from three Canadian universities and the Canadian Wildlife Service conducted the study, which appears in the July 15 issue of the journal Science.

They studied ponds below cliffs on Cape Vera, Devon Island, in Nunavut.

Seabirds called northern fulmars nest above the cliffs, where their droppings fall into the once-pristine lakes. The highest pollutant levels were seen in areas near the gull-like birds.

The contaminants are washed into the ocean, where the birds feed on fish and then return to the Arctic to their young.

When the birds return north, the contaminants they've accumulated are released on land in a "boomerang effect," said the study's lead author, Jules Blais, a professor of environmental toxicology of the University of Ottawa.

"The droppings will affect the lakes, but they're also bioaccumulating contaminants like mercury, DDT, PCBs and so forth," said co-author John Smol, a biology professor at Queen's University in Kingston, Ont.

Plants and animals could be exposed to the pollutants in the bird droppings, although researchers aren't yet sure what the impact is on the terrestrial food chain, such as polar bears.

"If there are fish in the system, those fish will bioconcentrate those chemicals," said biology Prof. Marianne Douglas of the University of Toronto. "Whatever eats the fish could be humans, that could be other wildlife, will end up with toxic levels of pollutants."

The contaminants found in the ponds were DDT, mercury and hexachlorobenzene, found in pesticides.

The research was sponsored by the Natural Sciences and Engineering Research Council of Canada, the EJLB Foundation, the Polar Continental Shelf Project, and the Northern Scientific Training Program.

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Wed 13 Jul 2005  
The Dunnville Chronicle  
Our planet is public property  
by Geoff Johnston

Last month I talked about the notion of the commons, those parts of creation which nobody owns, or more precisely which are owned in common. Everybody can walk along the beach, because, most of the time anyway, the beach is public property. It is part of the commons.

The ultimate public property is the planet itself; it is the commons to end all commons. We all depend on the planet for the means of life, for air, water, food and land, the basic necessities of human existence. If we say we own a piece of the planet, we are really saying we have assumed responsibility for the care of that piece.

What we do with it is not just our concern; it involves the neighbours as well. A property with trees is a better neighbour than one paved with grass and kept manicured with pesticides. Trees contribute to the common, to air quality and wild life, while a lawn does not, and may even, if pesticides are used, run the common down.

This idea runs counter to our notion of private property. I argued last month that we inherited that idea from the Romans. What is mine is mine and what is yours is yours. Since it is mine I can do what I like with it. The idea of private property has its uses; I don't want to abolish it altogether. I am simply saying that ownership is not just a right; it is also a responsibility, a responsibility to care, for what we do with ownership ultimately effects everybody.

Within the common planet there are common goods. The most obvious is the air, because it can't be privatized. I would include in the list of common goods the other essentials of human existence, land, water, food and in this climate at least, shelter. Since we are no longer hunter gatherers, but urban people, the common goods also include things like energy, education and medical care. These are common goods because we all need them.

Common goods may be provided by private agencies. The people who grow food are entrepreneurs in the private sector. Their products are bought, distributed and sold by private corporations. The system is far from perfect, but it does provide food. Whether common goods should be handled by private agencies is a pragmatic question. Do they do the job right, or at least better than public, or common, agencies?

The debate over health care in this country is a debate over the relative merits of public and private delivery. Doctors are business people who live by selling their skill. But they are paid by a public insurance scheme, to which we all contribute through our taxes. Hospitals are private, non profit agencies. Drugs are provided by private, for profit companies. The trick is to get the mix right, because health care is either very expensive or very cheap. It is cheap if you don't get sick, but staying healthy is not altogether within our control. Since people do get sick, the best health care system is the one which best serves the common good.

Common goods, like energy, medicine and education are there for the common good, not for private profit. The same can be said of private goods.

Years ago a friend of mine asked "What is Stelco for anyway?" I had never thought of it before but the answer which sprang to mind still seems like a good one. "Stelco exists to make steel". In the broader scheme of things Stelco makes money in order to make steel; it does not make steel in order to make money. The business community would hardly agree, and that is part of our problem. The single-minded pursuit of profit has taken our eyes off the real business, the management of the common for the common good.

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July 13, 2005

The meaning of Toronto's pesticide by-law  
by GIDEON FORMAN

Some commentators say the big story around Toronto's new pesticide by-law is that it's being ignored as homeowners and lawn-care companies continue to spray chemicals on residential property. While it's true a few people are thumbing their noses at the legislation, I'd say the interesting point is not the scofflaws - their numbers will drop dramatically as fines kick in and organic firms expand their business - but the fact the by-law reflects a new maturity and self-confidence on the part of our local government.

Before the law came in, those of us who wanted our neighbours to stop spraying had to humiliate ourselves. We had to go to the folks next door and say, "Look, your lawn chemicals are making my kids and me sick. Could you please refrain from doing this?" And they could decide to be good guys and stop or they could decide to continue. The choice was theirs. All we could do was supplicate ourselves and hope they might take pity.

I remember once going to a homeowner around the corner - he lived across from a boys' and girls' club - and saying there were children constantly passing his garden, would he consider avoiding these products? I even handed him literature on non-toxic alternatives. He took my pamphlet, said thank you very much and continued to squeeze the lever on his spray gun.

The city government was in something of a similar position. In the years before the prohibition, it ran subway and newspaper advertisements urging people to go natural. "Please keep poisons off the grass," the ads implored. The city had no teeth to back this up. All it could do was ask nicely and hope residents would comply.

I found those ads pathetic - especially the "please" part. Here were products that were clearly harmful - they were poisons, after all - and instead of forbidding their use the municipality could only make a request.

If citizens were in no mood to stop, there was nothing council could do.

If something needs to be done to protect human health or the environment, government shouldn't be reduced to having to make suggestions. It should have the power to compel.

When it comes to infant car safety, for example, decision-makers don't go around pleading. They pass child seat-restraint laws.

Prior to the by-law, City Hall came across as impotent.

It was forced to stand and watch as the poisoning continued, as people and pets were exposed to toxic products, as our water became polluted.

No more. With the coming of the new legislation, the city no longer has to humiliate itself. Just as council doesn't beg people to butt out in bars or drive slowly on side streets or avoid parking near a fire hydrant, so, too, it doesn't beg them to avoid pesticides: It requires them to. And if they choose to flout the law and spray anyway, there are legal consequences. There are no more entreaties, but fines and enforcement.

I'd say a city which goes this route is more self-respecting. It demonstrates more self-assurance and dignity. Where pesticides are concerned, it's picked itself up off the floor. It's no longer grovelling and hoping people will listen. It's laying down the law. It's insisting.

That's good for the environment. It's also good for the city's sense of self.

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Gideon Forman is executive director of the Canadian Association of Physicians for the Environment.

[http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article\\_Type1&c=Article&cid=1121164019564&call\\_pageid=968256290204&col=968350116795](http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article_Type1&c=Article&cid=1121164019564&call_pageid=968256290204&col=968350116795)

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**Environmentalists give Markham Town Council Green Thumbs Up!**

Environmentalists are congratulating Markham Town Council following a decision yesterday to start the process of implementing a pesticide bylaw to restrict lawn and garden pesticides. In a 8 to 2 vote, Markham Councillors directed town staff to proceed with a pesticide bylaw based on the precautionary principle and to hold a public meeting later this summer to determine the type of bylaw favoured by town residents.

"This is a huge step forward", says Sari Merson of York Region Environmental Alliance and a deputant at the meeting. "Because Toronto has a pesticide bylaw, many residents of Markham believe the legislation applies to all municipalities in the GTA. When I speak to residents at public events, they are always disappointed when I tell them that Markham does not yet have a bylaw to restrict pesticides on lawns and gardens."

At the meeting, councillors spoke about the importance of having a bylaw similar to Toronto's to level the playing field for lawn care companies because many companies have customers in both municipalities. Councillors also flagged the need to protect human health, particularly that of children, and the environment.

"There is absolutely no need to use pesticides on lawns and gardens because there are effective alternatives," says Janet May of Pesticide Free Ontario. "And studies show that residents that live municipalities that implement bylaws in conjunction with educational campaigns achieve significant pesticide reductions."

#### EUROPE DEBATES THE MOST MASSIVE CHEMICAL BAN IN HISTORY

The European Parliament is set to debate new regulations that would dramatically increase the number of banned chemicals in the EU. The law would require manufacturers of some 30,000 currently legal chemicals to provide scientific evidence that their products are safe for human health and the environment. If the legislation passes, it would have a major impact on thousands of chemicals and products manufactured and sold in the U.S.

Despite much weaker regulations in the U.S. many American companies have no choice but to adhere to European regulations given that the EU, with 25 countries and 460 million people, represents an even larger market than the U.S.

<http://www.organicconsumers.org/Politics/strict051805.cfm>

#### U.S. Exporters & Chemical Companies Fight Against New Strict EU Regulations

From: *Grist Magazine* <[www.grist.org](http://www.grist.org)> 5/17/05

#### U.S. Companies: Working to Keep Europeans Safe

#### American firms conforming to E.U. chemical regs

Though the U.S. was once a global leader in environmental regulation, that is, to put it mildly, no longer true. Now, the real challenge for many U.S. companies is complying with the stringent standards that govern the European Union market -- if they want to reach its 460 million consumers. Using a "better safe than sorry" model, the E.U. has instituted hundreds of bans on industrial compounds linked to cancer, reproductive problems, and other ill health effects. The newest piece of such legislation, set for evaluation by European Parliament this fall, would require companies to provide scientific data on some 30,000 chemical compounds, in many cases evaluating their effects on environmental and human health.

The testing could cost industries up to \$6.8 billion and might involve bans on thousands of chemicals if they can't be proven safe. "In the E.U., if there is a risk with potentially

irreversible impact, we don't wait until the last piece of information," said Rob Donkers, the E.U.'s environmental counselor in Washington, D.C.

straight to the source: *Los Angeles Times*, Marla Cone, 16 May 2005

[www.latimes.com/news/local/la-me-euroreg16may16\\_0,5222200.story?coll=la-home-headlines](http://www.latimes.com/news/local/la-me-euroreg16may16_0,5222200.story?coll=la-home-headlines)

#### Europe's Rules Forcing U.S. Firms to Clean Up

Unwilling to surrender sales, companies struggle to meet the EU's tough stand on toxics.

By Marla Cone

Times Staff Writer

May 16, 2005

At their headquarters in Santa Clara, researchers at Coherent Inc, the world's largest laser manufacturer, are wrestling with an environmental law that is transforming their entire product line.

Soon, everything produced at the Bay Area company even the tiniest microchip inside its high-powered lasers that fly on NASA satellites and bleach jeans sold at boutiques must be free of lead, mercury and four other hazardous substances.

The mandate that has Coherent and other American electronics companies scrambling doesn't come from lawmakers in Washington, or even Sacramento.

Instead, it was crafted 5,000 miles away, in Brussels, the capital of the European Union.

Europe's law, governing any product with a battery or a cord, has spawned a multibillion-dollar effort by the electronics industry to wean itself from toxic compounds.

"This is the first time we've encountered something like this on such a global scale," said Gerry Barker, a vice president of Coherent, whose lasers are used to create master copies of Hollywood films, test the safety of car tires, imprint expiration dates on soda cans and more.

And the electronics rule is only the beginning.

Already, Europe is setting environmental standards for international commerce, forcing changes in how industries around the world make plastic, electronics, toys, cosmetics and furniture. Now, the EU is on the verge of going further < overhauling how all toxic compounds are regulated. A proposal about to be debated by Europe's Parliament would require testing thousands of chemicals, cost industries several billion dollars, and could lead to many more compounds and products being pulled off the market.

Years ago, when rivers oozed poisons, eagle chicks were dying from DDT in their eggs and aerosol sprays were eating a hole in the Earth's ozone layer, the United States was the world's trailblazer when it came to regulating toxic substances. Regardless of whether Republicans or Democrats controlled the White House, the United States was the acknowledged global pioneer of tough new laws that aimed to safeguard the public from chemicals considered risky.

Today, the United States is no longer the vanguard. Instead, the planet's most stringent chemical policies, with far-reaching impacts on global trade, are often born in Stockholm and codified in Brussels.

"In the environment, generally, we were the ones who were always out in front," said Kal Raustiala, a professor of international law at UCLA. "Now we have tended to back off while the Europeans have become more aggressive regulators."

Europe has imposed many pioneering and aggressive < some say foolish and extreme < bans meant to protect people from exposure to hundreds of industrial compounds that have been linked to cancer, reproductive harm and other health effects. Recent measures adopted by the European Union have taken aim at chemicals called phthalates, which make nail polishes chip-resistant, and compounds added to foam cushions that slow the spread of fires in furniture.

#### EU's Big Market

Many companies, even those based in America, follow the European rules because the EU, with 25 countries and 460 million people, surpasses even the United States as a market. Rather than lose access to it, many companies redesign their products to meet European standards. For example, Revlon, L'Oreal and Estee Lauder have said that all their products meet European directives that control the ingredients of cosmetics. And U.S. computer companies say they are trying to remove lead and other substances banned in the EU from everything they sell.

As the EU emerges as the world's toughest environmental cop, its policies increasingly are at odds with Washington.

Among the compounds now phased out or restricted in Europe but still used in high volumes in the United States are the pesticides atrazine, lindane and methyl bromide; some phthalates, found in beauty products, plastic toys and other products; and nonylphenol in detergents and plastic packaging. In animal tests, those compounds have altered hormones, caused cancer, triggered neurological changes in fetuses or damaged a newborn's reproductive development.

The "biggest single difference" between EU and U.S. policy is in the regulation of cosmetics, said Alastair Iles, a postdoctoral fellow at UC Berkeley's Energy and Resources Group. Cosmetics sold in Europe cannot contain about 600 substances that are allowed in U.S. products, including, as of last September, any compound linked to cancer, genetic mutations and reproductive effects.

Driving EU policy is a "better safe than sorry" philosophy called the precautionary principle. Following that guideline, which is codified into EU law, European regulators have taken action against chemicals even when their dangers remain largely uncertain.

Across the Atlantic, by contrast, U.S. regulators are reluctant to move against a product already in use unless a clear danger can be shown. A chemical, they say, is innocent until proven guilty.

Critics say the U.S. Environmental Protection Agency's search for scientific clarity takes so long that the public often goes unprotected. Paralysis by analysis, the critics call it.

U.S. risk assessments can last years, sometimes longer than a decade, and in some cases, the EPA still reaches no conclusions and relies upon industries to act voluntarily. For instance, despite research that showed by 2002 that polybrominated flame retardants were doubling in concentration in Americans' breast milk every few years, the EPA has still not completed its risk review. Meanwhile, the U.S. manufacturer of two of the flame retardants agreed voluntarily to stop making them last year after they were banned in Europe and in California.

In the 1970s and '80s, all the major chemical and pollution laws in the United States had a precautionary slant, said Frank Ackerman, an economist at Tufts University's Global Development and Environment Institute.

Lengthy reviews of chemicals, which now dominate U.S. policy, began to evolve under President Reagan and grew in the 1990s. Carl Cranor, an environmental philosophy professor at UC Riverside, said that a conservative groundswell in American politics and a backlash by industries set off "an ideological sea change."

Part of the change stems from the much more vocal role of U.S. companies in battling chemical regulations, said Sheila Jasanoff, a professor of science and technology studies at Harvard University's John F. Kennedy School of Government. American attitudes toward averting environmental risks haven't changed since the 1970s, Jasanoff said. "What has changed is politics and political culture," she said.

#### EPA's Limited Role

The Toxic Substances Control Act, adopted by Congress in 1976, grants the EPA authority to restrict industrial chemicals that "present an unreasonable risk of injury to health or the environment." The law, however, also tells EPA to use "the least burdensome" approach to do so and compare the costs and benefits.

A pivotal year for the EPA was 1991, when a federal appeals court nullified its ban on asbestos. The court ruled that the agency, despite 10 years of research, had failed to prove that asbestos posed an unreasonable risk and had not proved that the public would be inadequately protected by steps short of a ban.

Since then, the EPA has not banned or restricted any existing industrial chemical under the toxics law, except in a few instances where manufacturers acted voluntarily. New chemicals entering the market are more easily regulated, and so are pesticides, under a separate law.

Some states, including California, are filling what they see as a void by adopting their own rules. California and Maine banned some polybrominated flame retardants, for example.

Iles said that restricting a chemical under federal law now requires a "very tough burden of proof."

"Americans tend to think that products are safe because they are in the market and must somehow have passed government regulation," he said.

"But there is no real regulation. Cosmetics, for example, are almost unregulated."

Since the asbestos rule was thrown out by the court, EPA officials perform more complicated calculations to quantify how much risk an industrial chemical poses, assigning a numeric value, for example, to the odds of contracting cancer or figuring out what dose might harm a fetus or child. They also do more research to predict the costs and the expected benefits to public health.

But making these precise judgments is difficult with today's industrial compounds. In most cases, the dangers are subtle, not overtly life-threatening.

Studies of laboratory animals suggest that low doses of dozens of chemicals can contribute to learning problems in children, skew sex hormones, suppress immune systems and heighten the risk of cancer. Some chemicals build up in the bodies of humans and wildlife, and spread globally via the air and oceans. But while harm is well-documented in some wild animals and lab tests, the risks to human beings are largely unknown.

In the face of that scientific uncertainty, Europeans say, their precautionary principle is simply common sense. If you smell smoke, you don't wait until your house is burning down to eliminate the cause, they say. Their standard of evidence for chemicals is similar to the creed of doctors: First, do no harm.

"In the EU, if there is a risk with potentially irreversible impact, we don't wait until the last piece of information," said Rob Donkers, the EU's environmental counselor in Washington, D.C.

"You can study things until you turn purple, but we do not work from the concept that you really need to prove a risk 100,000 times," he said. "In the face of potentially very dangerous situations, we start taking temporary risk management measures on the basis of the science that is available."

Europe's policy is, in part, a reaction to a series of disturbing revelations about dioxins in chicken, mad cow disease, toxic substances in diapers and baby toys, all of which have made many Europeans more averse to taking risks with chemicals.

Under Europe's rules, "there are chemicals that are going to be taken off the market, and there probably should be," said Joel Tickner, an assistant professor at the University of Massachusetts' School of Health and the Environment.

Conservative critics and some officials in the Bush administration criticize Europe's precautionary approach as extreme, vague, protectionist and driven by emotions, not science.

EPA officials would not go on the record comparing their policies with the EU's. But they asserted that their approach, while different, is also precautionary.

Instead of banning compounds, the EPA teams with industry to ensure there are safe alternatives. In the last five years, 3M Corp. voluntarily eliminated a perfluorinated chemical in Scotchgard that has been found in human blood and animals around the world, and Great Lakes Chemical Corp ended manufacture of polybrominated flame retardants used in foam furniture.

In those cases, EPA officials said, forming partnerships with industry was quicker than trying to impose regulations and facing court challenges as they did with asbestos.

More than any other environmental policy in Europe, the proposal known as REACH, or Registration, Evaluation and Authorization of Chemicals, worries U.S. officials and industries.

Under REACH, which was approved by the EU's executive arm and is scheduled to go before the European Parliament this fall, companies would have to register basic scientific data for about 30,000 compounds. More extensive testing would be required of 1,500 compounds that are known to cause cancer or birth defects, to build up in bodies or to persist in the environment, as well as several thousand others used in large volumes.

Those chemicals would be subject to bans unless there is proof that they can be used safely or that the benefits outweigh the risks. The testing would cost industries \$3.7 billion to \$6.8 billion, the EU says.

Some company executives contend that Europe is blocking products that pose little or no danger. In Santa Clara, Barker of Coherent said that the

EU's precautionary approach sounds good in principle but it forces businesses to do things that are "unnecessary and probably very expensive." In some cases, U.S. officials say, Europeans are using the precautionary principle as an excuse to create trade barriers, such as their bans on hormones in beef and genetically modified corn and other foods.

Not on the Same Page

"There is a protectionist element to this, but it goes beyond Europe trying to protect its own industries or even the health of its public," said Mike Walls, managing director at the American Chemistry Council, which represents chemical manufacturers, the nation's largest exporter. "It's a drive to force everyone to conform to their standards < standards that the rest of the world hasn't weighed in on."

John Graham, an economist and senior official of Bush's Office of Management and Budget, which reviews new regulations, has called the notion of a universal precautionary principle "a mythical concept, kind of like a unicorn." "Reasonable people can disagree about what is precautionary and what is dangerous," he said at a 2002 conference. It is ironic, says Richard Jensen, chairman of the University of Notre Dame's economics department, that Europeans "who embrace the precautionary principle should have such a high tolerance for risk from smoking and secondhand smoke." Americans are more fearful of cigarettes, nuclear power and car exhaust and it shows in their laws. They also pasteurize foods to kill bacteria, while European children grow up drinking and eating raw milk and cheese. Said UCLA's Raustiala, "The United States is quite schizophrenic, as are Europeans, about when we decide" to be cautious.

If you want other stories on this topic, search the Archives at [latimes.com/archives](http://latimes.com/archives).

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May 2005

Blakes Bulletin on Environment Law

Municipal Jurisdiction Over Environment Gets Boost

A recent decision of the Ontario Court of Appeal has upheld a broad reading of municipal powers to pass by-laws in the environmental sphere, and by extension, other areas as well. *Croplife Canada v. City of Toronto*, decided by the Court last week, addressed the question of whether the City of Toronto had the authority to enact a by-law limiting the application of pesticides within the City. The by-law in question provides that, subject to defined exceptions, no person shall apply or cause or permit the application of certain pesticides in Toronto. This by-law was enacted relying on s.130 of the Municipal Act, 2001, under which by-laws may be passed by a municipality to provide "for the protection of the health, safety and well-being of residents in the municipality".

The appellant, a pesticide producers' industry association, argued that the relevant provision (section 130) in question should be interpreted as a "specific health power" rather than a general welfare power. The Court rejected this and instead followed the Supreme Court of Canada decision in *Spraytech v. Hudson (Town)* (*Spraytech*) which held that the Town of Hudson had the authority to enact a bylaw regulating the use of pesticides under a general welfare provision of Quebec's Cities and Towns Act. *Croplife* had argued that the new Ontario Municipal Act, which was enacted after the *Spraytech* decision and structured differently from the Quebec legislation was intended to "cure" the Supreme Court's *Spraytech* decision.

The Court of Appeal largely followed the reasoning of the Supreme Court in *Spraytech* and rejected the appellant's argument that this section of the Ontario Municipal Act should be interpreted narrowly. Further, it rejected the argument that the existing federal and provincial legislation dealing with pesticides prohibited a municipal by-law on the same matter. The Court also found that the existence of the Federal Pest Control Products Act (the PCPA) and Ontario Pesticides Act do not preclude a municipal by-law addressing pesticides. Rather, the Court adopted the Supreme Court's approach from *Spraytech*, finding that there was no impossibility of "dual compliance".

In its reasons, the Court affirmed that a broad and purposive approach should be taken to interpreting municipal powers, such as the general welfare power granted under s.130. In light of the Supreme Court's clear adoption of such an approach in past decisions, and the trend towards broad enabling Municipal statutes by the provinces, the Ontario Court of Appeal found that it would take clear language to demand otherwise. The Court, however, did note that while a general welfare provision is sound policy for the flexibility it affords modern municipalities, it is not an unlimited grant of provincial powers. It may only be applied to concerns that are not only pressing within the community, but also relating to "problems that engage the community as a local entity, not a member of the broader polity".

One interesting side issue in this matter was the Court's view of the "precautionary principle", which stands for the proposition that, where there is the threat of serious or irreversible damage, lack of full scientific certainty should not be used to postpone measures preventative against environmental degradation. Rather, measures must be anticipatory and prevention oriented where there is the threat of serious damage. The Court expressly declined to address the precautionary principle on the basis that the lower court decision had not relied on it to reach its decision. However, the Court did note that if there had been no credible policy basis behind the by-law and had the municipality not otherwise had the power to enact such a by-law, the precautionary principle, on its own, could not be used to uphold the by-law.

With or without the help of the precautionary principle, Canadian courts appear generally predisposed to giving law makers a large degree of latitude in the exercise of their powers when it comes to protecting human health and the environment.

For further information, please contact Jonathan Kahn at 416.863.3863 or [jonathan.kahn@blakes.com](mailto:jonathan.kahn@blakes.com) or Robert Fishlock at 416.863.2904 or [robert.fishlock@blakes.com](mailto:robert.fishlock@blakes.com).

<http://www.blakes.com/english/publications/belb/May2005/MunicipalJurisdiction.pdf>

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Press Release Sierra Club of Canada May 4th 2005

MP Marlene Catterall congratulated for introducing bill to ban cosmetic use of pesticides

(Ottawa) - On the heels of the five-year anniversary of the Standing Committee on Environment and Sustainable Development report calling for a ban of cosmetic use of pesticides, Ottawa-West Nepean MP Marlene Catterall, introduced Bill C-370 aimed at making the recommendation a reality. Sierra Club of Canada congratulates this demonstration of strong leadership to protect health and the environment.

"This is a great example of progressive legislation and passing it will represent an exemplary exercise of political will to protect the most vulnerable," said Angela Rickman, a senior policy advisor to the Sierra Club of Canada. "Ultimately, if the most vulnerable are adequately protected, we all are."

In 2001, the Supreme Court upheld *Hudson*, Quebec's bylaw restricting pesticide use, stating the community had an obligation to protect the health of its residents, and that communities across Canada had the same right and obligation. Over 70 communities across Canada have passed bylaws restricting pesticide use on private and public property, and dozens of other communities are working on plans to do the same. The province of Quebec has imposed wide restrictions on many of the most commonly used pesticides in an effort to reduce exposure of children and other sensitive species.

"With the success of the grassroots cosmetic pesticide prohibitions, now is the time for us to all show a national commitment to a ban," says Katie Albright, Health and Environment Campaigner. "With thirty-five percent of Canadians already protected by municipal pesticide bylaws prohibiting cosmetic pesticide use, and numerous polls have demonstrated that the majority of Canadians want a ban on pesticides, the House should see this private member's bill as housekeeping. That is, cleaning our communities to get rid of pesticides that are unnecessary and put our health and the environment at risk."

Sierra Club of Canada urges each Canadian to write to her or his Member of Parliament to ask them to support Ms. Catterall's private member's bill is essential to ensure that all individuals have the same level of protection from the harmful effects of pesticides.

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Contact: Angela Rickman, Senior Policy Advisor, Sierra Club of Canada, 613-241-4611 Katie Albright, Health and Environment Campaigner, Sierra Club of Canada, 613-241-4611

<http://www.sierraclub.ca/national/media/item.shtml?x=831>

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Wed 13 Apr 2005

The Ottawa Citizen

Why doctors support banning pesticides

City Editorial

By: Dr. Robin Walker and Gideon Forman

As the weather turns warmer and Ottawans take out their rakes, lawn mowers and canvas gloves, they may want to seek gardening assistance from an unlikely source: their family doctor. This year physicians across the province are advising residents on how they should maintain their properties. The first thing the doctors are saying is avoid pesticides -- the poisons used to kill weeds and insects. Instead, they recommend the use of lawn-care methods and products that are non-toxic.

Why are doctors saying the use of pesticides on Ottawa's lawns and gardens should be phased out? The recommendation follows the release in April, 2004, of a ground-breaking review of pesticide studies by the Ontario College of Family Physicians (OCFP), an association representing more than 6,700 family doctors. The OCFP's systematic review -- the most comprehensive in Canadian history -- found consistent links between pesticide use and serious illnesses such as cancer, reproductive problems and neurological diseases.

Among the review's findings:

- Associations between pesticide exposure and brain cancer, prostate cancer and kidney cancer;
- Associations between pesticide exposure and birth defects, fetal death and intra-uterine growth retardation;
- Increased risk of leukemia (a form of cancer) if children are exposed to insecticides and herbicides used on lawns and gardens.

In short, doctors are saying that, even when used as directed, pesticides could be extremely harmful to children and to adults. In fact, they're so potentially harmful that leading health organizations -- including the Children's Hospital of Eastern Ontario, the Canadian Cancer Society, the Ontario College of Family Physicians, the Registered Nurses Association of Ontario, and the Canadian Association of Physicians for the Environment -- are urging Canadian cities to pass bylaws prohibiting cosmetic or non-essential pesticide use.

These health authorities recognize that citizens have a right to maintain their properties. But they're urging them to do so without poisons. Fortunately, that's not very difficult.

Homeowners can control insect pests by using nematodes -- naturally occurring microscopic worms that effectively kill grubs and larvae but are harmless to people and the environment. They can control weeds by aerating their soil, applying natural compost, recycling grass clippings, keeping grass long (at least three inches), and overseeding. (Overseeding crowds out unwanted species.)

A phasing out of pesticides isn't supported only by the medical community. It's also backed by the people of Ottawa. Polling earlier this year by the national firm Oracle Poll Research found that more than eight out of 10 city residents (82.5 per cent) support a pesticide phase-out in Ottawa's parks, while more than three out of four (75.6 per cent) support a phase-out on private residential properties.

Why the support for prohibiting these chemicals? Because Ottawans see them as threatening some of the most important things in their lives. Nearly eight out of 10 (77 per cent) said pesticides pose a threat to the environment, including wildlife, air quality and ground water. Nearly three out of four (73.9 per cent) said pesticides pose a health threat to children.

In fact, local residents are so concerned about these chemicals they don't feel it's enough to simply teach people about their dangers. They also want city council to pass a bylaw prohibiting their use. Asked whether they favour a bylaw coupled with public education or education on its own, seven out of 10 (70.7 per cent) chose the combined bylaw-education package.

If poisonous lawn products are unsafe and unpopular -- and effective non-toxic ones are now easy to obtain -- surely it's time for Ottawa to pass a pesticide bylaw. This common-sense legislation would prohibit the cosmetic use of pesticides while still allowing homeowners to destroy harmful pests such as rats, mice, termites and poison ivy.

Across Canada, pesticide bylaws have been passed by some 70 communities, including Montreal, Toronto and Halifax. Isn't it time Ottawa council listened to local residents, doctors, nurses and hospitals -- and followed suit?

Dr. Robin Walker, M.D. is professor of pediatrics at the University of Ottawa and a member of the Division of Neonatology at the Children's Hospital of Eastern Ontario. Gideon Forman is executive director of the Canadian Association of Physicians for the Environment ([www.cape.ca](http://www.cape.ca)).

[Avoid pesticides, Ontario doctors warn](#)

*Last Updated Mon, 26 Apr 2004 16:14:09*

TORONTO - Family doctors strongly recommended Canadians reduce their exposure to pesticides based on a 12-year review showing consistent links between pesticides and serious illnesses.

The Ontario College of Family Physicians released their review Friday of a wide range of studies linking pesticide exposure to cancer, reproductive problems and neurological diseases.

## INDEPTH

Since many of the health problems linked with pesticide use are serious and difficult to treat, the authors recommend prevention and reducing exposure "whenever and wherever possible."

"Perhaps most striking is that work exposure among parents can result in increase risk of significant health problems including kidney cancer and brain cancer in their children," said Dr. Margaret Sanborn of Hamilton's McMaster University, one of the authors of the college's review.

"A few studies show that even pesticide exposures caused by home and garden use, likely to be considerably less intense or frequent than work exposure, is associated with problems including brain cancer, childhood leukemia and a neurodegenerative disease called Amyelotropic Lateral Sclerosis."

The college recommended reducing exposure by:

- Researching and implementing alternative organic methods of lawn and garden care and indoor pest control.
- Properly using personal protection equipment, including respirators for home and work exposures.
- Educating people on safe handling, mixing, storage and application when pesticide use is considered necessary.

The authors supported municipal bans on the use of pesticide for cosmetic purposes.

They also encouraged family doctors to screen patients for pesticide exposure.

The pesticide industry has said bans on lawn chemicals are an over-reaction, adding Health Canada's regulatory division registers all pest control products used in Canada.

On Monday, the trade association representing manufacturers of pesticides said the college's literature review alarms the public unnecessarily and Canada's pesticide regulators have already taken such studies into account.

CropLife Canada said no product can be used in Canada if it causes any unacceptable health risk including cancer.

Written by CBC News Online [staff](#)

**Headlines: Sci-tech**

## Human Exposure and Health Hazards - Pt. 2

by Anne Steinemann\*

### Body Burden of Chemicals and Burden of Proof

What are the health effects of all the pollutants in our bodies that we discussed in Rachel's #810? The magnitudes and multiplicity of health risks may be impossible to assess fully, because we are dealing with mixtures of chemicals, non-monotonic dose-response relationships, cumulative effects, individual susceptibilities, lag time between exposures and effects, and hundreds of documented and potential morbidity and mortality effects (NIH, 2003; PSR, 2003). The complexity of analysis has led to regulatory paralysis, where chemicals are often assumed safe until proven hazardous, placing a perhaps insurmountable burden of proof on the public. Nonetheless, we have another body of evidence:

Rates of diseases with potential links to chemical exposures have been increasing nationwide. Asthma in children under age five has increased by 160% (1980-1994)(CDC, 1998). Autism has increased by 1,000% since the mid-1980s (Chakrabati and Fombonne, 2001; Byrd, 2002). Hypospadias, a congenital misplacement of the urinary opening in the penis, has increased by 100% (1968-1993) and now affects one of 125 male babies born (Paulozzi, et al., 1997; Baskin et al., 2001). Cancer in children has increased by 26% (1975-1999), with sharp increases in acute lymphocytic leukemia (62%), and brain and nervous system cancers (50%) (NCI, 2002a). Testicular cancer in young men has increased by 85% (1973-1999), and is now the most common cancer in men ages 15 to 35 (NCI, 2002b). If trends continue, breast cancer would affect 25% of the granddaughters of today's young women (NCI, 1997). Further, according to the American Cancer Society, only 5% to 10% of all cancers can be attributed to inherited factors (ACS, 2001); the rest occur from environmental exposures and other damage throughout our own lifetimes.

Multiple and complex links between pollutant exposures and health effects may have obscured perceptions of risk. Exposures do not always manifest immediate and dramatic health effects; rather, they can cause subtle, gradual, and often irreversible health damage. And even when they do cause immediate effects, there is the troubling tendency to misdiagnose or misattribute common symptoms caused by exposures. For instance, exposure to pesticides can cause acute symptoms that mimic the flu, such as fevers, headaches, nausea, joint pain, and simultaneously cause chronic damage to the endocrine, neurological, and immune systems (USEPA, 2003; NIH, 2003; Colborn et al., 1993).

Exposures also defy traditional dose-response relationships. Low-level chemical exposures can produce adverse health effects, even below regulatory thresholds and "no effects" levels (ASTDR 2003; NAS 2000; Ashford and Miller, 1998). For instance, chlorinated tap water

byproducts, trihalomethanes, were linked to increased miscarriages at 75 parts per billion (ppb), even though the maximum contaminant level (MCL) was set at the time at 100 ppb (Waller et al. 1998). The herbicide atrazine is linked to demasculinization of frogs at levels as low as 0.1 ppb, even though the MCL is set at 3 ppb (Hayes et al., 2002).

Further, low-level exposures can be more harmful than high-level exposures of the same pollutant (Schmidt, 2001). Many chemicals, such as endocrine disruptors, exhibit non-monotonic dose-response relationships, meaning that the response (such as an adverse health effect from a chemical exposure) can increase as dose is reduced. One such chemical is bisphenol A, used in products such as plastic water bottles and baby bottles. In a series of studies, low-dose exposure to bisphenol-A caused significant enlargement of the adult prostate weight of mice exposed in the womb, but high-dose exposure produced less or no enlargement (vom Saal, et al., 1997; Gupta, 2000).

Thus, we are regularly exposed to hundreds of industrial pollutants, from everyday products and places, that persist in our bodies and in the environment, and that are linked to numerous diseases and health effects. Yet the major sources of these pollutant exposures are not widely recognized, nor covered by environmental laws.

#### The Missing Coverage in the Quilt of Laws

Currently, no federal law or agency specifically protects indoor air environments, which is where we spend more than 90% of our time (Klepeis, et al. 2001), and which accounts for most of our pollutant exposures. Instead, federal laws concentrate on outdoor pollution, usually media-specific or pollutant-specific. Although the laws address some pieces of indoor air, the responsibilities for those pieces are scattered among more than 20 federal agencies.

A content analysis of 22 major U.S. environmental laws revealed that none mentioned "indoor air" (Steinemann, 2004). Further, no regulation or policy has provided the umbrella coverage needed to address indoor air or, more generally, human exposures to pollutants, which are currently greatest in indoor air environments. Nonetheless, several federal laws have some nexus with indoor air, and could provide the authority, if exercised.

The Clean Air Act of 1970 (CAA) could provide the U.S. EPA the authority to address indoor air quality through the regulation of "ambient air." Yet the original CAA does not define ambient air, and the EPA has limited its interpretation of ambient air to the regulation of "outdoor air." Because of this limited interpretation, the EPA does not currently exercise authority over indoor air pollution under the CAA. The EPA does, however, indirectly address indoor air by the regulation of outdoor air, because outdoor air infiltrates indoors. And the EPA has used its authority under the National Emission Standards for Hazardous Air Pollutants (NESHAPS) to ban indoor activities that affect emissions into the atmosphere (such as the spraying of asbestos insulation).

In 1998, standards were passed (pursuant to the CAA) to regulate consumer products if they contribute to at least 80% of the VOC emissions outdoors in areas that violate the National Ambient Air Quality Standards (NAAQS) for ozone. But these standards exempt some of the most significant sources of VOC exposures indoors, such as air fresheners, insecticides, adhesives, and moth-proofing products. Curiously, air fresheners are exempt if they contain more (rather than less) toxic constituents -- if they contain at least 98% paradichlorobenzene or at least 98% naphthalene, or if their VOC constituents are 100% fragrance materials.

The Toxic Substances Control Act (TSCA) provides the EPA broad authority to regulate chemicals that present an "unreasonable risk of injury to health or the environment." Yet "unreasonable risk" is not defined in TSCA, and it has been difficult for the EPA to develop the administrative record to meet such a standard, which is a prerequisite to regulation. The EPA can request data from industry only when it can provide evidence that their substance may present an unreasonable risk of injury, or can lead to significant or substantial human exposure, which the EPA generally cannot prove without such additional data from industry. Further, the EPA must treat as confidential much of the industry data submitted under TSCA, further hindering efforts to protect the public. Thus, until scientists have accumulated a body of

evidence demonstrating potential harm, which often takes decades, a potentially hazardous chemical can remain on the market (GAO, 1994; EWG, 2003).

The Consumer Product Safety Commission, through the Consumer Product Safety Act (CPSA), is directed to protect the public from "unreasonable risks of injury associated with consumer products," and thus could regulate consumer products that contribute to indoor air pollution and exposures. Yet regulation under the Act is constrained because it relies on voluntary safety standards rather than the promulgation of standards for protection. Regulation is also constrained by a cost-benefit analysis for each attempt at standard-setting by the Commission, and the restrictive definition of a "consumer product" that excludes several primary sources of exposure, such as pesticides and cosmetics.

Moreover, Federal laws do not require manufacturers to disclose all of the ingredients in their products, such as "inert" ingredients in pesticides, and chemicals in mixtures classified as "trade secrets." This exclusion is surprising, considering that undisclosed ingredients often account for more than 95% of the product, and can be even more toxic than the active ingredients (EPA, 2003). For example, a study of 85 consumer pesticide products found that 72% contained over 95% inert ingredients, and more than 200 of these inerts were classified as hazardous pollutants in other federal environmental statutes (NY, 1996). As another example, air "fresheners" containing para-dichlorobenzene are not required to list the ingredient, even though it is a registered pesticide and a known rat and mouse carcinogen. Also surprising, a manufacturer of a fragranced product need only list "fragrance" on the label, not the actual chemicals, even though more than 95% of chemicals used in fragrances are known toxics, sensitizers, and carcinogens (USHR, 1986; Fisher, 1998).

Perhaps the most sweeping federal environmental law, the National Environmental Policy Act (NEPA), requires an environmental impact statement (EIS) for federal actions "significantly affecting the quality of the human environment." Yet in the implementation of NEPA, impact assessments have focused on impacts to the environment, rather than impacts on humans. A nationwide and multi-agency study of EISs (Steinmann, 2000) found that the analysis of human health effects has been sparse, relegated to another environmental statute, or omitted entirely. And these EISs were for proposed actions with potentially significant human health effects, such as pesticide spraying and highway construction.

The Occupational Safety and Health Act (OSH Act), administered by the Occupational Safety and Health Administration (OSHA), regulates occupational environments, but does not protect all employees. For instance, the OSH Act does not cover federal agency employees, nor state and municipal government employees unless a state has a plan approved by the OSHA. Even approved state plans are permitted to exclude private sector employees. Efforts to establish exposure limits to toxic substances have generally failed because it is difficult for OSHA to develop the administrative record to demonstrate a "significant risk of material health impairment." Also, under the OSH Act, violations must result in an employee's death in order for the employer to be subject to criminal sanctions. OSHA has tended to focus on single hazards within industrial workplaces (such as large machinery), rather than multiple and often invisible hazards within typical office buildings (such as formaldehyde off-gassing from furnishings). And perhaps the largest regulatory gap, the OSH Act provides no coverage for homes and other non-industrial environments, where many people work.

More generally, environmental laws tend to focus on emissions, rather than human exposures -- even though exposures are how pollutants actually contact the human body and affect health. Our laws have successfully reduced outdoor emissions, and those efforts should be continued. But our regulatory lens needs to refocus on total human exposure, from all media. In this approach, units of human exposure could replace source emissions as the regulatory "currency" (Wallace, 1991; Smith, 1988).

Thus, our approach to environmental regulation neglects how pollutants actually reach and affect humans: through exposures (not emissions), through mixtures of pollutants (rather than isolated pollutants), through several media (water, air, land, dust, consumer products, rather than one medium), through several routes (epidermal, ingestion,

inhalation, intergenerational, rather than one route), causing multiple health effects (such as damage to the immune, neurological, endocrine, and reproductive systems, in addition to cancer, often the sole regulatory criterion).

What is a solution? The answer is not just regulatory, but also scientific, institutional, and educational. The next section discusses some principles of such an approach.

#### Reducing Human Exposure: What's Needed

The science of exposure assessment can help us to determine what, where, and when pollutants come in contact with humans. The handful of exposure studies, from the EPA TEAM studies through the recent CDC and EWG studies, have shown that our regulations are missing the major sources of pollutant exposures and potential health risks. That is, risks from indoor air pollution, and the consumer products that we choose, are currently far greater than risks from outdoor air and sources traditionally regulated.

Paradoxically, the places that we normally consider "safe" (homes, schools, workplaces, vehicles, public buildings, medical facilities) and the products that we consider "safe" (because they are widely sold and used) are precisely the major sources of pollutant exposures. Yet these sources are virtually unregulated by existing environmental laws.

Fortunately, because many of these exposures are within our control, we can reduce significant health risks through relatively simple and cost-effective actions, such as using less toxic consumer products and building materials. Unfortunately, the general public and the medical community are largely unaware of the major sources of pollutant exposures, their health effects, and ways to reduce those risks. Thus, a perilous gap exists between regulation and risk, and between science and public awareness.

What can be done to bridge these gaps? For one, we should have access to accurate and complete information about the chemical ingredients in products, the possible health effects from those chemicals, and the ways to reduce exposures. This would allow consumers to make more informed choices about the products they purchase and use, and if they do use those products, to know how to reduce exposures. This would also provide the data necessary for more effective regulation and protections.

Another important step would be to require more extensive testing, labeling, and evaluation of products before being put on the market, just as currently required for many foods and drugs. As exposure studies have shown, humans are affected by a wide range of non-food and non-pharmaceutical chemicals -- chemicals that can cause adverse health effects and that are contained in common products that currently receive little or no pre-market testing in the U.S.

We should promote the use and production of safer alternatives to common products and practices that pose exposure risks. Such alternatives could provide the same function but with less toxicity, such as personal care products and laundry supplies without synthetic fragrances, paints and varnishes that are low-VOC, and pest control based on integrated pest management rather than synthetic chemical pesticides. Further, using less toxic products and practices can bring additional benefits such as improved performance and productivity, reduced health care costs and liability, and increased profitability. For instance, estimated savings from reducing indoor exposures exceed \$100 billion annually, with benefits exceeding costs by ten-fold (Fisk, 2001).

We should also take advantage of advances in the science and measurement of exposure; advance that can tell us, with great accuracy, which pollutants are reaching humans and from where. Nationwide exposure monitoring programs, much like ambient air and water monitoring networks currently in place, could provide vital information on how humans are exposed to environmental pollutants. We have vast amounts of epidemiological data, suggesting links between pollutant exposures and illness. To understand and confirm these links, epidemiology can be supplemented with direct measurements of physical, chemical, and biological pollutant exposure.

Yet monitoring exposures is only part of the solution. Given that we

have found pollutants in the "wrong places" (e.g., pesticides in human breast milk), we need to ask ourselves not only how that exposure occurred, but also why that pollutant is being produced in the first place. Here, a precautionary approach can be usefully applied (Wingspread, 1998). We have evidence that humans can be harmed by substances that are any of the following: persistent, bioaccumulative, carcinogenic, endocrine disrupting, mutagenic, heavy metals, or toxic to immune, endocrine, and neurological systems, among other characteristics. A goal then should be to phase out and significantly reduce the reliance on these types of substances. And rather than waiting until a pollutant is emitted and found in the body, and then trying to assess the resulting harm, we can try to prevent harm in the first place, using what we already know about human exposures.

#### Acknowledgements

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\* Anne Steinemann holds the title of Professor in the Department of Civil & Environmental Engineering, and in the School of Public Affairs, at the University of Washington in Seattle, where she is also director of the Center for Water and Watershed Studies. This article is a slightly modified version of "Human exposure, health hazards, and environmental regulations," Environmental Impact Assessment Review Vol. 24 (2004), pgs. 695-710.

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The PMRA relied upon animal studies, frequently with rats. April 1, 2004 the genome of the rat was published in the prestigious journal "Nature". An important finding was that rats have genes for detoxification of chemicals that do not exist in people, and therefore are a poor model for toxicity testing. (There is a reason that rats can live in sewers and garbage dumps, and people cannot.) Pesticides are the only chemicals deliberately made toxic, and spread in the environment for that effect. All life shares common biochemical pathways and structures, so pesticides are, in some way, toxic to all species. 2,4-D comes in many forms with varying toxicities, but was assessed in a uniform manner. As well, 2,4-D for lawn care is mixed with other pesticides as well as other ingredients, and the toxicities of mixtures were not considered. Fertilizer - herbicide mixtures ("weed and feed" -type products) should be banned for many reasons (see factsheet on Weed and Feed).

#### Cancer

The Ontario College of Family Physicians found that the open, peer-reviewed literature regarding humans is clear enough for our doctors to advise avoidance if at all possible. Non-Hodgkin's lymphoma and leukemia are frequently noted, along with brain tumours and neuroblastoma (children). The PMRA, after lengthy discussion of whether our children more closely resemble dogs, rabbits or rats, preferred to rely upon secret animal studies supplied by the industry, that do not demonstrate carcinogenicity, and in the end was undecided over whether or not 2,4-D caused cancer.

The "independent Science Advisory Panel" noted that childhood cancer did merit more study. The PMRA said that this was a difficult area of study, and preferred to rely upon animal toxicity data. Of course, if there was a reliable correlation between animal and human cancers, the disease would have been cured years ago.

#### Reproductive Difficulties

2,4-D has been found in semen, blood and urine, and has been linked in the open literature to difficulties conceiving and bearing children and to gender imbalances. An animal study demonstrating failure of pregnancy using "off-the-shelf" herbicide was rapidly and vigorously attacked by the pesticide industry, but no retraction was ever published. A reproductive study required by the PMRA is still pending from the pesticide industry, but evidently that didn't stand in the way of concluding that 2,4-D poses an acceptable risk.

#### Neurological Impairment

The PMRA has not received from the pesticide industry a required developmental neurotoxicity study.

The possibility of neurological impairment is noted on the label for professional applicators: "2,4-D may cause severe irritation to the eyes. Prolonged breathing of 2,4-D may cause coughing, burning, dizziness or temporary loss of muscle coordination. Other possible effects include fatigue, muscle weakness or nausea. Treat symptomatically." Homeowners will not be so warned.

#### Dioxins

Chlorinated dioxins are inevitably formed during phenoxy herbicide manufacturing (2,4-D, mecoprop and dicamba are all phenoxy herbicides used in mixtures on turf). "Dioxins" is a large group of chemicals that persist in the environment, and that may cause cancer, harm neurological development, impair reproduction, disrupt the endocrine system and alter immune function. An industry lobbyist admitted that when the reactor gets too hot (conditions favouring dioxin formation) the batch gets pulled.

The PMRA report was published before the required dioxin analyses had been provided to them by the Industry Task Force II on 2,4-D Research. Dioxin contamination has been problematic in the past, but since 1983 the federal government has been assured by the manufacturers that it is no longer a problem and no further monitoring has been carried out.

Under Canada's Environmental Protection Act, dioxins with 2 or more chlorine atoms are targeted for virtual elimination. Given the ingredients for manufacture, dioxins with 2 and 3 chlorines will be the predominant contaminants in 2,4-D, although some higher-chlorinated forms will be present. However, the PMRA is only asking for analyses of dioxins with 4 or more chlorines. Thus, the PMRA is in contravention of the CEPA. It is also asking for an experiment to be conducted that will ignore the bulk of the problem. Moreover, the pending analyses will be carried out on five samples picked by the industry (low-temperature samples with little contamination will doubtless be chosen) and analysed for the industry. Surely unfavourable results will be discarded. In Canada there is no monitoring of contamination of commercial products or of herbicide-related dioxins in the environment (e.g. in sediments in waterways adjacent to golf courses).

Dioxin contamination may be an important contributing factor in inconsistent epidemiological evidence regarding herbicides and a wide variety of maladies.

#### Breakdown Products

A springtime stench blankets urban communities without bylaws or a Pesticide Code, and sickens people in stores (esp. workers) where lawn pesticides are sold. This is principally the smell of the first break-down product of 2,4-D. 2,4-dichlorophenol is a very toxic chemical, but is not even mentioned in the review of 2,4-D.

#### Scientific Process

At the Chalmers Research Group in Ottawa, we have world leaders in medical methodology - seekers of truth and transparency in medical research. Their methods have been adopted by the leading medical journals throughout the world. On the far side of town, the PMRA is breaking every rule in the book the Chalmers scientists are writing. Problems include: industry-provided, secret studies that are not open for peer review, reliance upon reviews rather than systematically reviewing primary literature, and even reliance upon unethical studies such as human ingestion of pesticide in a slurry with milk.

#### Conclusion

There are many doubts and flaws. The PMRA says that 2,4-D is safe if directions are followed, and at the same time decreased the allowable amount and frequency of application. Thus, the pesticide has not been used "safely" for decades. Homeowners are known not to follow recommended application rates in any case.

Ultimately, science cannot define an "acceptable risk". It may illuminate risks, but the degree of acceptability is a decision for society. Rather than illuminating risks, the PMRA has been derelict in its duty to compile relevant information and to weigh it dispassionately. The most charitable conclusion might be that the report was premature, since all relevant data was not in hand. However, this proposal document flouts the CEPA and does not even approach scientific standards for medical research, to ensure truth and transparency. The PACR2005-01 should be grounds for major changes within the PMRA and Canada's regulatory regime for toxic chemicals. It

is certainly grounds for cosmetic pesticide bylaws, and for Quebec to maintain its Pesticide Code, for the health of its people and as a fine example for the rest of the Canada and the world.

It is up to the people of Canada to tell the PMRA, and their politicians, how much uncertainty and risk are acceptable for the sake of killing dandelions in grass.

February 28, 2005  
Prepared by Meg Sears (MEng, PhD)  
For the Coalition for a Healthy Ottawa

[go back](#)

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Debate over pesticides, exposure growing again  
Watchdog groups back bill to phase some out  
Monday, February 21, 2005

By SHANNON DININNY  
THE ASSOCIATED PRESS

YAKIMA -- Farm groups and farm worker advocates are fighting over the first-year results of a study that found that one in five farm workers handling pesticides had suffered exposure to the chemicals -- and what role those results should play in future decisions about pesticide use. A national farm workers union is urging the federal government to begin a national medical monitoring program. And in Washington state, farm worker advocates and watchdog groups are touting a bill to phase out certain pesticides by 2012, to the dismay of farm groups who say it's too soon to make such a decision.

It is not a new fight, nor is it one likely to end anytime soon, even as the state enters just the second year of its monitoring program. "There are a lot of arguments about it," said Ann Wick, pesticide program manager for the state Department of Agriculture. "It's difficult to get really accurate scientific data, and it's open to a lot of questions. And dueling scientists are everywhere."

The debate centers on monitoring for an enzyme, cholinesterase, that occurs naturally in the body and is essential to normal functioning of the nervous system.

Certain pesticides, such as organophosphates and carbamates, can lower cholinesterase levels in the body. Depressed cholinesterase levels can lead to blurred vision, diarrhea or other flu-like symptoms, and in severe cases, seizures or death.

In response to a farm worker lawsuit, the state Supreme Court ordered the state Department of Labor and Industries in 2002 to adopt a rule to begin monitoring cholinesterase levels in farm workers.

The new rule required agricultural employers whose workers handle certain pesticides to track their hours and make the workers available for baseline tests and periodic blood tests to monitor cholinesterase levels.

Workers could opt out of the periodic medical exam, but employers could not pressure them.

During the 2004 spray season, 2,630 farm workers received a baseline test, and 580 received at least one medical test after that. About 119 workers, or 20 percent, saw their cholinesterase levels decline by at least 20 percent. Twenty-two of those employees, or 4 percent, were removed from their work because cholinesterase levels had declined by 30 percent or more.

"We are hesitant to draw firm conclusions based on the 2004 data.

It's only one year's data," said Michael Wood, who heads the Occupation Safety and Health Program at the state Department of Labor and Industries.

"We do believe that the 2004 data does confirm that there is a significant risk created by these pesticides, and that it justifies continued attention to these issues."

Farm worker advocates criticize state and federal agencies for failing to protect workers.

"Exposures like this to chemicals like these wouldn't be tolerated in other workplaces and communities, and farm workers and their families deserve protection now," said Carol Dansereau, director of the Farm Worker Pesticide Project.

The monitoring program focuses on a narrow subset of the most highly toxic pesticides, and the harmful effects of these products have been known for a long time, said Shelley Davis, co-executive director of the Washington, D.C.-based Farmworker Justice Fund.

"The government, both the (Environmental Protection Agency) and at the state level, have been taking some steps to increase protections, but really not enough," she said. "Efforts made to date are just inadequate."

Farm worker advocates are lobbying the federal government to create a national medical monitoring program and are aiming to ban or phase out use of pesticides.

"There's plenty of substitutes for them," Davis said. But farm groups call that move drastic and hasty.

"Eliminating the use of pesticides in this state would destroy thousands of farms and put tens of thousands of farm workers out of a job," said Dean Boyer, spokesman for the Washington Farm Bureau. "We're being especially cautious in this state and there was nothing in the first-year results that would suggest any widespread problem of exposure to pesticides."

The monitoring program can be a useful tool to identify gaps in safety, and a 20 percent depression is an indication that a farmer needs to review his or her work practices, Boyer said, noting that cholinesterase levels can rebound naturally.

Instead of banning pesticides, the program should be allowed to run its course, and the results should be evaluated scientifically to determine the cost-effective benefits of testing, he said.

But the long-term effects of lower cholinesterase levels are still unknown, said Erik Nicholson of the United Farm Workers.

"We are not willing guinea pigs for the industry to use, and then have scientists try to determine why so many are dying at such a young age," Nicholson said.

Both sides criticize the state's efforts to enact the program. Farm groups fought the monitoring initially, then complained about the state laboratory's handling of the tests.

Farm worker advocates said the state was too slow to adopt the program and should take stronger steps to ensure worker protection.

Meanwhile, the second year of testing got under way Feb. 1, and the threshold for monitoring was tightened. For the first year, workers who handled pesticides for 50 hours during any consecutive 30-day period were monitored. The threshold dropped to 30 hours in the second year of the program.

"The more hours you handle pesticides, the greater the likelihood that you'll have an exposure," Wood said.

As to banning pesticides, that would be a decision for state and federal regulators, he said.

Lyn Frandsen, pesticide compliance team leader for the Environmental Protection Agency in Seattle, said there are bound to be exposures even with regulations.

"Nothing's perfect," Frandsen said. "It's likely that people aren't following the regulations perfectly."

Those regulations include keeping workers out of sprayed fields and orchards for certain periods of time and wearing personal protective equipment, such as hoods or respirators. The state Department of Agriculture is stressing training on those regulations this year, said Wick, but an immediate ban on pesticides would be overreacting.

"There is evidence that the cholinesterase level in the blood is depressed. That is an exposure and that is a concern to us," she said. "Right now, we're looking at the data. We don't really have enough information to determine the cause of the exposure."

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#### Monsanto's Government Ties

A Monsanto official told the New York Times that the corporation should not have to take responsibility for the safety of its food products. "Monsanto should not have to vouchsafe the safety of biotech food," said Phil Angell, Monsanto's director of corporate communications. "Our interest is in selling as much of it as possible. Assuring its safety is the FDA's job."

It would be nice to think the FDA can be trusted with these matters, but think again. Monsanto has succeeded in insuring that government regulatory agencies let Monsanto do as it wishes. Take a look:

- \* Prior to being the Supreme Court Judge who put GW Bush in office, Clarence Thomas was Monsanto's lawyer.
- \* The U.S. Secretary of Agriculture (Anne Veneman) was on the Board of Directors of Monsanto's Calgene Corporation.
- \* The Secretary of Defense (Donald Rumsfeld) was on the Board of Directors of Monsanto's Searle pharmaceuticals.
- \* The U.S. Secretary of Health, Tommy Thompson, received \$50,000 in donations from Monsanto during his winning campaign for Wisconsin's governor.

The two congressmen receiving the most donations from Monsanto during the last election were Larry Combest (Chairman of the House Agricultural Committee) and Attorney General John Ashcroft. (Source: Dairy Education Board)

In order for the FDA to determine if Monsanto's growth hormones were safe or not, Monsanto was required to submit a scientific report on that topic. Margaret Miller, one of Monsanto's researchers put the report together. Shortly before the report submission, Miller left Monsanto and was hired by the FDA. Her first job for the FDA was to determine whether or not to approve the report she wrote for Monsanto. In short, Monsanto approved its own report. Assisting Miller was another former Monsanto researcher, Susan Sechen. Deciding whether or not rBGH-derived milk should be labeled fell under the jurisdiction of another FDA official, Michael Taylor, who previously worked as a lawyer for Monsanto.

[http://www.naturalhealthcoalition.ca/wto\\_and\\_gmo.htm](http://www.naturalhealthcoalition.ca/wto_and_gmo.htm)

February 17, 2005

Ottawa Sun

75% want pesticides banned, poll finds

By JOHN STEINBACHS,

The science might be up for debate, but a group of doctors concerned about the environment says 75% of Ottawa residents support a ban on pesticides for residential property. The Canadian Association of Physicians for the Environment yesterday released a survey claiming that only 14% use pesticides, compared to three-quarters who want them eliminated from regular use.

"Pesticides are widely unpopular in Ottawa. Taken together, these data give city councillors all the ammunition they need to bring in a bylaw," said Gideon Forman, the association's executive director.

#### HEALTH ISSUES

The association links pesticides to human health problems and is calling on local politicians to bring in restrictions against the lawn care products -- even on private property.

The survey also found that 70% of residents believe a bylaw restricting pesticide use -- along with an education campaign on how residents can have a healthy, chemical-free lawn -- would be the best way to bring in the necessary changes.

"The vast majority of residents in this city want public education teamed up with a city bylaw," said Forman.

The association released the poll's findings at a news conference attended by the city's medical officer of health, Dr. Robert Cushman.

Cushman said a bylaw restricting pesticide use will soon be drafted. He feels Ottawa should join the ranks of other municipalities that have taken similar action.

#### FOCUS ON CHILDREN

Cushman said the pesticide fight is different than the battle against smoking he successfully waged years ago.

"You can't bring in wheelbarrows of evidence (against pesticides) the way you can for tobacco. No one is addicted to pesticides and we're talking about cosmetic use," he said.

"I think it's time we really start thinking more about our children and our grandchildren than pristine lawns."

The survey, conducted by Oracle Poll, involved 525 randomly selected Ottawa homes and is considered accurate within plus or minus 4.3 percentage points, 19 times out of 20.

[john.steinbachs@ott.sunpub.com](mailto:john.steinbachs@ott.sunpub.com)

<http://www.canoe.ca/NewsStand/OttawaSun/News/2005/02/17/pf-933435.html>

Canadian Association of Physicians for the Environment

<http://www.cape.ca/>

Wed 09 Feb 2005

The Oregonian

Study finds illness in Washington pesticide handlers

By Alex Pulaski, The Oregonian, Portland, Ore.

Feb. 9--One in five Washington pesticide handlers experienced significant health effects from mixing or spraying chemicals, a new study indicates.

The study, which is being released today, was based on results from Washington's first year of state testing in 2004. Three farm-worker advocacy groups that prepared the study suggest that Oregon and other states require similar worker testing and that the federal government further restrict the use of highly toxic pesticides.

Only Washington and California conduct mandatory testing of farmworkers who regularly mix and spray pesticides. Farmers in Oregon's tree fruit regions, such as the Hood River Valley, generally oppose testing, and say they have reduced use of their most toxic sprays.

Pickers and thinners -- a much larger group than the relative few who directly handle pesticides -- were not tested in Washington. The blood tests measure levels of an enzyme vital to the body's nervous system.

The enzyme, cholinesterase, is inhibited by a class of more than three dozen pesticides that have come under the scrutiny of the U.S.

Environmental Protection Agency. Low levels of exposure might cause headaches or a runny nose, but high levels can be deadly.

Of 580 workers tested in Washington, 20.6 percent saw their enzyme levels drop at least 20 percent during the season. Under state rules, that level requires employers to conduct a workplace safety audit.

The study indicated that enzyme levels had dropped by at least 30 percent in 4.4 percent of workers tested. Under state rules, those workers had to be removed from pesticide handling.

Two of the commonly used bug-killers that affect workers are azinphos methyl, commonly known as Guthion, and chlorpyrifos, which is sold under a variety of names.

"Our findings, along with other recent studies, make it clear that these highly toxic pesticides need to be phased out," said Carol Dansereau, executive director of the Farm Worker Pesticide Project. The project, the Farmworker Justice Fund and United Farm Workers union released today's study.

Farmers such as Rick Blaine and Mike McCarthy say they have dramatically reduced the use of their most toxic pesticides, but that some are needed to battle pests. Both farm tree fruits in the Hood River Valley, but Blaine also farms across the Columbia River in Washington.

Blaine said that if workers are tested in an area like Hood River, area residents should probably be tested as well. McCarthy suspects that worker testing would be an unneeded expense prone to inaccuracies.

A little more than half of all the apples grown in the United States come from the Pacific Northwest, mostly from Washington.

According to the EPA, about 80 percent of all Northwest orchards are treated with azinphos methyl. The figure is about the same for chlorpyrifos.

The results made part of the Washington study released today are strikingly similar to California's experience. A 1985 study of 542 agricultural pesticide applicators indicated that a little more than one in five had depressed cholinesterase levels of at least 20 percent.

The EPA has refused to implement nationwide cholinesterase testing of workers.

"Without these rules, workers never know when it's time to take a break from spraying," said farmworker Martin Rios of Sunnyside, Wash.

Rios, who is on a temporary assignment as an organizer with the United Farm Workers union, was the lead plaintiff on the court case that led to Washington's instituting its testing program.

To see more of The Oregonian, or to subscribe the newspaper, go to <http://www.oregonian.com>.

(c) 2005, The Oregonian, Portland, Ore.

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Feb. 1, 2005.

Toronto Star

Kid power takes on pesticides

Orangeville urged to introduce ban Petition presented at town meeting

JIM WILKES

STAFF REPORTER

Miranda Brar is sick of pesticides.

Literally.

And that's the message she and a few friends took to members of Orangeville's town council last night, urging them to pull the plug on weed-killing chemicals.

"On behalf of the children of Orangeville and future generations, we ask you to stop this dangerous experiment with our lives and our futures now," the 13-year-old Grade 7 student told a public meeting on the issue.

"Are we children not more important than weeds?"

Brar and four friends from Princess Elizabeth Public School ambushed Mayor Drew Brown last summer, arriving at his office with an armful of reports about the harm caused by pesticides and the names of 300 youngsters on a petition supporting their cause.

They showed up last night with another list of names - this time 460 adults - to back their demands.

Miranda, who suffers from allergies, proposed a pesticide ban to the mayor after she developed soreness in her limbs, dizziness and head congestion that lasted for days. Her family doctor said the reactions, different from her allergy symptoms, could have been caused by exposure to pesticides.

Seven months later, the students are still waiting for a council decision, so they took their crusade to the meeting attended by the mayor and most councillors last night, where the public and lawn-care industry representatives had their say.

"If pesticides weren't dangerous, it wouldn't be necessary to put an emergency phone number on the back of the sign in case an accident happens," Dylan Caressa, 13, told an audience of about 75 people at the Town Hall Opera House.

"Pesticides are not safe," the Grade 8 student said. "The warning sign tells us that."

His sister Riva, 11, was more direct.

"The doctors of Ontario have told us that pesticides cause cancer, learning disabilities, birth defects and asthma, especially in children," she said.

Sarah Mediouni, 12, urged councillors to model their legislation after the town of Hudson, Que., which led the fight against cosmetic pesticides in that province and spearheaded a Quebec-wide ban.

Miranda has a personal stake in the issue.

"Pesticides tend to make allergies worse because they ruin your immune system," she said in an interview. "So pesticides can make you sicker than the weeds would."

The town's environmental advisory committee has recommended a bylaw like that in neighbouring Caledon, where pesticides are banned in July and August, or like Toronto, where an outright ban will be phased in by 2007.

Councillor Warren Maycock said he agrees with the concerns. "I don't use pesticides on my own lawn because I'm concerned about the environment and the health of my family," he said. "We don't have enough kids involved in the political process. The more we have, the better

off we'll be."

Brown agreed.

"They've made their concerns very clear and there are any number of citizens in the town who agree with them," he said. "I applaud them.

"The easy thing is to stay on the sidelines and complain or suggest that the witless politicians aren't doing what they should. These kids have taken a stand and are willing to tell us what they think.

"I think that's fantastic."

[http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article\\_PrintFriendly&c=Article&cid=1107213016887&call\\_pageid=968350130169](http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article_PrintFriendly&c=Article&cid=1107213016887&call_pageid=968350130169)

Lawsuit Targets Pesticide Air Pollution

January 19, 2005

Today, PANNA and a number of environmental health and community groups sued California's Department of Pesticide Regulation (DPR) for failing to uphold the Toxic Air Contaminant (TAC) law. The law, enacted in 1984, requires DPR to assess pesticides as potential air contaminants, and to regulate them in order to protect public health.

More than 900 pesticides are registered in California, yet in the last 20 years DPR has completed the review process for only four. Of the 172 million pounds of pesticides used in 2002 in the state, more than 90% are prone to drifting from application sites as airborne toxins.

Pesticides are a major component of air pollution in California's Central Valley. According to the California Air Resources Board, pesticides are among the top three contributors to ozone pollution (smog) in the San Joaquin Valley, and account for nearly 10% of the ozone-forming gases produced in the region. High levels of ozone trigger asthma attacks and exacerbate other respiratory illnesses. In 2002, asthma rates in Fresno County were the highest in the state, and the third highest in the nation. Nearly one-third of pesticides used in California are also associated with serious chronic and acute health problems, such as cancer or nervous system damage.

"Millions of Californians are exposed to airborne pesticides against their will. Like secondhand smoke, these 'secondhand pesticides' put us at risk of serious health problems such as asthma, cancer and neurological damage," said Susan Kegley of Pesticide Action Network. "For over 20 years, DPR has ignored its duty to uphold the Toxic Air Contaminant law and shirked its responsibility to protect the health of Californians."

Pesticides are the largest source of toxic substances released into the environment in California. In 2002, pesticide use accounted for the release of 5.7 times more toxic materials to the environment than manufacturing, mining, or refining facilities, as reported through U.S EPA's Toxic Release Inventory. If enforced, the TAC law would provide an important tool to reduce a major source of Central Valley air pollution. "When state agencies like DPR refuse to implement the law, communities like mine suffer the consequences," said John Mataka of Grayson Neighborhood Council in Stanislaus County. "Pesticides are a double health hazard because they're toxic and they cause air pollution. Here in the San Joaquin Valley, we breathe polluted air, have the highest rates of asthma in the state and suffer from other chronic diseases like cancer because DPR allows industrial agriculture to continue with business as usual."

The lawsuit was filed by Pesticide Action Network North America, Californians for Pesticide Reform, Grayson Neighborhood Council, Wishtoyo Foundation/Ventura Coastkeeper, Neighbors at Risk, Association of Irrigated Residents, and Community and Children's Advocates Against Pesticide Poisoning. The plaintiffs want DPR to comply with its duty under TAC to assess pesticide toxic air pollutants, to take action to reduce the health impacts of these air pollutants, and to comply with the sections of the law requiring public transparency and input, including review by an independent Scientific Review Panel and substantive cooperation with California's Air Resources Board and Office of Environmental Health Hazard Assessment (OEHHA). The plaintiffs also seek to ensure that risk assessment and mitigation measures for pesticide air pollutants are completed and implemented on a timely schedule.

Source: Press Release, PANNA and Californians for Pesticide Reform, January 19, 2005.

Contact: PANNA.

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No way out of pesticides' spiral of death? (FEATURE):

[India News]: New Delhi, Jan 16 : This is the story of the slow and steady poisoning of a nation by cash-crazy pesticide sellers and their willing victims - farmers who mistakenly see pesticides as a passport to prosperity.

The insidious poison has seeped in everywhere - the food you eat, the water you drink and the cola you sip.

Says Ramesh Menon, who has made a documentary highlighting the spiral of death spawned by pesticides. "The pesticide lobby is very strong and aggressive and is often in cahoots with the authorities. But the real problem is apathy. Apathy, in the end, is the greatest killer," Menon told IANS.

The stakes in the pesticide industry are huge: pesticide consumption in India has grown to a total market size of over \$1 billion. India produces 90,000 tonnes of pesticide a year. India's pesticide industry is the largest in Asia and the 12th largest in the world. Agrees Ravi Aggarwal of Toxic Links, an environmental watchdog group: "This pesticide lobby has tremendous clout in the ministry of agriculture and chemicals. It's only in the last three years that their stranglehold has been challenged."

The statistics are indeed grim. Over 100,000 die of pesticides poisoning every year in developing countries. According to WHO, in India over 70,000 end up as victims of pesticides every year.

Poisoning from pesticides affects 68,000 farmers and workers every day; annually, an estimated 25 million workers suffer from pesticide poisoning throughout the world.

An Indian Council of Agricultural Research (ICAR) report says 90 percent of pesticides don't hit pests, but instead contaminate soil, air and water.

Menon's documentary vividly evokes deadly consequences of indiscriminate use of pesticides. For example, in Warangal, Andhra Pradesh, there are 13,000 pesticide dealers. "Imagine so many dealers in one district," Menon exclaims in disbelief.

Cotton crop is the most successful seducer. In India, over 55 percent of pesticides is spent on cotton alone. The costs of such large-scale use are staggering. Andhra Pradesh spends Rs.7 billion (\$160 million) on pesticides every year.

Cotton occupies just five percent of the country's fields, says entomologist Derek Russell, but those fields use more than half the country's pesticides.

Pesticides are very expensive to buy and their excessive consumption is encouraged by unscrupulous dealers. This spawns a deadly circle of

debt, pushing farmers literally to the edge.

But despite such large-scale carnage wrought by pesticides, the government has been extremely slow in stirring into action. "Integrated pesticide management has been followed only in small pockets of West Bengal and Maharashtra," says Aggarwal.

The Supreme Court's notice to the government on a plea for a ban on the use of insecticides and pesticides on vegetables, fruit and other food articles hasn't cut much ice.

Farmers and their children continue to die from poisoning by endosulfan in Kerala. In Warangal and in many villages of Punjab, the debt burden often forces farmers to commit suicide.

Besides, the reckless use of pesticides in India's farm sector causes mental development disorders in children, says a report by the green watchdog body Greenpeace.

All is not gloom and doom, however. There are signs of change promising to break this vicious circle. Green farmers in many pockets of the country are waging a silent war against pesticides.

What's the way out? "We have to regulate the use of pesticides in the food chain and to weed out the most toxic of them," says Aggarwal. A shift in farming practices and a more rigorous implementation of integrated pesticide management can go a long way, he adds.

Says Menon: "Religious leaders can play a big role in persuading farmers to switch to organic farming. In Nashik, they successfully spread the message: do not cultivate poison. Do not eat poison. Many farmers switched to organic farming."

Sunita Narain of the Centre of Science and Environment, an NGO that exposed the presence of pesticide residues in colas, thinks that the problem is more manageable now as a result of awareness created by the case.

Narain suggests a revamp of the regulatory mechanism in the use of pesticides and a strong enforcement of the regime.

Public awareness campaigns have certainly helped, but there is a long way to go before the deadly spiral of pesticide poisoning is brought under control.

Indo-Asian News Service

<http://news.newkerala.com/india-news/?action=fullnews&id=60593>

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Parkinson's 'could be linked to pesticides'

Science advisers call for research into toxic link to brain disease

James Meikle, health correspondent

Friday January 14, 2005

The Guardian

The government's independent scientific advisers are stepping up the pressure on Whitehall to investigate the long-standing fear that the widespread use of pesticides against fungi, insects and weeds has increased risk of disease in humans.

Their demand for studies to show whether and how the chemicals may cause the nervous system disorder Parkinson's disease coincides with a separate call for improved measures of exposure to pesticides, because of possible links with prostate cancer.

The Department of Health's committee on carcinogenicity has stopped short of calling for new research on prostate cancer, but wants better monitoring of chemical use.

The advisory committee on pesticides recommends laboratory research into the toxic mechanisms that might be involved in Parkinson's.

It says it would be "useful" to set up long-term health studies of workers making or using pesticides, to see whether they replicate the association found in other countries between chemical exposure and incidence of the disorder.

Years of research into Parkinson's has not discovered what causes nerve cells to die in a part of the brain called the substantia nigra. Ageing is a prime factor but a combination of genes and pollutants or pesticides is believed to be the trigger.

Studies have so far failed to find a definite relationship with well-water drinking, farming, rural living, and pesticide exposure, but scientists at Aberdeen University, and in Finland, Romania, Italy and Malta are nearing the end of a EU-funded study investigating some of these factors.

The pesticides committee concluded in November, in a so-far unpublicised finding, that a review of the existing evidence indicated a correlation between pesticides and Parkinson's but "did not point to a particular toxic mechanism or a hazard from a specific compound or group of compounds".

The review by the Medical Research Council's Institute of Environment and Health found significant gaps in research and suggested new work to take into account the fact that the exposure to pesticides in Britain might be different to that in other countries, because of differences in agriculture, climate and regulations.

If there was enough historical information, it would be helpful to discover whether the incidence and prevalence of Parkinson's had changed substantially in the past 50 years.

Elizabeth Sigmund of Opn (Organophosphates Information Network) said a high proportion of those on its database had complained of symptoms like Parkinsonism, the group of disorders to which Parkinson's belongs.

"The government has been disgracefully dilatory. It knows farmers have been exposed to a variety of toxic chemicals. It is high time it took research very seriously and thought about how it can compensate people who are obliged to use such chemicals. I think there is beginning to be a sea-change in attitudes."

Linda Kelly, chief executive of the Parkinson's Disease Society, said that if scientists could understand how the disease was triggered, "you could perhaps understand what causes Parkinson's in the first place, and that could deliver better treatments".

The food and environment department, Defra, said some studies had found no association between pesticide use and Parkinson's, but added: "A link between pesticides exposure and Parkinson's disease cannot be discounted based on the evidence currently available. That is why further research is required."

The pesticides safety directorate was investigating the best way forward.

<http://society.guardian.co.uk/health/story/0,7890,1390170,00.html>

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January 1, 2005

LA Times

EPA Takes Pest Killer Diazinon Off the Shelves

By Marla Cone

Times Staff Writer

**Beginning today, consumers can no longer buy one of the most popular lawn and garden insecticides of all time.**

Retailers in the United States are prohibited from selling diazinon, a highly effective killer of a variety of yard pests such as ants and grub worms. The U.S. Environmental Protection Agency phased out residential use of the chemical, which can damage the nervous system, after

determining that it poses a human health risk, particularly to children.

The diazinon ban is part of an EPA program begun under the Clinton administration to scale back the most toxic pesticides, the organophosphates that have been popular for decades because they wipe out a broad spectrum of insects. It is still legal to use diazinon on some crops.

A powerful neurotoxin, diazinon is highly poisonous to fish, birds and other wildlife - a single granule can kill a small bird - and it is one of the most commonly found pesticides contaminating air, rain and water.

An ingredient in hundreds of home and garden products, about 13 million pounds of diazinon have been used yearly in the United States, 80% for residential uses.

Tens of thousands of households could still be storing diazinon products in their garages. Old supplies remain legal for consumers to use as long as the directions on the label are followed.

The EPA gave nurseries, hardware stores and other retail outlets four years' notice for the ban, and manufacturers ceased production last year. As a result, most stores have run out of diazinon.

"We think there are a few retailers with the product on the shelf, but not much," said Laura Parsons, a team leader at EPA's Office of Pesticide Programs in Washington.

On Thursday, an eBay seller in Florida was auctioning at least 20 8-ounce spray bottles at a beginning price of \$3.50 each, but the auctions stated that all sales would end Friday. A gallon of highly concentrated diazinon sold for \$132.50 in an eBay auction Wednesday.

Most nurseries and other stores haven't offered diazinon for months.

"We stopped selling it since the first of the year," said Rudy Refuerzo, assistant manager at an Armstrong Garden Center in Long Beach. "We tell consumers it's been off the market because of the EPA directive."

Multipurpose chemical pesticides such as diazinon are rare because the EPA has phased out several organophosphates, which kill insects by targeting their nervous systems.

The bans came after President Clinton signed a tougher pesticide law in 1996.

Diazinon is still legal to use on about 40 crops, and California ranks among the top three states that use substantial amounts for agriculture. EPA officials said the risks from agricultural use are considered low compared with residential use because the chemical is most dangerous from inhalation and skin contact, not from consumption of foods.

Small amounts have been detected in some food and drinking water, but the levels are below that which might pose a risk to people, according to an EPA assessment.

Environmental groups, however, have criticized the EPA for not banning all uses of a pesticide with known dangers.

Unlike the pesticide DDT, which was banned in the United States 30 years ago, diazinon does not persist in the environment or build up in the food chain. Instead, it is short-lived, breaking down within hours. However, it moves through soil and readily flows into groundwater or surface water. Residential use of diazinon in the 1990s accounted for more bird kills than any other pesticide, the EPA said.

High doses can kill people or cause neurological problems such as dizziness, headache, weakness, muscle paralysis and nausea, according to the federal Agency for Toxic Substances and Disease Registry.

Diazinon was derived from the same family of chemicals as the sarin nerve gas developed during World War II.

The insecticide was sold in liquid and granular form and was often marketed as a lawn treatment or ant killer under brand names such as Ortho, Spectracide and Real-Kill. Its chemical name is listed on the label under active ingredients.

If consumers choose to use it, they should wear gloves, and pets and people should be kept off the lawn or garden for several hours. Care should be taken to prevent the insecticide from washing off yards into waterways.

Consumers should not throw unwanted diazinon or other chemicals in the trash or down the drain. Instead, they should contact their city or county household hazardous waste program for free disposal. Los Angeles County residents can call (800) 238-0173 or (888) CLEAN-LA for collection locations. Orange County residents can call (714) 834-6752.

[http://www.latimes.com/news/nationworld/nation/la-na-pest1jan01,1,2720677\\_story?coll=la-headlines-nation](http://www.latimes.com/news/nationworld/nation/la-na-pest1jan01,1,2720677_story?coll=la-headlines-nation)

Bay Area Dioxins Project Final Report (February 2004)

[http://dioxin.abag.ca.gov/project\\_materials.htm](http://dioxin.abag.ca.gov/project_materials.htm)

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New Jersey Turfgrass Association

Clippings & Green World

Fall 2004 - Vol 56

2,4-D Nears Approval, But The Vultures Still Keep Circling!

Reprinted From Industry Task Force II \* [www.24d.org](http://www.24d.org)

You may be aware that the herbicide 2,4-D is entering the final stages of EPA's re-registration process. EPA has concluded its review of more than 300 new research studies and their conclusions have been posted on their website for public comment. Although we are generally satisfied with EPA's conclusions, we are concerned about attacks being made against the herbicide by activists groups during the public comment period.

As you are aware, 2,4-D offers economical, wide spectrum weed control. It is mixed with many other herbicides, both to increase the spectrum of weed control and to prevent the possibility weed resistance associated with some of the newer herbicides.

After more than 55 years of extensive use, the U.S. Department of Agriculture reports (NAPIAP Report No. 1-PA-96), "No scientifically documented human health risks, either acute or chronic, exist from the approved uses of the phenoxy herbicides (2,4-D)."

That same report concludes that should 2,4-D be no longer available, the cost to users and consumers would total some \$1.7 billion annually. With over 100 label uses, few crop protection products offer the same broad range of benefits.

<http://www.njturfgrass.org/archive.html>

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H. R. 4484, 107 th Congress - Opposition to Temporary Duty Suspension Bill

<http://waysandmeans.house.gov/legacy/trade/107cong/tradebills/hr4484dowagrosience.pdf>

Nufarm America's, Inc. Comments Supporting H.R. 4484 (2,4-Dichlorophenoxyacetic Acid, Its Salts and Esters (2,4-D))  
<http://waysandmeans.house.gov/legacy/trade/107cong/tradebills/hr4484nufarm.pdf>

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Pesticides and Breast Cancer Risk, 2,4D - Fact Sheet - BCERF  
[http://envirocancer.cornell.edu/FactSheet/Pesticide/fs14.2\\_4-D.cfm](http://envirocancer.cornell.edu/FactSheet/Pesticide/fs14.2_4-D.cfm)

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In Your Own Backyard  
[http://www.publicintegrity.org/docs/publici/pi\\_1998\\_08.pdf](http://www.publicintegrity.org/docs/publici/pi_1998_08.pdf)

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The Reconsideration of Approvals and Registrations Relating to 2,4-D  
[http://www.apvma.gov.au/chemrev/24D\\_scope.pdf](http://www.apvma.gov.au/chemrev/24D_scope.pdf)

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JOHN D. CONNER, JR.  
 Partner, Washington DC

Email [jconnerjr@mckennalong.com](mailto:jconnerjr@mckennalong.com)  
 Phone 1.202.496.7649 Fax 1.202.496.7756

John Conner, Jr. practices as an environmental law expert, concentrating in pesticide and chemical issues.

Since 1980, he has counseled joint ventures conducting product safety testing under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA) on their formation, antitrust concerns, tax questions and pesticide regulatory compliance issues. John serves as general counsel to three significant joint ventures: Industry Task Force II on 2,4-D Research Data, MCPA Task Force Three and the Piperonyl Butoxide Task Force II.

John has also represented pesticide registrants before the Environmental Protection Agency in numerous significant regulatory proceedings, including hearings involving chlordane/heptachlor, dinoseb, diazinon and 2,4-D. He conducts internal FIFRA and TSCA compliance audits and assists clients in the development of compliance systems. He has also been involved in pre-acquisition environmental audits of chemical manufacturing plants.

In recognition of his considerable expertise, John has been asked to chair and lecture at programs in this country and abroad on FIFRA, TSCA and environmental compliance. He is an active contributor to the Environmental Quality Committee of the ABA Section of Natural Resources, Energy and Environmental Law. In addition, he is a co-author of the Pesticide Regulation Handbook (First, Revised and Third Editions, published by Executive Enterprises Publications Co., Inc.) and The TSCA Handbook (First and Second Editions, published by Government Institutes, Inc.). He has authored numerous articles on environmental law and pesticide and chemical regulation and litigation for publications including Chemical Times and Trends, BNA Chemical Regulation Reporter, Pest Management, Chemical Regulation Reporter and the International Environmental Reporter. A former Editor-in-Chief of the University of Tennessee Law Review, he served as a law clerk to the Honorable Robert L. Taylor, United States District Court, Knoxville, Tennessee.

#### PRACTICE AREAS

- \* Environmental
- \* Pesticides/FIFRA
- \* Toxic Substances Control Act (TSCA)

#### EDUCATION

- \* J.D., University of Tennessee College of Law, 1973
- \* Editor-in-Chief of the Tennessee Law Review
- \* Law Clerk, Robert L. Taylor, United States District Court, Knoxville, Tennessee, 1974-1975
- \* B.S., University of Tennessee at Knoxville, 1970

#### PROFESSIONAL AFFILIATIONS

- \* The District of Columbia Bar
- \* American Bar Association
- \* The Federal Bar Association

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<http://www.mckennalong.com/attorney-profile-38.html>

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CMAJ \* August 3, 2004; 171 (3). doi:10.1503/cmaj.1041034.

NOUVELLES  
 SYNOPSIS

Environmental Health

OCFP pesticide study triggered by complaint  
Pauline Comeau

Ottawa

The Ontario College of Family Physicians' conclusion that there are no safe pesticide exposure levels, which garnered unprecedented national coverage, was sparked by a pesticide industry lobby group's insistence that there is not enough evidence to support such warnings. The OCFP launched an extensive review of pesticide literature more than 18 months ago after Industry Task Force II on 2,4-D Research Data, a US-based group, complained that warnings of harmful effects of pesticides included in an OCFP information pamphlet were inaccurate. (2,4-D is the most common active ingredient in lawn care herbicides.) The complaint was a repeat of the usual arguments in the ongoing debate on pesticides, which the head of the OCFP describes as "an exercise in finger pointing," where one group cites a report warning of health effects and the other side cites another report indicating the results are inconclusive. The OCFP study was aimed at ending such discourse. The study ([www.ocfp.on.ca](http://www.ocfp.on.ca)), funded by the non-profit Laidlaw Foundation, was not peer-reviewed or published. This is the first time a Canadian medical association has attempted to review the literature. Researchers examined 12 000 studies on the health effects of pesticides and drew conclusions from the 250 studies deemed to have the most solid methodology. The review found "consistent evidence" of serious health risks, including brain, kidney, and prostate cancer, and reproductive and nervous system effects. For example, 3%-7.7% of cases of non-Hodgkin's lymphoma are attributable to exposure to phenoxyacetic acids and chlorophenols.

In addition, there was no evidence that some pesticides are less damaging than others. Rather, what differed were the effects and the time it took for them to appear. "Our study showed that family doctors are right in advising patients to avoid exposures," says Jan Kasperski, CEO of the OCFP.

But Donald Page, Executive Director of the Industry Task Force II, attacked the findings in the media and online, charging that the conclusions are based on a "biased review" with unclear criteria for study selection. - Pauline Comeau, Ottawa

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Thu 25 Nov 2004

The Record (Kitchener, Cambridge and Waterloo)

Green grass debate begins; Regionwide pesticide ban far from certain

By: JEFF OUTHIT

The great pesticide debate has been launched.

Regional councillors voted unanimously last night to seek public input on a public health bylaw to ban residents from spraying pesticides on their lawns and gardens.

Spraying would only be allowed by special permit for proven infestations of weeds or pests. Violators would face fines, after warnings.

Surveys suggest the proposed pesticide ban will affect most households.

It will now go to public meetings in all seven municipalities, before returning to regional councillors for consideration next October.

The ban has not been approved in principle and its passage is uncertain.

Coun. Jane Mitchell of Waterloo supports it.

Chairman Ken Seiling and Kitchener Mayor Carl Zehr refused to take a stand.

"I do not know yet if I will support a full bylaw," said Woolwich Mayor Bill Strauss.

Perhaps all that's clear is that it's the biggest public health controversy since council banned smoking in bars and restaurants in 2000.

Almost 30 delegates were in council chambers last night to speak their minds on pesticides.

Many were cut off by Seiling, who refused to hear public debate on the merits of a pesticide ban.

Seiling directed delegates to restrict their comments to the plan to seek public input.

Most complied.

Still, many delegates decried pesticides as a cancer threat.

"The spraying of pesticides in our parks is ludicrous and disgusting," said Nancy Perkins of Cambridge, sporting a button that said "Pesticides Kill."

Lawn-care operators said they do not support a pesticide ban but do not object to seeking public input.

Before Seiling shut him down, operator Mike Malleck told councillors that pesticide permits will anger residents.

Councillors were asked to seek input beyond environmental activists and reach out to the many residents who spray their lawns and gardens.

"This is a group that we haven't heard from," said Coun. Mitchell.

Councillors have yet to hear scientific proof that lawn-care pesticides are a health threat.

But they have heard medical opinions that pesticides are an unnecessary risk to public health and should be avoided.

Cancer researcher Sharon Campbell of the University of Waterloo advised council to be thorough.

There are risks to pesticide use but also benefits, she said, citing agriculture, forestry and disease control.

A survey last year found that 57 per cent of area residents use pesticides on their lawns and gardens.

A more recent survey suggests 65 per cent of area residents would support a pesticide ban.

Six Ontario communities, including Toronto, have enacted restrictions on pesticide use. However, councils cannot restrict pesticide sales.

[jouthit@therecord.com](mailto:jouthit@therecord.com)

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Region of Waterloo Update

As you know, politicians love to delay and stall as long as possible. Last night the Regional Council for Waterloo opted to continue on their non-committal path. They unanimously approved the "process" of public consultation for the "framework of a bylaw" with a draft bylaw coming to Regional Council Oct. 2005 for approval or not.

Industry spokespeople (see list below) waited until the last minute to register in order to have the last word (common industry tactic).

Presenters were only allowed to comment on whether to continue with the process (ie not whether Waterloo Region should have a bylaw or

not).

<http://www.region.waterloo.on.ca/web/region.nsf/8ef02c0fded0c82a85256e590071a3ce/57c867e6b7afd35f85256f51006b6d35!OpenDocument>

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Havana. November 23, 2004

Use of pesticides reduced 20-fold in last 15 years\* The development of biological means, reproduction of pests' natural enemies and integral management of crops has made it possible to develop a virtually clean agriculture

BY RAISA PAGES -Granma International staff writer-EVERY year, between one and five million cases of poisoning through pesticides are reported, with lethal effects for several thousand people, including children.

However, people are not only contaminated through direct contact with these chemicals, but also by ingesting foodstuffs obtained through the elevated use of pesticides.

Generally speaking, these products remain as residues in foodstuffs. When they enter the human body, through the digestive system, they accumulate in different areas until they surpass the early stages and trigger off disease.

It has been proved that these chemicals cause cancer, infertility, impotence, and malformations of the urinary and reproductive systems, amongst other health problems.

#### NOT JUST IN LABORATORIES

In Cuba, research and investment into obtaining bio-pesticides has intensified since 1985. This knowledge and infrastructure permitted the country to reduce the volume of pesticides employed during the economic crisis of the 1990s. In 1989, the island used around 20,000 tons of pesticides for various crops. These chemical products were mostly imported from the former Eastern European socialist camp.

The lack of financial resources to obtain products from other markets was not the only reason for the turn towards environmentally friendly agriculture and reduced usage of toxins. Cuban scientists held the belief that those chemicals brought with them other problems by altering the equilibrium of agricultural eco-systems. They would control one pest, but then a more virulent one would appear.

With the employment of six lines of bio-pesticides (beneficial fungi and bacteria that do away with the cause of disease) and the reproduction of insects that eliminate various predators, toxic substances had been reduced to just 5,482 tons in 1995.

Nowadays, in 2004, just over 1,000 tons are used for various agricultural crops. That is to say, 20-fold less than 15 years ago (1989).

The minimum quantities that are now employed in the island's agriculture are set aside for potato, tobacco, and banana crops in order to coexist with potentially devastating pests that were introduced deliberately as part of the U.S. government's biological war on Cuba.

Initially, bio-pesticides and beneficial insects were reproduced in laboratories located throughout the country and staffed by specialized technical personnel, but demand has exceeded the production expectations of these units.

With the incorporation of thousands of producers into urban agriculture and the transformation of thousands of hectares of sugar cane to other crops, the need for bio-pesticides and beneficial insects has risen to an unexpected level.

But as nature is the response, non-toxic or organic agriculture has transcended the frontiers of the laboratory to become experimentation in the field. Agriculturists are discovering plants that act as insect repellents and that possess properties to destroy harmful microorganisms such as fungi, bacteria, or parasites. Beneficial insects are also being bred on city farms using local resources.

Amongst Cuba's native and exotic flora exist plants that possess active components with which natural pesticides or those of botanical origin can be prepared, without having to resort to a specialized infrastructure.

Such is the case with the Nim tree and other plants such as chinaberry, tobacco, chrysanthemum, Muerto flower, prickly pear, Florido pine, crabwood, custard apple, indigo and the ashen hoarypea tree, amongst others.

"These are neither chemical or biological products that fight against pests, but alternative ways of managing a crop," confirmed Dr. Emilio Fernández, deputy director of the Institute of Plant Health Research.

During meetings with agriculturists, experts have learnt of other

options: traps to attract harmful insects and stores of "good bugs" which eat the bad ones, those known as natural enemies of pests.

There are fungi, bacteria and beneficial insects that also eliminate pests. Finding and saving the good ones in order to combat the bad has become normal practice for Cuban producers thanks to the training they have received from various institutes, including the Institute of Plant Health Research, the leader in the program of extensionism.

One can eat a cabbage in Cuba safe in the knowledge that it was cultivated without the use of chemicals, he remarked. This vegetable is harvested without any chemical whatsoever. All the vegetables obtained through organic agriculture are safe, because the use of pesticides is prohibited as the crops are planted close to towns and cities.

With a diverse range of plants, producers are ready to act against "enemy troops". In Songo La Maya - a coffee-growing region in the eastern province of Santiago de Cuba - they prepare a brew known as "hediondo" from sweet potato to combat the Broca bug that attacks coffee bushes. In the same region, some campesinos have invented a machine to blow smoke into ants' nests to asphyxiate them without using any expensive products or petrol. In Matanzas, there are even agriculturists who have experimented and managed to harvest potatoes with a minimum amount of chemical products.

With minimum use of chemical products, Cuban agriculture coexists with such dangerous pests as Thrips palmi, and black Sigatoka or black leaf streak on banana plants.

"An awareness has been created so as not to damage the environment," explained Dr. Fernández.

<http://www.granma.cu/ingles/2004/noviembre/mier24/48plagas.html>

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Thursday, November 25, 2004

Group faults reporting of pesticide study But, state says, look at the bigger picture  
THE ASSOCIATED PRESS

YAKIMA -- An environmental group has taken issue with the way the state Agriculture Department released results of a pesticide study earlier

this week, saying the agency misled the public into believing that no pesticides were found in two watersheds.

On Monday, the Agriculture Department reported results from the first year of a three-year study to monitor pesticide concentrations in salmon-bearing streams. No pesticide residues were detected in about 96 percent of water samples from two Washington state watersheds, the agency reported.

The Washington Toxics Coalition did not find fault with the report itself. However, the report showed that pesticides were found in 100 percent of the samples taken from the streams, which is not what the agency reported in its news release, said Erika Schreder, staff scientist for the Washington Toxics Coalition.

"It's misleading," Schreder said yesterday.

State officials don't dispute that pesticides were found in all the samples taken from the streams. However, they won't back off on how they reported the findings.

About 155 samples were taken from the streams. Those samples then were tested individually for 144 specific pesticides, resulting in about 22,000 tests. In those tests, the specific pesticides being searched for were detected only 862 times, producing the 96 percent rate for finding no pesticide residue, said Bridget Moran, manager of the Agriculture Department's Endangered Species Program.

Moran took exception to claims that the agency was being misleading.

"Every sample we took (from the streams) we found pesticides, as we would expect when we look for 144 pesticides," Moran said. "We're just trying to put out the entire picture of all the data we looked at."

In 2002, the department contracted with the state Ecology Department to monitor pesticide concentrations in salmon-bearing streams. Results of the three-year study will help determine any mitigation efforts that might be needed to reduce exposure.

As part of the program, three drainages in the Lower Yakima Valley watershed were monitored for agricultural pesticide use: Spring Creek, Sulphur Creek and Marion Drain. Thornton Creek in King County was monitored to represent pesticide use in an urban watershed.

The report showed that five pesticides exceeded clean water guidelines established by the U.S. Environmental Protection Agency.

Three pesticides found in the agricultural watershed exceeded so-called chronic standards, which means the pesticides must be present for a certain period to cause harm. One pesticide in the urban watershed violated chronic standards.

The fifth pesticide, DDT, exceeded acute standards in the agricultural watershed. That means the pesticide need only be present to pose a risk.

In completing the study, Agriculture officials considered only the EPA clean water standards and no others, Schreder said.

"I believe other pesticides probably exceed other standards in these streams as well," she said.

Moran said that the study was designed only as an endangered species study, and that nothing should be assumed from data gained in just the first year.

"I see the exposures going down over time. I think that's good news for the growers, and I think we should acknowledge that as such," she said. "Obviously, we hope the residues continue to go down."

In both watersheds, samples were taken weekly from April through June 2003. In the Lower Yakima, biweekly sampling continued through summer 2003. The agencies are now midway through the second year of the project.

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#### Study Highlights Importance of Worker Skin Exposure to Pesticides and Limitations of Measurement Methods

Agricultural pesticide workers are not only exposed to pesticides from inhalation, but also through their skin. The dermal route of exposure to chlorpyrifos, a common agricultural pesticide, contributes substantially to workers' total exposure, according to researchers from the Johns Hopkins Bloomberg School of Public Health and the U.S. Environmental Protection Agency (EPA), who analyzed agricultural test data provided by pesticide manufacturers. The study authors report that accurate methods for estimating dermal exposure are important because they form the basis for assessing and protecting worker health. The study is published in the current online issue of *Annals of Occupational Hygiene*.

"Although our study's findings aren't unexpected, they highlight the significance of dermal exposure among pesticide workers," said Laura Geer, the study's lead author and a PhD student in the Bloomberg School of Public Health's Department of Environmental Health Sciences.

Geer explained that the EPA requires pesticide manufacturers to evaluate the potential for exposure to pesticide handlers. "Since there is a paucity of such data in the literature, we sought to mine these data. Our study demonstrates their utility and value to answer questions fundamental to dermal exposure and to protecting worker health," she said. "For example, from these data, we were able to estimate the fraction of pesticide absorbed through the skin based on real-world agricultural worker monitoring."

The authors analyzed data from five studies, including a total of 80 workers across nine states (Alabama, Virginia, Georgia, Texas, Arizona, Kentucky, Michigan, Florida and Ohio). The participants held a variety of pesticide-related jobs, including preparing pesticide formulations, loading the pesticide into application devices,

The researchers found that dermal exposure represents a substantial portion of total exposure, even though exposure levels were found below current occupational health standards and guidelines. For nearly one-half of the workers monitored (34 out of 77) in this study, more chlorpyrifos was absorbed through the skin than was inhaled. The researchers compared methods for estimating worker exposure by comparing residues found on clothing to levels of pesticide metabolites in urine. They observed a substantial difference, indicating that researchers may not be able to precisely evaluate worker exposure using these methods.

This difference in estimates makes it difficult for researchers to reconcile exposure and dose, increasing the uncertainty in assessing worker risk and the development of effective protective strategies.

The study authors recommend that additional work and research be done. The authors also note that their study demonstrates that the EPA's Pesticide Registrant Database offers a unique and valuable resource to researchers for the purpose of improving methods for assessing exposure and protecting worker health.

"Worker dermal exposure is under-appreciated in the United States.

Our study brings to the forefront the potential for workplace chemicals to be absorbed through the skin and the need to develop better methods to assess this exposure, so that ultimately we can prevent it and protect worker health," said Timothy J. Buckley, PhD, MHS, associate professor in the Bloomberg School of Public Health's Department of Environmental Health Sciences and the study's senior author.

The study was supported by the United States Environmental Protection Agency.

L.A. Geer, N. Cardello, J. D. Roberts and T. J. Buckley, from the Johns Hopkins Bloomberg School of Public Health, co-authored the study. Additional co-authors from the U.S. Environmental Protection Agency were M. J. Dellarco, T.J. Leighton and R.P. Zenzian. Weitere Informationen: [www.jhsph.edu](http://www.jhsph.edu)

<http://www.innovations-report.de/html/berichte/studien/bericht-36784.html>

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#### Campaign Launched to Remove Methyl Bromide-Treated Food from Supermarkets

(Beyond Pesticides, November 24, 2004) The Environmental Investigation Agency (EIA) is launching a campaign to convince United States supermarkets to stop selling food grown or treated with the deadly chemical methyl bromide, including tomatoes, strawberries and nuts. EIA, an independent, international non-profit organization, is investigating the supply chains for major supermarkets and will be campaigning to have products produced with methyl bromide removed from shelves across the nation.

Methyl bromide is harmful to the global environment as well as to human health. It is a potent contributor to the destruction of the ozone layer. Damage to the ozone layer results in increased rates of skin cancer and cataracts around the world, particularly among children.

Direct exposure to this toxic chemical can result in headaches, nausea, chest and abdominal pain, respiratory failure, and even death. Many strawberry and tomato fields treated with methyl bromide are located so near as to endanger homes, schools, and churches. The pesticide has also been identified as a significant source of occupational illness, injuring the farm workers who grow these crops.

In addition to the acute effects of exposure, a recent United States study of over 55,000 male pesticide applicators found that methyl bromide users had a statistically greater risk of developing prostate cancer, and those who had longer exposure to the chemical were at higher risk.

This week the global community has gathered in Prague, Czech Republic, to determine how best to end the use of methyl bromide. Pursuant to the Montreal Protocol, the international treaty designed to save the ozone layer, the world's developed countries are supposed to complete phase out of methyl bromide use by 2005; however, some countries have dragged their feet on this phase out. The United States, the largest user of methyl bromide in the world, is actually seeking to increase its use of methyl bromide in the years to come.

EIA President Allan Thornton stated, "There are viable alternatives to the use of methyl bromide. Supermarket chains such as Safeway, Whole Foods, Albertson's, Kroger and Wal-Mart need to ensure that their shelves are free of produce grown or treated with this deadly chemical. We will be writing to major supermarkets to ask them to stop supporting the continued use of methyl bromide."

For more information regarding EIA's campaign, contact R. Juge Gregg, Senior Campaigner at (202) 483-6621 or [jugegregg@eia-international.org](mailto:jugegregg@eia-international.org).

TAKE ACTION: Ensure your food is not treated with methyl bromide by buying organic. Write President Bush in the White House and insist that the U.S. comply with the Montreal Protocol and begin implementing alternatives.

<http://www.beyondpesticides.org/news/daily.htm>

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Mon Nov 15 14:22:03 2004 Pacific Time

#### Major Study of Organic Farming in California Yields Surprises

SANTA CRUZ, Calif., Nov. 15 (AScribe Newswire) -- The first comprehensive study of organic agriculture in California challenges the popular notion that organic farming is dominated by small family-owned farms and shows how the industry's regulatory structure has thwarted the very benefits that have generated strong public support for organic agriculture.

"Organic farming is seen as an answer to the crisis in our food system, but organic agriculture in California has evolved in some peculiar ways that effectively limit the number of acres that are in organic cultivation," said Julie Guthman, author of the new book, "Agrarian Dreams: The Paradox of Organic Farming in California" (Berkeley: University of California Press, 2004).

In her analysis, Guthman, an assistant professor of community studies at the University of California, Santa Cruz, also reconsiders "roads not taken" to a more socially just and ecologically sustainable agriculture.

A strong proponent of many of the ideals associated with organic agriculture, Guthman nevertheless believes the fastest-growing segment of farming today warrants scrutiny. Many experts expect as much as 20 percent of California cropland will be in organic production by 2024.

Major misconceptions concern the "who and why" of organic farming and the impact of industry regulation. Among Guthman's findings:

- Contrary to the popular image of farmers who embraced a "live gently on the land" philosophy, many growers switched to higher-value organic commodities to increase earnings.

- Rather than corporate takeovers, much of the growth of organic agriculture has come from growers who made the switch from conventional farming to organic, met with success, and recruited other experienced conventional farmers to join them.

- Many growers went organic out of fear that the pesticides they relied on would be banned, while others were concerned about their personal exposure to pesticides or the risks associated with exposing others to pesticides.

"There were very compelling economic and regulatory reasons for conventional growers to enter into organics," said Guthman. "As they went organic, they brought along their technical competence, their marketing relationships, and their labor practices. As a result, organic farming in California today looks a lot more like the agribusiness model than the pastoral family-farm model most people think of." Today's tight price competition affects all organic growers, even those who would like to farm less intensively, she noted.

The second major force that shaped the organic industry--and ultimately limited its reach, argues Guthman--was the movement's decision to self-regulate through the establishment of independent organic standards and third-party certification programs to verify those standards.

Like the leaders of many social movements of the 1960s, the pioneers of organic agriculture had to decide whether to operate within the system or not. "They chose to use the market but not the state in developing organic's regulatory structure," said Guthman. "In establishing regulations for their industry, organic growers exhibited a certain self-interest and arbitrariness that created some perverse incentives and outcomes, albeit usually unintentionally."

For example:

- The focus on materials rather than processes--soil inputs rather than cover cropping, for example--fostered an idea that input substitution was good enough, allowing many growers to be organic without fundamentally altering their growing practices.

- Grower-designed and -enforced standards paved the way for the organic industry's failure to address social-justice aspects of sustainability, including farmworker wages and working conditions, and hunger and food distribution issues.

- Organic certification generates a price-premium that creates an incentive to restrict entry because reducing competition keeps the price-premium high.

"The paradox of incentive-based regulation is that it generates a motive to limit participation, when the whole purpose is supposed to encourage more sustainable production," said Guthman, noting that despite the growth of organic farming, it still accounts for only 1 percent of U.S. agricultural output.

Finally, Guthman paints an unromantic picture of agriculture in California. "Historically, small-scale family farms have never been the norm in California," she said. California's agrarian tradition has been shaped by land values that reflect and support a form of high-intensity, specialty-crop, year-round farming unlike anything else in the United States, said Guthman, who describes it as a "treadmill running on overdrive."

"Land values in California correlate to the value of crops that are grown and the intensification of farming practices, so farmers are under incredible pressure to get more crop value per acre," said Guthman. "Because organic adds value, it has the potential to further inflate land costs, which ironically undermines the goal of growing in less-intensive ways."

Guthman's prescription for addressing the shortcomings of the current system starts with "revisiting the roads less traveled," including banning pesticides, creating government subsidies for sustainable farming, eliminating subsidies for conventional agriculture, and revising immigration policies to support farmworkers.

"One percent of U.S. agricultural acreage is organic, compared to nearly 30 percent in Australia," said Guthman. "We have 2,000 organic farms in California, but Italy has 45,000. There's been much more widespread transformation in different political environments. We really have to ask ourselves how successful our approach has been."

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CONTACT INFORMATION: Julie Guthman may be reached at 831-459-2726 or via e-mail at [jguthman@ucsc.edu](mailto:jguthman@ucsc.edu). For media assistance, contact Jennifer McNulty, 831-459-2495, [jmcnulty@ucsc.edu](mailto:jmcnulty@ucsc.edu)

NOTE TO EDITORS: Julie Guthman is available for media interviews; see contact information above. This release is available on the web at: [press.ucsc.edu](http://press.ucsc.edu) .

<http://www.ascribe.org/cgi-bin/spew4th.pl?ascribeid=20041115.122502&time=14%2022%20PST&year=2004&public=1>

Agrarian Dreams: The Paradox of Organic Farming in California (California Studies in Critical Human Geography, 11) by Julie Guthman; Hardcover: 250 pages; University of California Press (August 1, 2004) ISBN: 0520240944

Home > Greenpeace International > News > details  
Bayer terminates GE work in India  
Biotech company falters for third time in one year

Mon 15 November 2004

INDIA/Mumbai

Bayer has pulled out of GE research in India after sustained pressure from Greenpeace; this is the biotech giant's third defeat this year proving just how unsustainable and unwanted GE agriculture is.

Bayer conceded to Greenpeace India that ALL its projects on genetically engineered (GE) crops have been "discontinued" in a letter sent by Alope V. Pradhan, head of Bayer's Corporate Communications in India.

"We don't need genetically engineered crops to feed India," said Divya Raghunandan, GE campaigner for Greenpeace India. "In fact globally, the

promises made by the genetic engineering industry have been unfulfilled, whether increasing crop yields or reducing pesticide use."

She continued: "It doesn't surprise us that Bayer is giving up in India as they saw the writing on the wall - the Indian public was not going to accept their manipulated cabbages and cauliflowers and they cut their losses. It's time for the rest of the industry to give up on this misguided and inappropriate technology."

The letter outlining Bayer's retreat was sent following a protest which saw six activists chain themselves to the Bayer headquarters in Mumbai at the beginning of October. During their protest they demanded to know exactly what the biotech giant was doing in India.

They also presented documentary evidence obtained from the Department of Biotechnology (DBT) proving that ProAgro, a Bayer subsidiary, was using the highly controversial Cry9C gene in Indian cabbage and cauliflower.

Bayer's only response was to issue a statement denying it had any involvement with the Cry9C gene. But it then contradicted itself by stating that "the (Cry9C gene) trials were conducted in a contained environment and were harvested well before flowering. Since these research trials never went to the phase of development or commercial production the question of biosafety assessment does not arise."

"The apathy and indifference of this company is unbelievable!" said Divya Raghunandan. "They took 11 hours to eventually respond with half-truths and an inconsistent statement. This statement only vindicates our stand that we are dealing with an irresponsible corporation with many skeletons to hide."

The use of this gene also proves the double standards systematically used by biotech companies. In the US Cry9C was only approved for animal feed and industrial purposes as there were concerns that it could cause allergies due to shared characteristics of other allergens. In 2000 a scandal involving the gene, which was used to create StarLink GE corn, cost the US agro-biotech industry US \$1 billion when traces were found in Taco shells.

This retreat follows other decisions by Bayer earlier this year. In March of 2004, the company announced it would be pulling out of GE crop research in the UK. A few months later, in June, it announced it would not pursue commercialisation of GE canola in Australia.

"It is clear that popular resistance to genetic engineering is not diminishing as hoped for by the industry," said Doreen Stabinsky, GE campaigner for Greenpeace International. "No matter what country we're talking about, consumers are on the same page. They don't want to eat genetically engineered food. That's good news for farmers and good news for the environment."

Find out more:

- Read the letters exchanged between Greenpeace India and Bayer.
- Find out the history of Bayer in India.

[http://www.greenpeace.org/international\\_en/news/details?item\\_id=647402](http://www.greenpeace.org/international_en/news/details?item_id=647402)

Manitoba

November 12, 2004

NEW RATES TO HELP MAINTAIN ENVIRONMENTAL PROTECTION: STRUTHERS

The province today announced new pesticide use permit rates which Conservation Minister Stan Struthers said will maintain reliable and safe environmental protection efforts related to the use of pesticides.

The cost of operating the permit program has risen steadily since rates last changed in 1996.

"The new rate of \$250, up from \$100, will help recover the increases in costs and will enable the department to continue to ensure that pesticides are used safely and appropriately and are applied in an environmentally sustainable manner," said Struthers.

The new rate will also assist in:

- \* supporting the Clean Farm Program and the collection and proper disposal of obsolete farm chemicals including pesticides from Manitoba farms;
- \* reviewing and updating the conditions applied through the permits;
- \* participating in the federal pesticide registration process to ensure pesticides are safe and environmentally acceptable, and continuing to provide instruction on pesticide use to ensure proper application;
- \* ongoing implementation of a code of practice for golf courses in the application of pesticides;
- \* working co-operatively with the domestic pesticide industry regarding lawn pesticides to ensure they are used properly and appropriately;
- and
- \* ongoing inspection of municipal collection sites used for farm chemical containers.

The new rates will take effect Jan. 1, 2005.

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<http://www.gov.mb.ca/chc/press/top/2004/11/2004-11-12-01.html>

Survey result shows organic wines pesticide free

Monday, 15 November 2004, 9:59 pm

Press Release: New Zealand Winegrowers

For immediate release 11 November 2004

Survey result shows organic wines pesticide free

A recent survey of pesticide residues in organic products showed no pesticide residues present in organic wines sampled. The survey, which covered fruits, vegetables and wines, was conducted by the New Zealand Food Safety Authority the government body responsible for food regulation in New Zealand.

Pesticide residues were found in a number of other organic food products, but not in wine. Earlier reports of the results might have given the misleading impression that organic wines in the survey, or grapes used to make organic wines, contained pesticide residues. But this is not the case.

Philip Gregan, Chief Executive Officer of New Zealand Winegrowers said "We are pleased to see that the organic wines tested were pesticide free. The New Zealand wine industry is strongly committed to sustainable production systems through the Sustainable Winegrowing New Zealand programme. A certification standard for organic production has also been developed in conjunction with the industry and a number of wine producers have certified organic programmes in place. Certification provides consumers with a reliable message that wines are actually made to organic standards."

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Sat 13 Nov 2004

The Kitchener Waterloo Record

Proposed bylaw would prohibit pesticide use without a permit

By: BOB BURTT

Spraying chemicals to control weeds on lawns and gardens without a permit will be illegal within three years if a controversial bylaw considered by Waterloo Region becomes law.

The new policy, to be discussed by the region's community services committee Tuesday, would be phased in over three years.

During that time, the region would consult with the public, launch a massive education campaign about alternatives to herbicides and pesticides, and allow a year before violators are fined.

Regional council would not vote on whether to give final approval to the bylaw until the first year of consultation is over.

Anti-pesticide advocates support the recommendations, but lawn-care representatives warn of companies being forced out of business and lawns and gardens being taken over by weeds.

"The thrust of it is that spraying pesticides would be allowed if a permit was issued by a person hired or designated by the region," said Susan Koswan, a critic of pesticide use and a member of the working group that proposed the bylaw.

Koswan said no permits would be issued in high-risk areas near water courses, schools and bus shelters and exemptions would be granted for the use of chemicals in swimming pools and water treatment plants.

"People will be able to apply for a permit if they can demonstrate they have an infestation and have lost most of their lawn," Koswan said.

The working group that came up with the proposed bylaw was composed of representatives from each municipality in the region, officials from the regional health department, some regional councillors and representatives from the lawn care industry.

Koswan has been pushing for greater restrictions on pesticide use for a decade and is now cautiously optimistic that victory is near.

John Wright, of Wright Lawn Care Service of Bloomingdale, doesn't share her enthusiasm.

Wright, also a member of the working group, said the tough rules could put his company out of business.

"If they are passed we will have to reinvent lawn care and people aren't going to like it."

There are no easy or cheap alternatives and "there is no research to show how to do it," he said.

Wright wonders how much of a fight the the lawn care industry can put up.

"The industry is worn out. We've fought this all across Ontario.

There is no money left and less energy. We spent millions of dollars fighting this."

He argued it still isn't clear whether municipalities have the right to regulate the use of pesticides.

Patrick O'Toole, a former owner of a lawn-care company, said, "The permit system would be nothing but a nightmare," and difficult to enforce.

Jane Mitchell, a regional councillor and head of the working committee, said the three-year phase-in would give companies time to shift their emphasis and learn to work without chemicals. She disagrees with Wright's claim that there are no alternatives.

Mitchell hopes council supports the committee, but says the outcome is too controversial to call.

She has personal reasons for wanting to see a tough stand taken.

She recently lost her mother to non-Hodgkins lymphoma, a disease that she says has been linked to pesticides.

"Concerns about health are the bottom line," she said.

Mitchell said the plan is for the bylaw to be enforced on a complaint basis. It would not apply to farming or agricultural concerns, but would apply to lawns on farms.

If the policy is approved, the region would become the seventh Ontario community and one of more than 60 in Canada that have bylaws regulating the use of pesticides on lawns and gardens.

The region has budgeted \$400,000 for an educational campaign, which will continue with or without a bylaw, Mitchell said.

A survey done by the region's community health department indicated 64.6 per cent of more than 1,100 people support banning the use of pesticides on private lawns and gardens.

[bburt@therecord.com](mailto:bburt@therecord.com)

[http://www.therecord.com/opinion/letters/write\\_letter.html](http://www.therecord.com/opinion/letters/write_letter.html)

Sat 13 Nov 2004

The Windsor Star

Prozac in our drinking water: Study

By: Sarah Staples

The federal government's first study of pharmaceuticals in drinking water will confirm traces of common painkillers, anti-cholesterol drugs and the antidepressant Prozac are ending up in the treated water that Canadians drink, CanWest News Service has learned.

The study is similar to one being led by the Windsor Utilities Commission examining the affect of ozonation on such drugs.

"That is encouraging," said Saad Jasim, director of water quality and production for the Windsor Utilities Commission who is leading the binational study currently underway. "That will be good news. We've been calling for this kind of study in Canada."

Ozonation is believed to remove a large number of pharmaceutical traces.

Jasim's study, which is ongoing, is scheduled to wrap up in 2006.

A study by researchers from the National Water Research Institute for Health and Environment Canada, designed to gauge how efficiently

plants removed traces of drugs from drinking water, found nine different drugs in water samples taken near 20 drinking water-treatment plants across southern Ontario.

The drugs were mainly from a class known as "acidic pharmaceuticals," and included the painkillers ibuprofen and naproxen, and gemfibrozil, a cholesterol-lowering medication.

Concentrations were in the parts per trillion -- comparable to one cent in 10 billion dollars. "Barely detectable" levels of Prozac were also found.

The worst contamination came from treatment plants located near rivers, downstream from sewage treatment plants -- as opposed to those plants sourcing water from lakes or groundwater -- say the authors, whose work has been submitted to the British scientific journal *Water Research* and is expected to be published sometime in the New Year.

While the amounts are well below prescription doses, experts from the NWRI say confirmation of even scant levels of a burgeoning assortment of drugs in Canada's drinking water is a troubling find warranting further investigation.

"It's kind of a brand new ballgame and we don't know enough," said Jim Maguire, director of the institute's aquatic ecosystem protection research branch.

The effects of pesticides are better understood and regulated in Canada than personal care products, such as lotions and cosmetics, or prescription pharmaceuticals, said Maguire.

The government study is the first official acknowledgement of longstanding suspicions voiced by Canada's water quality experts.

The federal government isn't testing for the full gamut of drugs that are potentially in Canada's potable water supply, preferring initially to limit its search to "acidic" drugs because they are easiest to spot using existing pesticide analysis techniques, said Kent Burnison, an NWRI microbiologist.

Sat 13 Nov 2004

The Ottawa Citizen

Drinking water tainted by drugs, study confirms: Federal institute turns up traces of painkillers, Prozac in treated water

By Sarah Staples

The federal government's first study of pharmaceuticals in drinking water confirms traces of common painkillers, anti-cholesterol drugs and the antidepressant Prozac are ending up in the treated water that Canadians drink, CanWest News Service has learned.

A study by researchers from the National Water Research Institute for Health and Environment Canada, designed to gauge how efficiently plants removed traces of drugs from drinking water, found nine different drugs in water samples taken near 20 drinking treatment plants across southern Ontario.

The drugs were mainly from a class known as "acidic pharmaceuticals," and included the painkillers ibuprofen and naproxen, and gemfibrozil, a cholesterol-lowering medication.

Concentrations were in the parts per trillion -- comparable to one cent in \$10 billion. "Barely detectable" levels of Prozac were also found.

The worst contamination came from treatment plants located near rivers, downstream from sewage treatment plants -- as opposed to those plants sourcing water from lakes or groundwater -- say the authors, whose work has been submitted to the British scientific journal *Water Research* and is expected to be published next year.

While the amounts are well below prescription doses, experts from the institute say confirmation of even scant levels of a burgeoning assortment of drugs in Canada's drinking water is a troubling find warranting further investigation.

"It's kind of a brand new ballgame and we don't know enough," said Jim Maguire, director of the institute's aquatic ecosystem protection research branch.

Residues of hormones are well known to disrupt the reproductive abilities of amphibians and fish. There is also suspicion that antibiotic residues working their way up the food chain may promote

resistance to the drugs, while other medications could harm fetuses, and people who are ill or infirm.

The effects of pesticides are better understood and regulated in Canada than personal care products or prescription pharmaceuticals, said Mr. Maguire.

"You need to know how long (the contamination is) lasting, and if it's being continually reintroduced but there's no country in the world that has enough information," he said. "We're kind of like where we were 25 years ago with PCBs and dioxides."

The government study is the first official acknowledgement of long-standing suspicions voiced by water experts.

Transcripts obtained by CanWest News Service of a Health Canada-sponsored international workshop in 2002 show government chemists voicing serious concern over the possible negative effects of trace pharmaceuticals, at a time when U.S. and European studies were starting to reveal antibiotics and chemotherapeutics, drugs for epilepsy and depression, anti-inflammatory drugs, veterinary drugs, fragrances such as musk, and hormones in treated sewage run-off and tap water.

The federal government isn't testing for the full gamut of drugs that are potentially in the potable water supply, preferring initially to limit its search to "acidic" drugs because they are easiest to spot using existing pesticide analysis techniques, said Kent Burnison, a microbiologist with the institute who co-authored the study.

Ontario water was surveyed because samples had to be taken near the institute's laboratory to preserve their integrity.

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Assessment and Management of Pharmaceuticals and Personal Care Products in the Canadian Environment: Proceedings of a Multi-Stakeholder Workshop

<http://www.nwri.ca/announce/pharmaceuticals-e.html>

Aquatic Ecosystem Protection Research Branch

<http://www.nwri.ca/factsheets/aeprb-ecosystemhealth-e.html>

Jim Maguire

Director

Environment Canada

Aquatic Ecosystem Protection Research Branch

National Water Research Institute

Environment Canada

867 Lakeshore Road

PO Box: 5050

Burlington, Ontario

L7R 4A6

Tel: (905) 336-4927

Fax: (905) 336-6430

E-mail: [Jim.Maguire@ec.gc.ca](mailto:Jim.Maguire@ec.gc.ca)

<http://www.nwri.ca/staff/jimmaguire-e.html>

Kent Burnison  
 Project Chief  
 Priority Substances Exposure  
 National Water Research Institute  
 Environment Canada  
 867 Lakeshore Road  
 PO Box: 5050  
 Burlington, Ontario  
 L7R 4A6

Tel: (905) 336-4407  
 Fax: (905) 336-6430  
 E-mail: [Kent.Burnison@ec.gc.ca](mailto:Kent.Burnison@ec.gc.ca)  
<http://www.nwri.ca/staff/kentburnison-e.html>

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Prime Minister Announces \$194 million to Create New Canada Research Chairs

**RESEARCHERS TO EXPLORE TOPICS INCLUDING DIAGNOSIS AND TREATMENT OF ADHD,  
 ALTERNATIVES TO PESTICIDES AND SUPPORT FOR ABORIGINAL COMMUNITIES**

VANCOUVER, Nov. 12 /CNW Telbec/ -Prime Minister Paul Martin, joined by the honourable David L. Emerson, Minister of Industry and Minister responsible for the Canada Research Chairs program, today announced an investment of \$194 million for Canada's top researchers. "We're proud that the funding announced today will support research by Canada's leading scholarly and scientific minds," said Prime Minister Martin.

"From health care, to the environment, to building stronger communities, the work of these Canada Research Chairs will have a direct impact on the lives of Canadians and help position Canada as a world leader in the 21st century economy."

Of the 194 new Canada Research Chairs, 79 are either expatriates or international researchers coming to Canada. So far, the Canada Research Chairs program has attracted 395 researchers from abroad. The program was designed to attract and retain the best and brightest researchers from around the world.

"In the new economy, our most important resource is people," said Industry Minister David L. Emerson. "This is why the Canada Research Chairs program is so vital to Canada's future. These researchers not only create world-class knowledge that is being put to use right now, across all sectors of society, but they are also helping train the next generation of researchers and knowledge workers."

The new Canada Research Chairs include:

- Adele Diamond, Canada Research Chair in Developmental Cognitive Neuroscience at the University of British Columbia (UBC). The work of Professor Diamond, who comes to UBC from the University of Massachusetts Medical School, offers new hope for early diagnosis and improved treatment of disorders such as attention deficit hyperactivity disorder (ADHD), schizophrenia and autism.
- Rajeshwar Dayal Tyagi, Canada Research Chair in Value-Added Products from Waste at the Institut national de la recherche scientifique, Université du Québec. Professor Tyagi will explore how to reduce levels of hazardous chemicals in Canadian communities by developing cost-effective ways to replace fertilizers, pesticides and herbicides with recycled waste water and sewage.
- Hugh Brody, Canada Research Chair in Aboriginal Studies at the University College of the Fraser Valley, will help Aboriginal youth develop and maintain healthy and sustainable communities.

Today's investment also includes \$23.1 million from the Canada Foundation for Innovation (CFI) to fund essential research infrastructure, ranging from computer equipment for information databases to housing for laboratory facilities. For a complete listing of CFI contributions, please visit the Foundation's Web site ([www.innovation.ca](http://www.innovation.ca)).

"Our investment will provide the tools researchers need to compete with the best in the world," said Dr. Eliot Phillipson, President of CFI. "It will also contribute to strengthening the research training environment for young Canadians in all regions of the country."

The Canada Research Chairs program has created 1,348 research positions at 73 Canadian universities since it was launched in 2000.

The program helps universities attract and retain the best researchers and achieve research excellence in natural sciences and engineering, health sciences, and social sciences and humanities.

For further information: Media contacts: H loise Perron, Canada Research Chairs Program, (613) 996-8373, Cell: (613) 371-3783, [heloise.perron@chairs.gc.ca](mailto:heloise.perron@chairs.gc.ca); Douglas Lauriault, Canada Foundation for Innovation, (613) 996-3193, [douglas.lauriault@innovation.ca](mailto:douglas.lauriault@innovation.ca); St phanie Leblanc, Office of the Honourable David L. Emerson, Minister of Industry Canada, (613) 995-9001, PMO Press Office, (613) 957-5555; For more information on this news release, including the list of recipients, please visit our Web site at [www.chairs.gc.ca](http://www.chairs.gc.ca)

Adele Diamond  
 Developmental Cognitive Neuroscience  
 University of British Columbia  
 E-mail: [adele.diamond@ubc.ca](mailto:adele.diamond@ubc.ca)

Dr Rajeshwar D. Tyagi  
 Chercheur-professeur  
 Centre Eau, Terre et Environnement  
 Institut national de la recherche scientifique  
 Universit  du Qu bec  
 CP 7500 Sainte-Foy (Qu bec)  
 G1V 4C7 Canada

T l phone: (418) 654-2617  
 T l copieur/Fax: (418) 654-2600  
 Courriel: [rajeshwar\\_dayal\\_tyagi@inrs-ete.uquebec.ca](mailto:rajeshwar_dayal_tyagi@inrs-ete.uquebec.ca)  
<http://www.cnw.ca/fr/releases/archive/November2004/12/c2372.html>

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NDP urges ban on trans fats  
 Canadian Press  
 November 12, 2004

OTTAWA -- NDP Leader Jack Layton wants Canada to become the second country in the world to ban processed trans fats. He says his New Democrats will introduce a motion in the House of Commons on Nov. 18 to outlaw the unhealthy fats found in everything from fast food to peanut butter.

Canadians eat an average of 10 grams of trans fats a day -- one of the highest rates in the world.

A gram of trans fat is up to 10 times more dangerous to heart health than a gram of saturated fat.

The World Health Organization recommends countries eliminate processed trans fats, as Denmark did last year.

"Families want protection from dangerous trans fats and the NDP is calling on all parties to provide it," Layton told a news conference Friday.

"Let's show Ottawa can listen to people and respond to their concerns -- and improve public health in the process."

Layton said that because trans fats are most prevalent in highly processed foods, low-income and older Canadians are particularly at risk.

The NDP motion would require the government to base its legislation on the findings of the Heart and Stroke Foundation.

Winnipeg MP Pat Martin has been spearheading the parliamentary fight against trans fats. Before the last election, he introduced a private member's bill modelled on the Danish law, which would effectively ban all processed trans fats.

Some trans fats naturally occur in trace amounts in some dairy products and meat.

<http://www.canada.com/ottawa/ottawacitizen/news/story.html?id=51378d3f-63d7-4980-a11c-5156b1cd97b9>

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Sat, November 13, 2004

Ottawa Sun - Letter to the Editor

Local and regional health departments demanded 100% smoke-free bylaws. They got them. The Ontario Medical Association demanded a province-wide smoking ban. They got it. They are now demanding that Ontario spend \$450 million (funnelled through them of course) over the next five years to stamp out the scourge of smoking. They will get it. After all, it's only money and, more important, not theirs.

The Canadian Medical Association is now demanding that the federal government pass national smoke-free laws.

Why are we wasting time and money on politicians? Let's just turn the government over to the doctors.

Frank Zaniol

(We can think of a few people who would take you up on the offer)

<http://canoe.com/NewsStand/OttawaSun/Letters/>

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Finally Some Truth in Advertising

by Hart Haidn

Briarpatch: Fighting the War on Error

Vol. 33, No. 8, November 2004

Illustration: "Hits Hard. Doesn't Stop." Billboard between Saskatoon and North Battleford is an example of the aggressive advertising of pesticides. Ads like this symbolize the war for higher shareholder returns, a war with countless examples of "collateral damage" among humans and nature.

In the summer of 1973 I was a student of agriculture working on a farm in South Africa. Every morning we had our freshly pressed orange juice from the farm's orchard. One Sunday morning, a few hours after breakfast, I felt a weakness in my legs, then a numbness in my other limbs and soon I was almost paralyzed. That orange juice, the symbol of healthy nutrition, had poisoned me.

What I did not know was that the orchard had been sprayed with the insecticide Lindane the day before. I had consumed residues of this pesticide in the juice I drank. After a few scary hours I recovered in the evening.

Lindane is a pesticide that has been banned in many countries, but is (incredibly) still in minor use in Canada. When I began farming in Northern BC in 1978, we used pickup loads of different pesticides to spray the crops and never thought much about it. It was not before the 1990 that farmers began using protective clothing when spraying their crops.

Industry, university departments and governments are still denying or downplaying the risks of pesticide use. It is very difficult for the public to be well informed and to be able to distinguish between industry propaganda and reliable independent information.

Quebec has a province-wide ban on cosmetic pesticide use [not yet; in 2006] and 66 municipalities across Canada have pesticide bylaws.

However, similar attempts in other communities have failed. The city of Regina recently refused to establish a ban on the cosmetic use of pesticides; in Saskatoon a similar debate takes place at this time. The arguments used against such a ban are the same everywhere:

"Health Canada regulates all pest control products manufactured and sold in Canada, and the products are subject to some of the toughest regulatory standards in the world." This is the line of Croplife

Canada, the association of the pesticide industry.

This is not the opinion of the Commissioner of the Environment and Sustainable Development. In the introduction to his 1999 report to the House of Commons he said: "Our audit identified significant weaknesses in the federal government's assessment and management of toxic substances. The federal government's cornerstone policy in this area, the Toxic Substances Management Policy, represents a potentially powerful and pragmatic approach to a complex and difficult issue. But it is not being acted on, nor is there a government-wide plan to do so. Strategies for the management of specific substances, although required by the Policy, have not been developed. Established government objectives are not being met."

Only one year later, the Standing Committee on Environment and Sustainable Development presented its report "Pesticides, Making the Right Choice for the Protection of Health and the Environment."

Charles Caccia, member of Parliament for Davenport was its chair and wrote in the preface to the report: "We found that pesticides are highly poisonous substances designed to kill living organisms and are thus potentially harmful to workers using them, and to farming and urban communities unknowingly exposed, as well as to consumers.

Therefore, we asked ourselves whether a regulatory system could be designed that would give clear and absolute precedence to human health. Based on our findings, it must be designed as such.

"The 30-year old Pest Control Products Act may soon be amended; draft legislation is being developed. This opportunity must be seized to integrate in the new legislation the fundamental principles that will guide pest management decisions in the years to come. The package of amendments proposed by the Pest Management Regulatory Agency (PMRA) in January 1999 contains serious omissions and flaws."

In the ongoing pesticide debate, the public is confused: concerned citizens, physicians, environmental organizations and some public agencies oppose the corporate propaganda (supported by universities, bureaucrats and politicians). Major studies based on a growing body of evidence show that pesticides are not safe. Some examples are:

\* Many studies have found an association between cancer in humans and exposure to agricultural pesticides. Organophosphorous pesticides have been used to control mosquito plagues.

\* Birth Defects Higher near Farming Areas using Pesticides

Babies born to families living near wheat growing agricultural areas using chemical pesticides have been found to have a 65 percent greater risk of having birth defects related to the circulatory/respiratory system. The pesticide category believed to be the culprit is chlorophenoxy herbicides that contain [include!] the chemical the chemical 2,4-D.

\* Prostate Cancer Risk Doubles to Pesticide Applicators

Among male applicators, prostate cancer mortality has been shown to be significantly increased.

\* Increased risk of Brain Cancer

Living closer than 2600 feet from an agricultural area has been found to double the risk for developing brain cancer.

These and other reports prompted the Ontario College of Family Physicians to conduct a review of many studies to assess the health risks of pesticides. They concluded: "Our review has found evidence of serious harmful effects in several areas including cancer, reproductive effects and impacts on the nervous system. These effects are found in both occupational and home and garden exposures."

The current debates are similar to the tobacco, lead or asbestos battles. Industries fought hard to prove their benefits and argue a lack of evidence about their harm potential. It was the recurring struggle of public health against private economic interests. Where do you stand? Who can you trust more?

Hart Haidn lives in Saskatoon, SK and gives lectures on this subject, or can supply a disc with a two hour narrated power point presentation for \$10. He is chair of the Canadian Center for Sustainable Agriculture Inc. and can be reached at 306-956-0832 or [hhaidn@sasktel.net](mailto:hhaidn@sasktel.net)

For additional information check these websites:

<http://www.chem-tox.com/pesticides>

<http://cape.ca>

<http://parl.gc.ca/InfocomDoc/36/2/envi/Studies/Reports/envi01/04-toc-e.html>.

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FOR IMMEDIATE RELEASE

Press contact: Aaron Colangelo or Elliott Negin, 202-289-6868

If you are not a member of the press, please write to us at

[nrdcinfo@nrdc.org](mailto:nrdcinfo@nrdc.org) or see our contact page.

GROUPS SUE EPA FOR FAILING TO PROTECT CHILDREN FROM RAT POISONS

Tens of Thousands of Children -- Mostly Latino and African-American

-- Are Poisoned Annually

WASHINGTON (November 9, 2004) -- The Environmental Protection Agency has failed to protect children from exposure to chemical rat poisons, according to a lawsuit filed today by West Harlem Environmental Action (WEACT) and the Natural Resources Defense Council (NRDC). The groups filed the lawsuit in federal district court in New York City.

The agency introduced safety regulations in 1998 that would have protected children from the poisons, but it revoked those regulations in 2001. Tens of thousands of children are poisoned every year; African-American and Latino children suffer disproportionately.

"The EPA is allowing the chemical industry to continue to sell rat poisons without adding ingredients that would protect children," said Aaron Colangelo, an NRDC attorney. "There is an easy and effective solution to the problem, but the agency sided with industry instead of our kids."

In 1998, when the EPA determined that rat poison exposures are an unreasonable health risk in violation of federal pesticide laws, it refused to approve rat poisons unless manufacturers included two safety measures to protect children: an ingredient that makes the poison taste more bitter and a dye that would make it more obvious when a child ingested the poison. In 2001, however, EPA revoked the safety regulations, announcing that it "came to a mutual agreement

with the rodenticide [manufacturers] to rescind the bittering agent and indicator dye requirements."

The number of reported child poisonings has increased annually since EPA's policy reversal, according to Poison Control Center data. Every year more than 15,000 children under age six accidentally eat rat poisons, and several hundred require hospitalization. Poisoned children can suffer from internal bleeding, bleeding gums, and anemia, and can go into a coma.

Rat poisons harm children in all communities, but African-American and Latino children and children living below the poverty level suffer a disproportionate risk. In New York state, for example, 57 percent of children hospitalized for rodenticide poisoning are black, although only 16 percent of New York state's population is black; 26 percent of hospitalized children are Latino, although Latinos comprise only 12 percent of the state's population; and 17.5 percent of the children hospitalized are below the poverty level, although children living below the poverty level comprise only 13 percent of the state's population.

Studies have found that the safety measures do not undermine the effectiveness of the rat poisons. One manufacturer already includes a bittering agent in a leading rat poison sold in the United States because it is required in other countries, and has found it to be equally effective at killing rats as poisons without the bittering agent.

"There is no tradeoff between more child poisonings on the one hand and more rats on the other," said Veronica Eady, general counsel for WEACT. "These basic safety measures would protect children without making the rat poisons less effective at killing rats." Millions of pounds of rat poisons are applied nationally every year.

In New York City, for example, rat poisons are used heavily in public housing, public schools and city parks. Some 800 pounds of these rat poisons were used in the General Grant Houses in West Harlem in 2000 alone, and the same rat poisons were used in nearby Morningside Park, as well as two elementary schools in the same neighborhood. As a result, children living in the General Grant Houses - and likely in other areas of the city - may be exposed to these rat poisons at home, at school and in local parks.

WEACT and NRDC are filing the lawsuit to challenge EPA's reversal of the child safety measures. The groups charge EPA's policy reversal violates the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Administrative Procedure Act.

The Natural Resources Defense Council is a national, nonprofit organization of scientists, lawyers and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 1 million members and e-activists nationwide, served from offices in New York, Washington, Santa Monica and San Francisco.

<http://www.nrdc.org/media/pressreleases/041108a.asp>

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Ethical and Scientific Flaws Found in Pesticide Testing on Humans

(Beyond Pesticides, November 9, 2004) Newly published research found scientific and ethical deficiencies in human pesticide-dosing studies submitted to EPA for consideration during the pesticide registration process. The author, Alan Lockwood MD, sought to understand human testing issues by obtaining six studies from EPA under the Freedom of Information Act that involved human test subjects. His research, "Human Testing of Pesticides: Ethical and Scientific Considerations," was published in the November 2004 edition of American Journal of Public Health. Each of the studies claimed to use an ethical standard called the Declaration of Helsinki. The author evaluated each report for compliance with this standard. The research found inadequate compliance in the following areas:

unacceptable informed consent procedures unmanaged financial conflicts of interest inadequate statistical power inappropriate test methods and endpoints distorted results

The declaration states that "research must improve diagnostic, therapeutic and prophylactic procedures and the understanding of disease" and "the interests of science and society should never take precedence over the well-being of the subject." As none of the studies appeared in scientific literature, it seems that the studies were not meant for improved general scientific knowledge and understanding.

In addition, 'informed consent' was found to be lacking. One study reviewed referred to aldicarb, the pesticide administered to humans, only

as "the compound under test," even though the consent form states "I have been given a full explanation of .any reasonably foreseeable untoward effects." In the study regarding azinphos methyl, participants were only given a partial list of possible side effects, with the symptoms of weakness, respiratory failure and death being excluded. In addition, should the participant decide to back out of the study at any time, they may not receive payment.

The author also found each study to be 'underpowered.' This means that so few test subjects were involved that the results are inconclusive and the whole testing group was exposed to risk unnecessarily.

There has been a recent uproar, including from certain staff of EPA itself, due to EPA's new proposed study Children's Environmental Exposure Research Study, to test pesticides on children.

Dr. Lockwood states in his paper, "Given today's knowledge of the effects of pesticides, there is no assurance that any such study can be completely free of short-term risks, long-term risks, or both." He called for an EPA committee free from political and financial conflicts of interest to review the practice of human testing.

TAKE ACTION: Write U.S.EPA Administrator Michael Leavitt and EPA Deputy Administrator Stephen Johnson and voice your opinion.

<http://www.beyondpesticides.org/news/daily.htm><http://www.beyondpesticides.org/news/daily.htm>

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Press Release

For Immediate Release: Tuesday, November 9, 2004

Contact: Chas Offutt (202) 265-7337

#### EPA STALLS INFANT PESTICIDE DOSING STUDY

Cites Negative News Coverage As Need for Further Review Bush Administration Poised to Legalize Human Testing

Washington, DC - The U.S. Environmental Protection Agency is suspending a controversial study to measure pesticide exposure in babies, from birth to age 3, who have pesticides sprayed in their homes. Citing "recent news articles [that] have mischaracterized the study," EPA announced a further review that "will ultimately enable us to be more protective of children's health," according to memos released today by Public Employees for Environmental Responsibility (PEER).

In a memo dated Monday, November 8th and distributed to EPA employees, William McFarland, the Acting Deputy Assistant Administrator for Science, wrote that EPA would subject the study to further review that "may refine the study design" but that the study would proceed in the spring.

EPA is paying families in Jacksonville, Florida (Duval County) who "spray or have pesticides sprayed inside your home routinely" to study the resulting chemical exposure in their infant children. The study, called the Children's Environmental Exposure Research Study or CHEERS, pays participating families \$970 for participating throughout the entire two-year study period. Families who complete the study also get to keep the camcorder they are provided to record their babies' behavior. In addition, families are given bibs, t-shirts and other promotional items. The families are recruited from public clinics and hospitals. EPA selects infants based upon pesticide residue levels detected in "a surface wipe sample in the primary room where the child spends time."

"EPA seems to think that the problem with this study is one of public relations, not morality," stated PEER Executive Director Jeff Ruch, whose organization is working with agency scientists who are questioning the ethics of the study. "Regardless of the number of reviews, paying poor parents to dose their babies with commercial poisons to measure their exposure is just plain wrong."

Conducted with funding from the American Chemistry Council, which represents 135 companies including pesticide manufacturers, the study looks at 60 infants and toddlers. EPA claims that the study had already undergone independent reviews and complies with human subject safety standards, but agency scientists note that -

- Exposure of infants to potentially harmful chemicals without some countervailing medical benefit can never meet the ethical standards that EPA claims to meet; The reviews cited by EPA include that of Battelle, which is the primary contractor for the study and would hardly be independent. These reviews also have not been posted by EPA so that the scope of the reviews is unknown; and- In earlier press releases, EPA claimed review and participation by the Centers for Disease Control and Prevention (CDC) but in its latest statements, CDC is no longer referenced.

Pesticide companies want data on actual infant exposure levels to persuade EPA to drop its rules requiring that pesticide exposures to small children must be ten times more protective than adults. According to published reports, the Bush Administration will soon announce their repeal of the Clinton-era rules against testing pesticides on humans. EPA wants to use CHEERS as the opening for a new policy on accepting testing on humans to determine pesticide toxicity.

EPA scientists are also expressing concern that corporations are now influencing EPA research through direct financial contributions. The American Chemistry Council (ACC), which contributed \$2 million to CHEERS, successfully lobbied to include exposure to flame retardants and other household chemicals in the study. EPA now has 80 similar research agreements with industry, including three with ACC.

"EPA Administrator Mike Leavitt is claiming an election mandate for the administration's environmental policies, but I don't remember President Bush campaigning for human experimentation on toddlers," Ruch added.

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Read the memo announcing postponement of CHEERS

Find out more about the CHEERS study

View the EPA press releases claiming CDC partnership

[http://www.epa.gov/cheers/images/news\\_release\\_092204.pdf](http://www.epa.gov/cheers/images/news_release_092204.pdf)

[http://www.epa.gov/cheers/images/news\\_release\\_101204.pdf](http://www.epa.gov/cheers/images/news_release_101204.pdf)

[http://www.ems.org/nws/2004/11/09/epa\\_stalls\\_infan](http://www.ems.org/nws/2004/11/09/epa_stalls_infan)

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HoustonChronicle.com -- <http://www.HoustonChronicle.com> | Section:  
Local & State

Nov. 9, 2004, 6:55AM

Mosquitoes could mutate beyond pesticides' reach County predicts most potent weapon will be obsolete

By ERIC BERGER

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RESOURCES

Graphic: Pesticide-Resistant Mosquitoes

Graphic: Houston-Area Mosquitoes

Pesticides, long the weapon of choice against the nettlesome and sometimes deadly mosquito, are losing their bite.

Harris County's chief mosquito fighter has recommended rotating the spraying of a handful of still-effective pesticides next year to maximize their usefulness. But even with this plan, it's probably a matter of when, not if, mosquitoes mutate beyond the control of pesticides.

"I think, probably within 5 to 10 years, we will see resistance to every pesticide," said Ray Parsons, director of Harris County's Mosquito Control Division. "I'll say this: I'm glad I'm retiring after the first of the year."

Much as bacterial infections have become more difficult to treat because of the overuse and misuse of antibiotics, so too have mosquitoes become resistant to insecticides.

Mosquito control officials note government programs to control mosquitoes have contributed to this resistance, but Parsons said private companies - spraying at the behest of community and civic associations - also share a part of the blame.

Unlike the county, which sprays only at specific times to dampen mosquito-borne viruses such as West Nile, private companies spray on a more regular basis to control nuisance mosquitoes, which pose no imminent health threat. And the more exposure mosquitoes endure, the tougher they get.

Parsons and others also maintain that some companies, to save money, dilute their pesticide, which not only doesn't kill mosquitoes, it promotes resistance in the offspring of survivors.

"Oh, I have no question that this is happening," said Raleigh Jenkins, owner of ABC Pest, Pool & Lawn Services, one of the largest pesticide companies in Houston. Jenkins said his trucks spray at the rate recommended by label pesticide labels.

He says, however, that some of his competitors are not. Some private bids to municipalities and communities are lower than the actual cost of the pesticides, Jenkins said. To make money on these cheap bids, he said, the product has to be diluted.

"I've heard rumors of this, but I have never heard of anyone being found doing it," said Ken Myers, executive director of the Texas Pest Control Association.

Weekly spraying common

Private spraying is common in Houston. Of the more than 100 residential communities that CIA Services manages in the greater Houston area, about 20 percent choose to regularly fog for mosquitoes, said the company's president, Ralph Troiano.

Most communities spray once a week from April to October, he said. Troiano said he asks spraying companies to spread pesticides at the label-recommended rate, but admitted it is nearly impossible to determine whether they comply.

"The most important thing is whether or not residents find it effective," he said. "From the feedback we receive, residents can tell when we're spraying, and when we're not. They think it's pretty effective."

Public and private sprayers have two types of pesticides at their disposal that can safely be sprayed into residential communities: organophosphates, a group of closely related pesticides that includes malathion; and a synthetic form of pyrethrins, which are derived from chrysanthemum flowers.

"There are a lot of different kinds of pesticides, of course, but there aren't a lot of pesticides that you can apply indiscriminately," said Patricia Pietrantonio, an entomologist at Texas A&M University.

Malathion came into widespread use nearly half a century ago. As mosquitoes developed a resistance, communities turned to pyrethrins. This year, Harris County sprayed 2 million acres with a pyrethrin commercially sold as Scourge.

Jim Olson, another Texas A&M entomologist, said there are few promising pesticides under development that could safely be widely sprayed. That's why maximizing the effectiveness of the current pesticides is critical, he said.

Nurturing a susceptibility

Pietrantonio and Olson have begun a study of mosquito resistance in Harris County, collecting thousands of larvae from Culex mosquitoes, the carrier of West Nile. They will raise the mosquitoes and then test whether genetic mutations have made them resistant to the pyrethrins used by the county.

About six years ago Pietrantonio led a similar study that determined a significant number of the insects were no longer susceptible to malathion.

Scientists now believe most mosquitoes may have regained a susceptibility to malathion. The reason, they say, is that it is difficult for a mosquito to block more than one type of pesticide.

The trick is to try to nurture this susceptibility and breed the vulnerability to at least one type of pesticide back into the population.

So next year, in Harris County, Parsons said he has recommended that the county rotate among spraying with malathion and two different types of pyrethrins. This targeted spraying should extend the useful lifetimes of the chemicals.

Scientists say an unfortunate byproduct of all spraying is that the chemicals will eventually only kill those mosquitoes that have no resistance at all. With no reproduction from this desirable group, then, it will become increasingly difficult to breed susceptibility back into the

population.

"It's pretty well proven that dead mosquitoes can't reproduce," Olson said. "That's an Aggie paradigm right there."

[eric.berger@chron.com](mailto:eric.berger@chron.com)

<http://www.chron.com/cs/CDA/printstory.mpl/metropolitan/2890973>

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Action Alert

Good news! The City Council is FINALLY going to hold a public hearing on pesticide use in New York City. The hearing will be on a package of pesticide measures, including a bill adopting the Pesticide Neighbor Notification law, a bill requiring City agencies to reduce their pesticide use, and a resolution in support of the state Urban Pesticide bill (see below for more info).

The hearing will take place on Wednesday, November 17th, at 10 a.m. in City Hall.

We encourage you to testify at this hearing and spread the word to your colleagues and activist contacts. Please feel free to contact me at (518) 436-0876, ext. 258 or [lhaight@nypirg.org](mailto:lhaight@nypirg.org). if you need more information about these bills or about the issue of pesticide use in New York City.

NYLCV has made these bills part of this year's NYC environmental scorecard. For information about outreach to the City Council, contact Craig Wilson at 212-361-6350, ext. 209 or [cwilson@nypirg.org](mailto:cwilson@nypirg.org).

NYLCV can also provide preprinted postcards in support of these bills that you can circulate.

Thanks for your support of these important public health and right-to-know measures.

All best,

Laura Haight, NYPIRG

Background: An enormous amount of pesticides are used in New York City on a routine basis. Exposure to pesticides can pose a wide range of threats to human health, from acute reactions, such as asthma attacks, headaches, nausea and rashes, to long-term health problems such as neurological disorders, endocrine disruption and cancer.

Fortunately, we CAN control pests without putting our health at risk -- safer and more effective alternatives exist for preventing and controlling virtually all urban pest problems. Much of the cutting edge research on pesticide hazards and alternatives has been conducted right here in New York City.

The Health Committee of the New York City Council will be holding a hearing on the following package of pesticide measures on Wednesday, November 17th, at 10:00 a.m.:

Intro. No. 328: Pesticide Neighbor Notification Law This bill "opts in" to the state's Neighbor Notification Law. This common-sense right-to-know measure requires commercial lawn and tree care companies to notify adjacent properties 48 hours before spraying toxic pesticides. It also requires homeowners to post signs on their lawns when they apply lawn pesticides on their own.

Intro. No. 329: New York City Pesticide Use Reduction Law This bill requires all City agencies and their contractors to stop using the most acutely toxic pesticides and pesticides that contain known or probable carcinogens on City-owned or leased property, and to switch to least toxic or nontoxic pest control approaches whenever possible.

It also creates an interagency pest control committee, requires agencies to post signs prior to pesticide applications, and requires agencies to report annually on their pesticide use. The bill allows emergency waivers for health purposes.

Res. No. 68: Resolution in Support of the State Urban Pesticide Bill This resolution calls on the New York State Senate to pass the Urban Pesticide Bill (the Assembly has already passed it). This bill creates a temporary board to investigate the high rates of pesticide use in urban areas and requires pesticide applicators to be trained in nontoxic pest control methods.

Any member of the public can testify at the hearing. The full text of these bills can be found at:

<<http://www.nycouncil.info/issues/index.cfm>>.

Laura Haight

Senior Environmental Associate

New York Public Interest Research Group

107 Washington Avenue

Albany, NY 12210

(518) 436-0876, ext. 258

(518) 432-6178 (fax)

[lhaight@nypirg.org](mailto:lhaight@nypirg.org).

<http://www.nypirg.org>

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September 1, 2003

Newsday

[Aerial Spray](#) Questioned

By Tomoeh Murakami Tse and Michael Rothfeld

STAFF WRITERS

Suffolk County began spraying pesticides from a helicopter last week to control mosquitoes, even though it has not had a confirmed human case of the West Nile virus so far this year.

Nassau County, which has two confirmed human cases, has not, prompting some Long Island environmentalists to question why Suffolk chose to respond with aerial spraying when it could have attacked a limited West Nile threat by applying pesticides in targeted areas from the ground.

"It's a blanket exposure to the public and to the environment to the harmful effects of pesticides," said Adrienne Esposito, associate executive director of the Citizens Campaign for the Environment in Farmingdale. "They're only supposed to use that [aerial spraying] when the health risk of West Nile virus outweighs the health risk of pesticides."

Dr. Patricia Dillon, director of epidemiology and disease control for the Suffolk County health department, said the decision was based on a number of factors, from an increase in the number of mosquitoes, which bite both birds and humans, to a jump in the number of dead bird sightings. For example, Dillon said Friday, calls about dead birds in the Mastic and Shirley area, one of the regions targeted for aerial spraying, since Aug. 11 make up 50 percent to 60 percent of all dead-bird notices in the area this year. Other regions that were subject to aerial spraying of resmethrin are Southold and Blydenburgh in Smithtown county park areas.

"We had two fatalities, eight cases last year. We don't want to ever see that again," Dillon said. "I consider last year to be a failure. ... We are concerned for the health of the population. We don't want to wait until a human has the disease. It's too late by then."

Debra O'Kane, executive director of the North Fork Environmental Council in Southold, suggested that county officials were using West Nile as an excuse to spray, when in fact their true purpose was to placate residents bothered by the high counts of regular mosquitoes this year.

"There needs to be a distinction between nuisance spraying and what is classified as disease control," she said.

Some even accused the county of creating undue concern about West Nile so it can control mosquitoes. "They're playing on the risk, and overstating the risk of the West Nile virus," said Peconic Baykeeper Kevin McAllister, who earlier this year sued to try to block Suffolk County's mosquito control efforts. Very few communities decide to conduct aerial spraying, and Suffolk County so far is the only county in New York to do so this year, said Kristine Smith, a spokeswoman for the state Department of Health. She said it is up to local governments to decide whether to spray. It is unlikely that the pesticide Suffolk

is using in its aerial spraying at very low concentrations will have "adverse health effects for most people," according to the department's Web site.

"Dead-crow density," a possible early warning of the West Nile virus, was "moderate" in Suffolk and Nassau counties for the week ended Aug. 23, the Web site said. Occasional human cases have occurred within a few weeks after counties reported moderate dead-crow densities, according to the state. Nassau officials said they don't feel the need for aerial spraying to kill adult mosquitoes, although the state Health Department last week confirmed the first two human cases of West Nile on Long Island - a 60-year-old Hicksville man who is recovering at home after an extended hospital stay and a 57-year-old Bethpage woman who has fully recovered.

So far this year, there has been no spraying for adult mosquitoes in Nassau, either with ground trucks or by helicopter, said Dr. Abby Greenberg, director of disease control for the county health department. The county conducts routine aerial spraying to kill mosquito larvae in the salt marshes along the southern shore, she said.

Greenberg said that only 10 pools of mosquitoes out of 400 have so far tested positive, and that the mosquitoes were the kind that did not bite humans. It is also hard to determine, Greenberg added, where the two county residents were infected with the disease.

Greenberg said the county conducts aerial spraying only when large numbers of mosquitoes test positive in an area unreachable by ground spraying, such as in swamps.

"Aerial spraying is to be used only when ground spraying is not effective," she said.

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<http://www.newsday.com/news/local/longisland/ny-lispra313436952sep01.0.6948163.print.story?coll=ny-linews-headlines>

How are urban ecologies formed and how might they be managed?

A well-manicured, high-input suburban lawn in Columbus Ohio - an unregulated contributor to non-source point pollution in groundwater and the ambient ecosystem. 80% of people in developed nations are urbanized and half the global population lives in cities, where immense systems of water, energy, and nutrient flows are harnessed to make life possible for billions of people. Yet, despite an interest on the part of policy makers and planners, urban ecosystems have received less than full attention, particularly in social science and environment/society research. A central reason for this silence on urban ecological dilemmas is the staggering complexity of problems that are aggregated into larger systems, but built from the disaggregated choices of individuals, each of whom is located within intricate physical and social systems. Millions of decisions governing trash disposal, automobile use, home maintenance, etc., combine to form the urban environment. Moreover, the very ordinariness of these daily decisions makes them easy to overlook, even as they combine to create large effects. Robbins' most recent work has been an examination of such ecologies, specifically in the form of the American lawn, a landscape (the coverage of which is around 8 million hectares) onto which millions of pounds of toxins are poured every year, including slightly toxic substances like 2,4-D and Dicamba, as well as moderately toxic herbicides like Glyphosate and Chlorpyrifos and highly toxic broad spectrum insecticides like Carbaryl and the deadly organophosphate Diazinon. This research explores the social and economic motivation of lawn owners. Initial conclusions suggest that wealthy well educated people use chemicals most frequently and that people who claim concern for the environment are disproportionately likely to use chemical inputs.

See:

Robbins and Sharp. 2003. "The Lawn Chemical Economy and Its Discontents" *Antipode*. 35(5):955-979.

Robbins and Sharp. 2003. "Producing and Consuming Chemicals: The Moral Economy of the American Lawn" *Economic Geography* 79(4): 425-451.

Robbins and Birkenholtz. 2003. "Turfgrass Revolution: Measuring the Expansion of the American Lawn" *Land Use Policy*. 20: 181-194.

Robbins, Polderman, and Birkenholtz. 2001. "Lawns and Toxins: an Ecology of the City" *Cities: The International Journal of Urban Policy and Planning*. 18(6): 369-380.

Paul Robbins

Department of Geography, The Ohio State University  
1100 Derby Hall, 154 North Oval Mall  
Columbus, Oh 43210-1361  
Telephone: (614) 292-6001

Email: [probbins@geography.ohio-state.edu](mailto:probbins@geography.ohio-state.edu)  
<http://whopper.sbs.ohio-state.edu/faculty/robbins/page.htm>

Julie Tranquilla Sharp  
 E-mail: [sharp.153@osu.edu](mailto:sharp.153@osu.edu)  
 Department of Geography, Ohio State University  
 1155 Derby Hall, 154 North Oval Mall, Columbus, Ohio 43210  
<http://geog-www.sbs.ohio-state.edu/grads/jsharp/>

#### Research

I am a fourth-year doctoral student in the People, Environment, and Society specialization of the department. I apply a critical theoretical approach to questions of resource use, the practice of science, and the construction of meanings about nature in the global North. My regional interests center on North America. My advisor is Paul Robbins.

I am currently working with Professor Robbins on an investigation of the cultural, political, and ecological relationships surrounding the residential lawn in North America. This project uses survey, interview, and secondary data to examine the lawn care practices and motivations of homeowners as well as the political economy of the turfgrass, lawn, and landscape industries. Forthcoming publications in this area include:

\* Robbins and Sharp. 2004. (Forthcoming) "The Lawn Chemical Economy and Its Discontents" *Antipode*.

\* Robbins and Sharp. 2003. (Forthcoming). "Producing and Consuming Chemicals: The Moral Economy of the American Lawn" *Economic Geography*.

The Lawn-Chemical Economy and Its Discontents

*Antipode* November 2003, vol. 35, no. 5, pp. 955-979(25)

Robbins P.[1]; Sharp J.[1]

[1] Department of Geography, Ohio State University, USA

#### Abstract:

The daily geographies of consumption represent some of the most ecologically important and economically complex frontiers for critical research. Among these, the turfgrass lawn is perhaps the most overlooked, owing to its very ordinariness. Despite the serious risks posed to human health and ecosystem viability by high-input lawn systems, little critical scholarship has engaged the lawn, especially as a structured economic phenomenon. This paper explores the forces and political economic conditions under which the lawn is produced, promulgated, and resisted in North America. In the process, we draw attention to the deeply structured economic impetus behind the direct sale of potentially toxic chemicals to urban dwellers.

Based on survey research and a review of the industry, we argue (1) that chemical demand is driven by urban growth and classed aesthetics, (2) that direct and aggressive sales of chemicals to consumers are spurred by crises in the chemical-formulator industry, (3) that the search for consumer-lawn markets is driven by declining margins in the worldwide chemical trade, and (4) that counter institutional struggles against high-input lawns represent a salvo against otherwise abstract and daunting cultural-economic hegemony.

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Nov. 6, 2004

Toronto Star

Miller on course after first year

Mayor David Miller surfed into office a year ago, riding an election day wave of goodwill and great expectation. To his credit, that wave has yet to subside. Across Toronto, there is a sense this city is finally on the move.

On Wednesday, Miller will celebrate the first anniversary of his election victory that saw him replace former mayor Mel Lastman, who led the city for six years. Now, after years of controversy and stagnation under Lastman, Toronto's concerns are no longer neglected or dismissed by Queen's Park and Ottawa. There has been a dramatic change in course, with Toronto gaining new money, new power and new respect.

And although he has made some mistakes along the way, Miller is behind much of that progress.

Among the "three Ms" who won power last year - Miller, Premier Dalton McGuinty, and Prime Minister Paul Martin - Toronto's mayor is the only one who has not disappointed, in some way, the people who elected him. McGuinty broke faith with the electorate by imposing a hefty tax increase, formally known as the health-care premium, contrary to his promises. For his part, Martin has proved a weaker leader than expected.

By contrast, Miller has gone from triumph to triumph. He obeyed the defining promise of his election campaign and axed the planned Toronto island airport bridge just two days after formally taking office. Miller's speed and ability to marshal city council support were proof to his backers and foes alike that this mayor meant business.

His tenure has seen remarkable progress toward a much needed "new deal" for Canada's cities. Federal officials now rebate the goods and services tax on purchases made by municipalities. That windfall is worth about \$30 million to Toronto. The pace of federal infrastructure funding has quickened, and both Ottawa and Queen's Park have agreed to share gasoline taxes with municipalities. Toronto can expect more than \$90 million in the next fiscal year from its share of the provincial gas tax. And federal officials are promising to pass along 5 cents from Ottawa's tax on every litre of gasoline sold in Canada. That adds up to \$2 billion a year, although it's not yet clear how this would be divided among communities.

A "new deal for cities" isn't just about money. Large urban areas also need new power over their own affairs, especially Toronto.

Canada's biggest city cannot set speed limits for its traffic, extend bar service hours or even install a speed bump without first receiving

approval from Queen's Park. That could change now that the province is reviewing the City of Toronto Act with an eye toward increasing the city's clout. Miller's presence has boosted this process. It would be hard to imagine the province giving Toronto more power while Lastman was mayor. On policing, Miller wins again. During last year's municipal election, Toronto Police Chief Julian Fantino clearly favoured Miller's main rival, John Tory. That was a huge mistake. Fantino's contract is not being renewed. Rather than hiring more police officers as suggested by Tory, Miller won city council's full support for a preventive approach to battling crime, one based on increased funding for community support programs, recreation opportunities, and other services.

Miller can claim a long list of other accomplishments, including:

A cleaner city, with more money channelled into tidying Toronto and the launch of a "20-minute makeover" litter collection campaign. More public involvement in city decisions, especially a budget consultation process which had unprecedented community input.

A 3 per cent tax increase on residential ratepayers - that's in line with what Miller promised, and well below tax hikes elsewhere in Greater Toronto. For example, Oshawa residents endured a 9.8 per cent increase.

Approval of the St. Clair streetcar right-of-way; a bylaw banning lawn pesticides; rules restricting the removal of trees, and a host of other controversial pieces of the Miller agenda.

The mayor's mistakes have been remarkably few. Most notable was his unfair criticism of McGuinty's plan on sharing of the gas tax. Miller complained that receiving gas tax money would leave Toronto poorer if Ontario didn't also cover another massive city budget shortfall next spring. That sounded ungrateful. Thankfully, Miller's outburst didn't do lasting damage to relations with the province.

Another failure concerns taxes. During the election, Miller advocated a complex plan to change business taxation in a way that avoided increased taxes. Instead, he raised the property tax on business by 1.5 per cent. But that failure has not dented Miller's appeal, even in business circles.

What next for Miller over the remaining two years of his term?

Well, he should build upon his winning streak. There is some concern he has devoted too much attention to downtown issues, such as the airport bridge, and not enough on suburban priorities, such as safer streets. Miller can easily put that to rest by doing more to reach out to suburbanites.

He must work toward winning the full "new deal" that Toronto need. Also, Miller should become the true champion of the waterfront. Revitalization of Toronto's wasted shoreline is at a critical phase. Aggressive leadership is needed to drive the process forward, and Miller has the skills to achieve a breakthrough. A clean, green waterfront would renew the city.

If Miller's next two years in office are as successful as his first, Toronto could be on its way to greatness.

[http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article\\_Type1&c=Article&cid=1099609815059&call\\_pageid=968256290204&col=968350116795](http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article_Type1&c=Article&cid=1099609815059&call_pageid=968256290204&col=968350116795)

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The Canada Gazette

Vol. 138, No. 45 - November 6, 2004

Health, Dept. of Food and Drugs Act

Regulations Amending the Food and Drug Regulations (1393 - Fenamidone)

Regulations Amending the Food and Drug Regulations (1394 - Famoxadone)

Regulations Amending the Food and Drug Regulations (1400 - Picloram)

Regulations Amending the Food and Drug Regulations (1412 - Difenconazole)

Regulations Amending the Food and Drug Regulations (1413 - Dimethomorph)

Regulations Amending the Food and Drug Regulations (1420 - Mesotrione)

Regulations Amending the Food and Drug Regulations (1424 - Fenbuconazole)

Regulations Amending the Food and Drug Regulations (1430 - Dimethenamid)

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Order 2004-66-08-02 Amending the Non-domestic Substances List

Order 2004-87-08-02 Amending the Non-domestic Substances List

<http://canadagazette.gc.ca/part1/2004/20041106/html/index-e.html>

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Fri 05 Nov 2004

The Toronto Star

City's pesticide ban called illegal; Power of municipal bylaws goes under court scrutiny Appeal more than green-lawn issue, manufacturers argue

By Tracey Tyler

The City of Toronto hijacked "a very limited" emergency health power designed to deal with problems like a SARS outbreak and used it to fashion an illegal ban on pesticides, the Ontario Court of Appeal has been told.

Lawyers for a coalition of pesticide manufacturers were in the province's highest court yesterday attempting to overturn the city's bylaw, enacted in May of 2003, which imposes a blanket ban on pesticide use, with some exceptions.

But the case isn't just about whether homeowners should be able to use chemicals to achieve perfectly green lawns. The case is also the first test of the scope of power Ontario towns and cities have to pass bylaws aimed at the health and safety of their citizens, Scott Maidment, a lawyer representing CropLife Canada, a trade association of pesticide producers, told the court.

The city passed its bylaw banning pesticide use under a section of Ontario's new Municipal Act, which came into force last year and represented the first major overhaul of the legislation in more than a century. Section 130 of the act gives municipalities the power to regulate "matters" for the purposes related to the health, safety and well-being of its citizens - as long as those "matters" are "not specifically provided for" anywhere else in the Municipal Act or other legislation.

The pesticide industry says the bylaw duplicates existing federal and provincial laws on pesticide use, which are also designed to protect health and safety.

The federal Pest Control Products Act and Ontario's Pesticides Act set out very detailed rules about how, when and where pesticides can be used, Maidment said.

"If you use a pesticide in this country, contrary to the limitation contained in its label, you can go to jail for up to two years."

But the city maintains there is no conflict.

The bylaw is about reducing non-essential pesticide use, not simply regulating it, said Susan Ungar, a lawyer also acting for the City of Toronto.

Federal and provincial legislation, no matter how the pesticide lobby tries to characterize it, hasn't had that same effect, she said.

"Let's face it, before this bylaw, had people stopped spraying their lawns for esthetic purposes? No," Ungar told Justices Stephen Goudge, Kathryn Feldman and Susan Lang.

"Our bylaw is intended to deal with the concerns I think any human being would have. These are poisons designed to kill something."

Supporting the city's position yesterday were eight interveners, including the Ontario College of Family Physicians, the Canadian Association of Physicians for the Environment, the Federation of Canadian Municipalities and the World Wildlife Fund.

In dismissing the pesticide industry's challenge to the ban last year, Justice William Somers of the Superior Court of Justice said passing the bylaw was well within the city's power. The bylaw doesn't conflict with any federal or provincial legislation, which focuses on the registration and labelling of pesticides, he said.

Somers relied on a recent Supreme Court of Canada decision upholding a pesticide ban in Hudson, Que., on the grounds that city's bylaw did not conflict with federal or provincial law.

But Maidment told the panel yesterday that federal and Ontario pesticide legislation isn't just about labelling. Labelling requirements are simply a means "to achieve the real objective, which is protecting health and safety," he said.

The powers granted to the city under the new Municipal Act to provide for the general welfare of its citizens was intended for very limited emergency use, Maidment added. "If we had another SARS outbreak, the city could use it to order everyone to wear masks on the TTC."

[http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article\\_PrintFriendly&c=Article&cid=1099609815626&call\\_pageid=968350130169](http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article_PrintFriendly&c=Article&cid=1099609815626&call_pageid=968350130169)

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Mon, November 1, 2004

Fake food

Apples from Africa, beef from Bolivia ... with food travelling this far, little wonder why it's chock full of preservatives

By HOLLY LAKE, Ottawa Sun

PAULINE COMEAU isn't a gambler, particularly when the health of her two little girls is the potential wager. Her job as a mom is to create the safest environment she can for Sofia, 4, and Gabriela, 2, she says.

Even if it entails trips to several stores and forking over a few additional dollars, all the fruits and vegetables brought into her home are organic, as is all the milk they drink. When organic meat is available, she buys that too.

Her kids are "fruit freaks" and Comeau isn't about to let pesticides become a major component of their diet. Nor does she think they need to consume the hormones animals are fed.

"When they talk about body mass and the amount of food they ingest, I'm concerned about what they might do to underdeveloped bodies," Comeau says. "I don't want anyone to tell me they haven't found any evidence yet of harm. I'm just not trusting of people who are trying to reassure me that it's okay."

There have been too many occasions in the past where something was deemed to be safe, only for it be yanked from the shelves years later

after it's found to pose a risk.

"I just don't want (my girls) to have to find out 10 years down the road there are higher rates of cancer because they've been eating certain toxic things that people were telling us were safe," Comeau says. "I'd rather err on the side of safety."

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The average Canadian food molecule used to travel 240 km to the store shelf. Today the journey spans 2,000 km.

That's leaving us with more than jet-lagged food. Perched on the plate is food that's less nutritious than it used to be. What's worse, some of it might actually be doing us harm.

#### GREATER DISTANCE

Over the past 40 years, the food industry has seen huge changes. Globalization has led to centralized production, while the number of food processing and distribution companies has decreased drastically. As a result, our food is moving greater distances to reach local markets -- and in this case, being well-travelled is not a good thing.

Strawberries coming from California by truck can leave three to 10 days between picking and plate. An African pear, like peppers from Holland, can travel even longer.

"Some nutrients are very unstable and so the longer it's in transit, the more likely the nutrients are to be lost," says Rod MacRae, a food policy consultant and food security instructor at Ryerson University. "No one is really looking at this."

Fruit that's going halfway across the world to market is harvested earlier than if it were going to be sold fresh next door. That could also compromise nutritional value, as the optimal time for transporting is not always optimal for gleaned a food's greatest good.

MacRae points to nutrient data files kept by Canada, the U.S. and the U.K., which are historical databases of nutritional content of food. "In all three countries, certain nutrients are in significant decline over a period of time and nobody really knows why," he says. "I suspect one of the factors is this globalization."

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So if food is travelling further than ever before, what's keeping it fresh and looking good along the way?

Whether it's fruit, vegetables, processed or frozen food, the answer is: Floating in a chemical soup. Just like Saran, the food industry is wrapped up in shelf life.

Food must be road-ready because the industry's bottom line depends on its long and happy existence on the store shelf. Appearance is also key, so it must also look good while lasting a long time.

How does the industry do it? It keeps a few additives on hand in its collective kitchen.

In Canada, more than 400 food additives are approved for use. Those include colours, preservatives, flavours, sweeteners and texture agents. Processing agents, such as anti-caking and anti-foaming agents, are also added to make a product easy to deal with and to ensure consistent results.

"Almost everything we look at has some sort of preservative in it," says Randee Holmes, an environmental writer and author of *Additive Alert: What Have They Done to Our Food?*

That's sometimes because nutrients and natural preservatives are lost in the processing, so manufacturers add things back in to perform the same function. And it's not always added to the food. In the case of cereal, it can go on to the packaging.

While most additives in Canada are "considered safe," Holmes says about 20% warrant considerable concern.

#### COAL TAR DERIVATIVE

"There are colour additives used in Canada that have been banned by up to 17 other countries," she says -- some the World Health Organization has advised against using.

Brilliant blue is one of them. A coal tar derivative, it's used in milk, jams and jellies with pectin, bread, butter, sherbet, smoked fish, liqueurs, caviar, pickles, relishes and icing sugar, among other things.

In *Hard to Swallow: The Truth About Food Additives*, authors Doris Sarjeant and Karen Evans point out brilliant blue was banned in Austria, Finland, Norway, Sweden, Switzerland and all European Commonwealth countries, after it was found to cause cancer when ingested as well as malignant tumours in rats around the ingestion site.

It's a similar tale for amaranth (red No. 2), which is permitted for use in many of the same foods as brilliant blue, despite studies where it induced cancer, prevented pregnancies, caused birth defects and stillbirths in rats. It's banned in Norway, Australia, Finland, France, Greece, Japan, the former Soviet Union and the U.S., but it's still approved for use here.

Citrus red No. 2 is another the WHO warns about. The dye was found to be toxic in 1973 after various studies linked it with internal organ damage and cancer in animals. Australia, Britain and Norway have banned it, but not Canada. While it was withdrawn from all edible portions of food, it's still permitted on orange skin, so people who use the peel in cooking, make marmalade, peel oranges with their teeth, or put a slice in a drink are ingesting it.

"The law states any dyed oranges have to be labelled, but only on the box in which they're shipped," Holmes says.

The list doesn't stop there, but it should. It contains known cancer-causing agents and some question why synthetic colours are in our food at all. Norway completely banned them in 1979.

"The thing about colours is that they're wholly cosmetic. They're not needed except from a manufacturer's point of view, but colour is in

almost everything," Holmes says.

#### NATURAL PRODUCTS

Detailed labelling would at least give consumers choice, Comeau says. "It's my job to make a decision, not your job to make it for me. Just give me the information and I'll decide."

Labels would also correct the belief that natural flavours are derived from natural products.

"Something can be called 100% strawberry flavour and not have any strawberries in it," Holmes says. Anne Hall, a certified nutritionist, says it's a chemical cocktail. Because hundreds of additives can be lumped under natural or artificial flavours on a label, people don't know they're eating them.

Married to the late Dr. Ross Hume Hall, a biochemist at Hamilton's McMaster University who spent his career sounding the alarm about additives, Hall says the debate has raged since the 1970s because nobody nipped it in the bud. There are just new terms and natural flavours is one of them.

"Do I think they're safe? No. I avoid them like a poison."

They supplant real food, Hall says. They exist for the benefit of the food business.

"They're foreign chemicals, faking the taste we prefer."

Much like the "blueberries" in a waffle that are just apples dyed blue. Apples, of course, are cheaper than blueberries.

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Unintentional additives are also served up daily from pesticide residues, hormones and antibiotics in animal products. To increase yields, many farmers use synthetic fertilizers, which MacRae says can suppress micronutrients.

"We're (also) pretty free and easy with biocides. Their function is to kill things we don't actually want in a field, but they're not always as necessary as everyone presumes and not as harmless as everyone hopes," he says.

#### NEUROTOXIN

Those don't show up on labels either, but that doesn't mean they're not there. A Canadian tomato, for instance, may be exposed to any combination of 41 approved pesticides.

Among them is the neurotoxin permethrin, registered for use on tomatoes in Florida and Canada, despite the U.S. Environmental Protection Agency classifying it as a carcinogen because it causes lung tumours in female mice and liver tumours in mice of both sexes.

Studies in the U.S. have found that in tomato pastes the permethrin concentration can increase 230-fold. That led to a ruling that permits Florida tomatoes to only be sold fresh and not used commercially to make paste.

"Canada uses the same pesticide, but does not have the same regulation," Holmes says.

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It wasn't always this way. Just 50 years ago, the Canadian diet consisted of minimally processed foods that came from farms in the same time zone. But Holmes maintains Canada has one of the safest food supplies in the world. Of course, it's clear that doesn't mean it's entirely without risk. She says the best way to avoid feasting on more chemicals than you have to is to eat fresh, local and less processed foods.

"Most of the food we eat is safe. I don't like to take an alarmist position because I don't think it's necessary," Holmes says. "But I think people would do well to not just take things at face value and not just assume that because something is regulated as safe that it really is."

[holly.lake@ott.sunpub.com](mailto:holly.lake@ott.sunpub.com)

<http://www.canoe.ca/NewsStand/OttawaSun/News/2004/11/01/pf-695353.html>

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Mon, November 1, 2004

Group targets tobacco biz

Health experts want industry 'denormalized'

By CP

TORONTO -- Some of Canada's most influential doctors, health experts and anti-smoking lobbyists will launch a campaign today urging the federal government to strip the tobacco industry of a powerful public relations asset: Its public image as a legitimate, mainstream business. The strategy, called "tobacco industry denormalization," was adopted as a key element of a national tobacco control plan agreed to by the provinces and the federal government in 1999.

But the group accuses the feds of being reluctant to fully implement the strategy, which was recommended to the health ministry two years ago by the Ministerial Advisory Council on Tobacco Control.

#### INDUSTRY GUARDED

"Epidemics normally trigger extraordinarily aggressive responses from governments," the group writes in a letter to Health Minister Ujjal Dosanjh. "Unfortunately and tragically, the tobacco industry has been protected from such responses by a belief by some within government and by the general public that the tobacco industry is a normal, legal industry selling a normal, legal product, an industry entitled to be accepted within the mainstream of normal business."

Ignoring the industry's role in the "tobacco epidemic" would be like "failing to discuss the behaviour of mosquitoes in a malaria epidemic or the role of rats in an outbreak of bubonic plague," said Ottawa medical officer of health Dr. Rob Cushman, one of many health officials who have signed on to the campaign.

On Friday, Dosanjh sent a strong signal that he plans to take a hard line with the industry.

"Our government has a bias; cigarettes are lethal when used as intended," Dosanjh said. "Our bias is in favour of health."

<http://www.canoe.ca/NewsStand/OttawaSun/News/2004/11/01/695346.htm>

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Oct 29 2004

VANCOUVER.CBC.CA

Pesticide ban proposed for 'city of gardens'

VICTORIA - Greater Victoria residents may be banned from using virtually all pesticides and herbicides in their gardens by next spring The proposed Capital Regional District ban would include common grass products, as well as organic phosphates used on ornamental plants.

Paul West, who heads the regional district committee looking into the issue, says a proposed bylaw will likely be presented to area councils in the spring.

West says the bylaw would be tough to enforce, but he believes home gardeners would abide by it.

"Enforcement is difficult, but there is a social pressure," he says. "For example people in the CRD don't water their lawns when it's restricted. We're looking for that kind of consensus here."

West says organically-managed gardens are among the most beautiful in the "city of gardens."

While Victoria city councillors are supportive of the ban, a city bylaw wouldn't ban its own parks and recreation department from using the chemicals.

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[http://vancouver.cbc.ca/regionalnews/caches/bc\\_ban20041029.html](http://vancouver.cbc.ca/regionalnews/caches/bc_ban20041029.html)

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Tuesday, November 2, 2004

Lawn and Landscape

United States and Canada Struggling with Childhood Pesticide Exposure Risks

By Lauren Spiers

The fact that pesticides used for lawn, tree and shrub care are toxic is no secret. Indeed, that's the reason they're used so often in the first place - to kill unwanted weeds and insects in otherwise attractive landscapes. Still, many homeowners and municipalities in the United States and Canada are furthering efforts to severely limit if not eliminate pesticide use for aesthetic purposes.

Following Toronto's and Montreal's leads from earlier this year, the residents of Windsor and Essex County, Ontario, Canada will be faced with the issue of creating bylaws to govern pesticide use, according to an Oct. 13 article in the Windsor Star.

The Star reports that Windsor-Essex County Environment Committee is planning a telephone survey of 500 residents next spring on the use of chemical pesticides for aesthetic reasons and will begin a campaign to inform residents about chemical pesticide alternatives, notes Committee Coordinator Ron Elliott.

"Is it really important that they have pristine green lawns that look like golf courses, or would they accept a ban on pesticides and have the odd dandelion to cut out?" Elliott says. His question and the committee's program arise just as a Canadian study confirms high levels of pesticide residue in young children.

According to the study released last month and conducted by the Quebec Institute of Public Health, residues of pesticides in the organophosphate and chlorophenoxy classes were found in children tested. Researchers detected chlorophenoxy, a common class of weed killer, in the urine of 15 percent of children tested one or two days after lawn spraying took place. Additionally, organophosphate residues were present in 98.7 percent of children's urine samples.

Questions regarding the levels of pesticide residues present and how they compare to toxic levels of those pesticides were still being investigated as of press time.

The study tested on 89 children between the ages of 3 and 7 years old who lived outside of agricultural areas, but near suburban Montreal and Quebec City. Researchers recognize that this sample is not representative of the Canadian public at large, but are concerned nonetheless.

"The study justifies any large-scale measure to diminish the use and exposure of pesticides in the population," says Mathieu Valcke, an Institute of Public Health toxicologist and co-author of the study.

"Although we don't have all the scientific data, it's better to err on the side of caution," adds Harold Dion, chairman of the Quebec College of Family Physicians, which is calling for an outright pesticide ban because of previously discovered links between pesticides and cancer.

Canada's results reflect the concerns of American families and the United States Environmental Protection Agency (EPA), which has hit a sticking point with regard to its own study on pesticide toxicity in children.

On Saturday, Oct. 30, the Washington Post reported that the EPA is dealing with internal protests and ethical questions regarding the planned two-year Children's Environmental Exposure Research Study, partially funded by the American Chemical Council (ACC). In addition to raising questions about bias due to the ACC's financial involvement, some scientists are concerned about how the program will affect lower-income families.

According to The Washington Post, in exchange for participating in the study, which involves infants and children up to age 3, the EPA will give \$970, some children's clothing and a camcorder to keep, to each family using pesticides in their home. Some EPA officials expressed their concern that the study lacked safeguards to ensure that low-income families would not be swayed into exposing their children to hazardous chemicals in exchange for the gifts.

In an e-mail cited by The Washington Post, Suzanne Wuerthele, the EPA's regional toxicologist in Denver wrote, "It is important that the EPA behaves ethically, consistently, and in a way that engenders public health. Unless these issues are resolved, it is likely that all three goals will be compromised and the agency's reputation will suffer.

In defense of the program, Linda Sheldon, EPA's Acting Administrator for the human exposure and atmospheric sciences division says the agency will educate families participating in the study and would inform them if their children's urine showed risky levels of pesticides.

"We are developing the scientific building blocks that will allow us to protect children," Sheldon says, noting that the study design was reviewed by five independent panels of academics, officials of the Centers for Disease Control and Prevention and representatives of the Duval County (Florida) Health Department where the study would be conducted.

<http://www.lawnandlandscape.com/news/news.asp?ID=2832>

11/02/04

>  
> Orangeville Banner  
>  
> Town revisits pesticide issue  
>  
> ASHLEY GOODFELLOW, Banner Staff Writer  
>  
> Pesticide use in the Town of Orangeville will go under review again > in the new year, when the public will be called on for input.  
>  
> Council agreed at its Oct. 18 meeting to consider adopting a bylaw > similar to one in the Town of Caledon that limits the application of > pesticides on all residential, commercial, and industrial lawns to > spot spraying.  
>  
> Caledon's bylaw only permits broader applications if a qualified > individual determines that an area is infested.  
>  
> Caledon garnered much attention when it passed its bylaw in April > 2003; it was the first municipality in the province to do so, and was > recognized by TV Ontario as co-winner of the greenest community in > Ontario.  
>  
> The recommendation to change Orangeville's guidelines on pesticide > use comes from the mayor's environmental advisory committee (MEAC), > which has been working toward controlled use of chemical pesticides > since its inception in 2002.  
>  
> In May 2003, the town initiated a three-year pilot project using > alternatives to pesticides in two town parks -- Walsh Crescent Park > and Village Green Park -- which town staff says has been "a learning > process."  
>  
> Administrators of the weed control method used at the Village Green Park > site noted a substantial reduction in weeds.  
>  
> But this spring, residents neighbouring the Walsh Crescent Park site > reported a problem with weeds, and voiced dissatisfaction with the > project.  
>  
> "It wasn't so much that there were weeds -- it was that the town > promised to take care of the park and didn't," recalls Walsh Crescent > resident John Adams. "But since then, the town has been working with > the program and the park is looking really good. It did make a big > improvement."  
> > Adams says his neighbours now agree that the project is working -- > but he thinks many would not support a town-wide pesticide ban.  
>  
> "I'm one of the few that do not have people come in and spray the > lawn," he says.  
>  
> In theory, Adams says, changing the bylaw is a good idea but he's not > sure that he would support it completely -- especially considering > the costs of alternative weed control methods.  
>  
> "It would be a very expensive proposition for residential land owners > and it takes a lot more time," he notes. "But to be quite honest, I > don't use a lot of pesticides anyway because of all the kids and > animals in the neighbourhood."  
>  
> And clearly, some the town's youth are concerned with the application > of pesticides.  
>  
> In July, a group of elementary school students delivered a petition > opposing pesticide use with more than 500 signatures to Mayor Drew > Brown.  
>  
> The youngsters, aged 11 and 12, said they had suffered ill effects > from exposure to the harmful toxins.  
>  
> Presenting the mayor with reports and documents to back up their > claims of the health hazards linked to pesticides, the youths asked > what it would take to stop the town from spraying.  
>  
> At that time, Brown was quoted as saying "I believe we are heading > toward a pesticide-free community."  
>  
> He also assured the students that the town would revisit the issue -- > and he's adhered to that promise.  
>  
> Town clerk Cheryl Johns says she expects the public meeting to be > scheduled sometime in January 2005.  
>  
> Council also agreed to endorse a public awareness campaign by MEAC > that will educate residents on environmentally-friendly alternatives > to pesticides.  
> <http://www.northpeel.com/br/orangeville/news/story/2315384p-2681802c.html>  
>  
> Orangeville Banner  
> 37 Mill Street

- > Orangeville, Ontario
- > L9W 2M4
- > Telephone: 519-941-1350
- > Fax: 519-941-9600
- > Editorial: [banner@orangevillebanner.com](mailto:banner@orangevillebanner.com)
- > Town can learn from test project
- > <http://www.northpeel.com/br/orangeville/editorial/story/2315382p-2681827c.html>
- >
- > Pesticides are regulated by Health Canada
- > <http://www.northpeel.com/br/orangeville/editorial/letters/story/2150496p-2490857c.html>
- >
- > Is perfect lawn today worth illness in future?
- > <http://www.northpeel.com/br/orangeville/editorial/letters/story/2091681p-2421383c.html>
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- > Need to reexamine our attitudes about weeds
- > <http://www.northpeel.com/br/orangeville/editorial/letters/story/2091682p-2421380c.html>
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- > Pesticide does not remain in environment
- > <http://www.northpeel.com/br/orangeville/editorial/letters/story/2049880p-2371589c.html>
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- > Take youth seriously
- > <http://www.northpeel.com/br/orangeville/editorial/story/2049867p-2371566c.html>
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- > Youths protest pesticide use
- > <http://www.northpeel.com/br/orangeville/news/story/2049871p-2371568c.html>
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- > Weeds preferable to applying pesticides
- > <http://www.northpeel.com/br/orangeville/editorial/letters/story/1997426p-2312843c.html>
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- > Students could volunteer to pull weeds
- > <http://www.northpeel.com/br/orangeville/editorial/letters/story/1997425p-2312847c.html>
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- > Weeds choking out residents
- > <http://www.northpeel.com/br/orangeville/news/story/1962601p-2271895c.html>
- >
- > Park a poor example
- > <http://www.northpeel.com/br/orangeville/editorial/story/1962550p-2271903c.html>
- >
- > If thy weed offendeth thee, pluck it out -- or try vinegar
- > <http://www.northpeel.com/br/orangeville/editorial/columns/story/1871109p-2183674c.html>
- >
- > Towns look at reducing pesticide
- > <http://www.northpeel.com/br/orangeville/news/story/1849944p-2159513c.html>
- >
- > Behind the times
- > <http://www.northpeel.com/br/orangeville/editorial/story/1850034p-2159620c.html>

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#### The Lawn-Chemical Economy and Its Discontents

Antipode November 2003, vol. 35, no. 5, pp. 955-979(25)

Robbins P.[1]; Sharp J.[1]

[1] Department of Geography, Ohio State University, USA

#### Abstract:

The daily geographies of consumption represent some of the most ecologically important and economically complex frontiers for critical research. Among these, the turfgrass lawn is perhaps the most overlooked, owing to its very ordinariness. Despite the serious risks posed to human health and ecosystem viability by high-input lawn systems, little critical scholarship has engaged the lawn, especially as a structured economic phenomenon. This paper explores the forces and political economic conditions under which the lawn is produced, promulgated, and resisted in North America. In the process, we draw attention to the deeply structured economic impetus behind the direct sale of potentially toxic chemicals to urban dwellers.

Based on survey research and a review of the industry, we argue (1) that chemical demand is driven by urban growth and classed aesthetics, (2) that direct and aggressive sales of chemicals to consumers are spurred by crises in the chemical-formulator industry, (3) that the search for consumer-lawn markets is driven by declining margins in the worldwide chemical trade, and (4) that counter institutional struggles against high-input lawns represent a salvo against otherwise abstract and daunting cultural-economic hegemony.

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