

Pesticide Presentation to the City of Prince Albert

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I. The statement that "pesticides are safe" because they are registered is incorrect. It is illegal under the Canadian *Pesticide Control Products Act (PCPA)* and *regulations* to say or imply that pesticides are safe, even if used according to label. It is also illegal to say or imply that registration means safety.

II. Recent media attention surrounding Round Up (and its active ingredient, glyphosate) has brought this issue to the public's attention.

- 2015: In March 2015, the International Agency for Research on Cancer (part of the World Health Organization) determined that glyphosate was a "probably carcinogenic to humans."
- 2017: California added glyphosate to the state's Prop 65 list of chemicals known to cause cancer on July 7, 2017. This has been litigated and currently there is a preliminary injunction preventing glyphosate from being listed.
 - o <https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/california-glyphosate-warning/>
 - o <https://agfax.com/2018/06/14/california-fed-court-blocked-attempted-glyphosate-warning-label-dtn/>
- 2018: California court decision for Dewayne Johnson, awarded \$289 million by a jury who ruled that Monsanto's weedkiller Round Up caused his cancer and that Monsanto failed to warn him of the risks.
 - o <https://www.theguardian.com/business/2018/aug/10/monsanto-trial-cancer-dewayne-johnson-ruling>
 - o <https://usrtk.org/pesticides/mdl-monsanto-glyphosate-cancer-case-key-documents-analysis/>
 - o **Multi District Litigation:** More than 555 lawsuits are pending against Monsanto Co. in U.S. District Court in San Francisco, filed by people alleging that exposure to Roundup herbicide caused them or their loved ones to develop non-Hodgkin lymphoma, and that Monsanto covered up the risks.
 - o **State litigation:** An estimated 8,000 other plaintiffs have made similar claims against Monsanto in state courts in California.

Recent media attention around glyphosate levels in pretty much all food – one of the most widely used chemicals in the world. Also large percentages of humans have glyphosate in their bodies.

III. Safety issues of other pesticides and the EPA history of regulatory approval

1. Fraud in lab testing pesticides resulting in criminal convictions in 1983 in the US.

Industrial Bio-Test Laboratories faked or suppressed information in studies on pesticide safety which were then used to register or licence at least 212 pesticide active ingredients by the EPA, used all over the world. These

ingredients were not taken off the market or re-tested after the discovery that the studies used for approval were fraudulent.

(Source: Poison Spring: The Secret History of Pollution and the EPA. By E.G. Vallianatos, McKay Jenkins, pages 124-139, available online: <https://books.google.ca/books?id=g-DOAgAAQBAJ&pg=PA131&lpg=PA131&dq=ibt+trial+poison+spring&source=bl&ots=FTQEkIEYBA&sig=C7ETKEieLQkFrAE5rdCvOtcCvLg&hl=en&sa=X&ved=2ahUKEwjs8c VitfdAhWxMX0KHbkED-gQ6AEwCnoECAgQAQ#v=onepage&q=ibt%20trial%20poison%20spring&f=false>)

2. Conditional Registration in Canada and the US

The PMRA was established in 1995 and is governed by the *Pest Control Products Act*, which was written to prevent "unacceptable risks to people and the environment through use of pest control products."

-what is a conditional registration?

- companies are permitted to sell pesticides without having provided all necessary data to the agency. It's akin to getting your driver's license without being able to prove you can drive a car.
- In fact, in 2003, the Auditor found 58 per cent of new pesticides registered the previous year were being sold without their manufacturers having provided all necessary data to the PMRA.
- "Examples of information gaps at the time of temporary registration include what happens to the pesticide after it is released into the environment, what impact it is likely to have on children's central nervous systems, and how toxic it is to invertebrates and non-target plants," the Auditor noted
- In 2008, the Auditor did a [second audit](#). By then 272 pesticides had received temporary registrations. In fact, the Auditor discovered nine pesticides had been on the market for more than 10 to 20 years (one as much as 21 years) without agrochemical companies providing all of the data to the PMRA.
- Then, in 2015, the Auditor did [a new audit](#) and again [found](#) "important weaknesses" with the PMRA's performance, including 80 pesticides were being sold in Canada with temporary registrations – including most of the neonics available in Canada. Overall, the audit discovered a total of nine pesticides had been on the market for a decade or more as conditionally registered – eight of which were neonics – the same number as in 2008. "We also found that the Agency had never exercised its authority to cancel a conditional registration when registrants failed to fulfill the conditions of registration," they noted.
- no longer allowed for new pesticides in Canada, but existing conditional registrations can continue

3. Dose–response as the template for regulatory science.

The PMRA uses a “risk-based” assessment model that critics believe ensures no pesticide could ever be banned. This model looks at the probability of a substance causing harm if you are exposed to it, no matter how toxic the chemical is.

This approach is weak on assessing the impact of people being exposed multiple times to pesticides and the cumulative risk. It does not address the impact of mixing those toxins with other chemicals.

Implies there is a dose at which there are no effects, which the last decades of research show isn't true.

4. No threshold for biological effects

Evidence of endocrine and other effects of substances at low doses, that are not seen or are even opposite at high doses. Independent research has also found many negative health effects actually occurring at concentrations currently found in the environment.

Many chemicals are now known to have no safe exposure level such as *arsenic* used in CCA treated wood for various uses including children play structures, or the hormone *oestradiol*. Endocrine disrupting chemicals have no threshold below which they have no effect. One of the effects that can result from endocrine disruption is cancer.

Therefore there is absolutely no guarantee that we can dilute a chemical (such as occurs in a domestic product) to reach a level of no health effect. In fact, endocrine and/or low level effects are known for more and more chemicals as we study the phenomenon.

and 4 Essentially, as far as I know the tests we mandate for pesticides in Canada have not been updated since 1984, in spite of huge progress in testing methodology and understanding of new low level health effects. The dose at which 50 % of the animals die is irrelevant to low level effects like hormone disruption, obesity, and the development of autism and ADHD.

(<http://www.snapinfo.ca/info/health/nervous-system-effects>) Parkinson disease, or health effects up to 3 generations later. In fact, pesticides that are endocrine disruptors often have much more profound effects at levels the PMRA currently considers acceptable.

5. Some products with registered domestic formulations have definitely been linked to cancer by some agencies

Glyphosate, the active ingredient in Round Up and Nuglo which PA used in 2017.

Trillion, Par 3, Premium 3-way and Killex is 2-4-D, mecoprop, and dicamba - what the city used this year. Potential link of 24D to cancer (listed as a possible carcinogen by WHO's International Agency for Research on [Cancer](#) (IARC) in 2015) (<https://www.theguardian.com/environment/2015/jun/23/herbicide-24-d-possibly-causes-cancer-world-health-organisation-study-finds>)

Dicamba is volatile and the drift can kill neighbouring farmer fields.

Out of 29 banned chemicals in Ontario (26) (10 herbicides, 11 insecticides, 6 fungicide, 1 slugicide and 1 other product), 7 with domestic formulations are listed as carcinogens by PAN (33): the herbicide *Amitrole*, insecticides *Carbaryl* and *Pyrethrin* and the fungicides *Captan*, *Folpet* and *Thiophanate methyl*. The now de-registered insecticide *Pirimicarb* was also strongly linked to cancer.

In addition, 6 more pest control products with domestic formulations are considered possible carcinogens: the herbicides *2,4-D*, *Mecoprop*, *Dichlobenil*, the insecticides *Malathion* and *Piperonyl butoxide*, and the slugicide *Metaldehyde*.

2,4-D amine (used in *Weed and Feed* type products) was found to be a risk by the *International Agency for Research on Cancer*.(10) It is also considered a potential groundwater contaminant. (7) (also see point 17-fungicides)

6. There are many other negative health effects linked to pesticide use, looking at cancer is only the tip of the iceberg:

Parkinson's disease, nervous system, autism, ADHD, brain damage, nervous system damage, auto immune diseases, lower IQ in children

IV. Alternatives

Every province except Saskatchewan has already banned or limited the cosmetic use of pesticides, so there are many alternatives that are already being used.

Overseeding, watering, mixed grass/fescue (monocultures are bad), adding things like clover – Parliament hill has flowers in the lawn!

For sidewalks, there are machines that either burn or boil the weeds – pretty effective.

Forevergreen Landscaping, B.C. Canada. Sells a range of infrared eco-weeder from models for home-owners for cracks or dandelions to models up to 16 feet across to be used by municipalities and farmers. More effective when weeds are small. May have to be redone a few times.

Propane weeders also available from other companies. They are effective, but tend to use more fuel.

Aquacide commercial steam weeder. for large scale use. May no longer be sold in Canada

Goats ☺

Osborne Organics <https://osborneorganics.com>

More information on alternatives to pesticides at <http://www.snapinfo.ca/info/alternatives-to-pesticides> and <http://www.snapinfo.ca/programs/programs> and <http://www.snapinfo.ca/issues/lawn-turf>