## Why Should We Be Concerned About Pesticide Use?

Most people are not aware of the growing body of scientific evidence showing that pesticides can harm our health even in tiny amounts.

### **EPA** registration does not mean products are safe. A

common misconception is that the EPA's job is to decide which products are safe and which ones are not. The EPA does not perform testing. Rather, the EPA estimates toxicity to a certain population of people against the economic benefits of allowing a product to be sold, in spite of that product's toxicity. Additionally, it is most common that only individual "active" ingredients of products are required to be tested by the manufacturer - the entire formulations are not tested, nor are they tested in combination with

other formulated products being used in the same landscape. Scientists have shown that combinations of pesticides can be far more dangerous. Furthermore, pesticide labels on containers reflect short term exposure concerns only (eg. eye and skin irritation, etc.), not potential long term affects such as cancer, neurological, or infertility issues.<sup>1, 2</sup>

**Our nation's health, especially that of children, is deteriorating** with over 54% currently diagnosed by HHS with a chronic health condition or learning issues. New York University doctors estimate that pesticide exposures cause an annual



loss of 1.8 million I.Q. points in American children from neurological disorders. The numbers are increasing. Children are overwhelmed with toxins in our environment, and their buckets are full. Who among us does not know of such an affected child? People, pets, and wildlife are all being exposed to pesticides.

## Organic methods and protocols are being successfully used in many cities today,

resulting in fewer weeds, softer fields, and greatly reduced water use. Training is readily available from experienced landscapers.

- 1. Children's Exposure to Pesticides and Childhood Cancers <a href="https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/Children's-Exposure-to-Pesticide-and-Childhood-Cancers.aspx">https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/Children's-Exposure-to-Pesticide-and-Childhood-Cancers.aspx</a>
- 2. Project TENDR: Targeting Environmental Neuro-Developmental Risks The TENDR Consensus Statement https://ehp.niehs.nih.gov/doi/10.1289/EHP358

Of the most commonly used pesticides, 19 are linked with cancer, 21 with reproductive effects, 13 are linked with birth defects, 26 with liver or kidney damage, 15 with neurotoxicity, and 11 with disruption of the endocrine (hormonal) system.

Active ingredient glyphosate, sold under the brand name Roundup, the most commonly used non-selective herbicide in the world, has been designated as a probable carcinogen by the International Agency for Research on Cancer. It is listed under California's proposition 65 and the manufacturer is facing thousands of class action lawsuits from people who used the product and now have cancer.

2,4-D, the main ingredient in 'weed and feed' products and the most widely used selective herbicide on turf grass, has been designated as a possible carcinogen by the International Agency for Research on Cancer.

Both glyphosate and 2,4-D are shown in scientific research to have hormone mimicking effects at low levels of exposure.

Recent legal actions have shown that we have good reasons to question the wisdom of "doing things as we always have." The EPA's decisions fall far short of being fool proof. As time passes new technical information enlightens us on exposure hazards with chemicals like chlorpyrifos, atrazine, and now glyphosate that are either banned or have restricted use in the U.S. and/or other countries. In many locations though, some of these same toxic pesticides are still used in public places within the U.S. including school grounds. Decision makers responsible for safety of public places have an obligation to keep up with new information about pesticide toxicity.

**Synthetic fertilizers cause harm** to the beneficial microbes in our soil, evaporate into the atmosphere in the form of nitrous oxide, a green house gas 300x more potent than Co2. They wash out of soil contributing to nutrient pollution of water bodies, causing algae blooms and other problems in addition to being an unsustainable petroleum based product.

## The American Academy of Pediatrics:

"...Children's exposure to pesticides should be limited as much as possible."<sup>3</sup>

### Organic methods and protocols are being successfully used in many cities today,

resulting in fewer weeds, softer fields, and greatly reduced water use. Organic land management practices are being implemented in communities throughout the U.S. Examples include Harvard and Yale Universities, numerous cities in Maine, Irvine, California, Springfield, Massachusetts, Yellow Springs, Ohio, all Connecticut school grounds grades K-8, all New York public schools, and more. Training is readily available from experienced landscapers.

Children's Exposure to Pesticides and Childhood Cancers
 https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/Children's-Exposure-to-Pesticide-and-Childhood-Cancers.aspx



# **Organic Saves Money!**

#### **SO THE KEY QUESTION IS:**

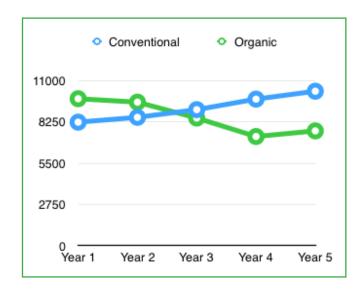
Why are we still using toxic pesticides in public spaces when safer alternatives are readily available?

#### A report comparing annual maintenance

**costs** for a typical 65,000 square foot high school football field over 5 years using both conventional and organic management techniques finds that once established, an organic turf management program can result in savings of greater than 25% compared to a conventional turf management program.<sup>4</sup>

Mt. Lebanon School District in Pittsburgh, Pennsylvania's program implemented in 2000 is "manageable and no more expensive than using pesticides." The school district reports "a relatively low cost with improved playing surfaces."<sup>5</sup>

You can play an important role in preventing diseases linked to pesticide exposure, and protecting those who are most vulnerable. Organic land management practices will not increase costs, and are being implemented in communities throughout the U.S. Examples include Harvard and Yale Universities, numerous cities in Maine, Irvine, California, Springfield, Massachusetts, Yellow Springs, Ohio, all Connecticut school grounds grades K-8, all New York public schools, and more.



- 4. A Cost Comparison of Conventional (Chemical) Turf Management and Natural (Organic) Turf Management for School Athletic Fields <a href="http://www.grassrootsinfo.org/pdf/turfcomparisonreport.pdf">http://www.grassrootsinfo.org/pdf/turfcomparisonreport.pdf</a>
- Smartschan, G.F. 2000. Superintendent of Schools, Mt. Lebanon School District, Pittsburgh, PA. Letter to U.S. Senator James Jeffords.



## More Benefits of Implementing an Organic Program

- Improve overall health, carbon storing capacity, and water retention of soil in turf fields and landscapes without use of toxic chemicals or synthetic fertilizers.
- Reduce use of fertilizers, thereby alleviating runoff of nitrogen and toxic chemicals into waterways.
- The need for less irrigation, which conserves water and saves money.
- Reduce the potential of future lawsuits due to exposure to toxic chemicals that cause cancer and other health issues.
- Protect wildlife, pollinator health and other natural resources.
- Provide a healthier environment for children, landscaping employees, and all others using landscaped areas.
- Raise awareness as to the benefits of organic landscape management, and set a positive example for the surrounding community.
   For example, allowing for the creation of educational pollinator and vegetable gardens and opportunities for positive media reports.

"Why did it take a group of citizens coming forward for us to recognize that we should be doing this?

This is such common sense."

 Mayor Christina Shea, Irvine, CA, upon passing their pesticide reform policy

#### **Get Started Today!**

You can play a key role in protecting public health and the environment by taking the initiative to implement proven organic land management practices. Cities, school districts, and HOA's have the opportunity to be leaders in sustainability - all while saving money on operating costs! Let us assist you to get started. We can connect you with experts on natural turf management and resources with alternatives to toxic pesticides.



www.NonToxicCommunities.com