## 10 Pets are also vulnerable to the short and long-term health effects of pesticides.



Animals exposed to pesticides have been shown to have those pesticides in their urine. Because pets play in yards and often ingest grass, they experience greater exposure to these poisons than most other living things. And, as with

children, their low bodyweight and size make even small accidental exposure a serious, sometimes fatal occurrence.

## 11 When pesticides are used indoors, the exposures are higher than when used outdoors.



Adults, children, and pets will all have higher exposure levels indoors, where the pesticides are often more concentrated. The risk of developing blood cancers such as leukemia and lymphoma increases significantly in children exposed to pesticides indoors, which a recent meta-analysis has

shown. A correlation between pesticide exposure and childhood brain tumors has also been observed.

#### 12 Pesticides should only be used as a last resort — and people need to know the risks of using them.



Before applying pesticides, organic pest control methods should be tried first. Organic pest control is defined as using a means of pest control that does not use man-made chemicals. Only when organic methods fail should pesticides be applied, and only with care, to reduce pets' and children's exposures.

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# **PESTICIDE RISKS ON LAWNS AND IN HOMES**





Pesticides include insecticides, for killing insects; berbicides, for killing weeds; fungicides for killing mold, mildew, and fungi (mushrooms); and rodenticides for killing mice and rats. All pesticides are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which is administered under the U.S. Environmental Protection Agency (EPA). People worldwide encounter pesticide mixtures everyday on lawns and indoor environments.

### Pesticides are intentionally toxic substances. They are designed to kill living things.



Most pesticides are inherently toxic, which is why the federal government regulates them. However, just because they are regulated does not guarantee that they are safe. Pesticides are tested for safety one pesticide at a time, yet they are often sold in combinations.

2 Many government-approved pesticides are carcinogenic, neurotoxic, endocrine disruptors and developmental toxins.



The federal government does not have the funding to do its own testing, so it relies on the pesticide industry itself to test the pesticide for its safety.

3 Lawn-care pesticides are not tested for their chronic health effects, such as cancer and neurotoxicity, unless the pesticide is also used on food.



Three kinds of pesticides are commonly used on lawns: insecticides, herbicides, and fungicides. People who depend on wells need to think about whether these chemicals are getting into their drinking water.

## **4** Pesticides are composed of active ingredients and "inert" ingredients.

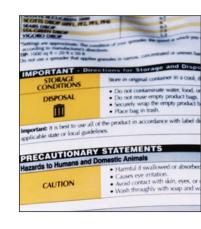
Pesticides are composed of active ingredients and "inert" ingredients. Inert ingredients can make up 90% of a pesticide.



The active ingredient targets the pests, and the inert ingredients are added to make the active ingredient more effective. The inerts are not identified on the pesticide label, so there is no way to know what is in them. Inert ingredients

range from non-toxic to highly toxic. Some inerts are toxic when they are swallowed or inhaled, while others are toxic when absorbed by the skin.

### 5 Federal laws to control pesticide risks rely heavily on the pesticide label.



Pesticide packaging and labeling are regulated under the authority of the federal government. Warning labels are in tiny print, while claims of benefits are in large print. Surveys have shown that many consumers do not read the labels on pesticide packaging.

## **6** Industry relies on pesticide labeling as the means of providing safety.



Pesticide labels do not warn about long-term health effects, such as cancer or neurotoxicity. Labels are only required to address acute toxicity, such as what to do if you swallow the pesticide or get it in your eyes.

#### 7 The popular "Weed & Feed" for lawncare is made up of 2,4-D, dicamba, and MCPP.



Pesticides are tested for their safety one pesticide at a time, yet this product contains three pesticides. Without testing, no one knows what that exposure actually means for people's health.

Four of the most popular lawn-care pesticides have been associated with non-Hodgkin's lymphoma.



These include the herbicides 2,4-D, dicamba and MCPP. The herbicide glyphosate, often marketed under the name Roundup, is sold everywhere in spite of the pesticide manufacturer being sued for it causing non-Hodgkin's lymphoma, leukemia, and brain cancer.

Children, infants, and fetuses are especially vulnerable to pesticide exposures.



Children take in more pesticides relative to their bodyweight than adults. In addition, their developing organs are more vulnerable to pesticide toxicity. Women who are pregnant should be particularly careful about any pesticide exposures.