

A recent study found that children of farm workers exposed to pesticides are more likely to be born with biliary atresia, a rare liver disorder.

Pesticides often cannot be washed off fruits and vegetables; residues are commonly found in food. One estimate holds that 40% of foods are contaminated with pesticides. Long range health effects of this kind of pesticides exposure have not been determined, although it has been implicated in variety of cancers. Additionally, improper handling of foods and pesticides can lead to extremely high levels of pesticides in foods.

Agriculture affects water supplies in a number of ways. Lakes, reservoirs and streams can be filled with silt when soil washes off farmland. Manure from farm animals washes into water supplies and pollutes them. The over use of groundwater for agriculture has led to depletion of groundwater and aquifer leading to water shortages. One estimate holds that more than half of all the water used goes towards growing feed for livestock.

OUR RESPONSIBILITY

- ⊕ Government should ban the import of hazardous pesticides.
- ⊕ Illegal manufacturing of toxic pesticides should be stopped.
- ⊕ An advisory service should be made available at farmers' field to provide them handouts of pesticides use.
- ⊕ Safety measures should be adopted.
- ⊕ Extensive surveillance of extent of groundwater pollution should be done.
- ⊕ Mass communication and audio-visual communication should be made for public awareness including TV transmission. Regulatory legislation regarding manufacturing, distribution, handling and usage needs to be implemented.
- ⊕ The use of pesticide exceeding the allowable limits in food items should be absolutely discouraged.
- ⊕ Integrated Pest Management Program started by Agriculture should be adopted.
- ⊕ Use of genetically engineered crop varieties should be introduced.
- ⊕ Biological control of pests and disease should be encouraged.
- ⊕ Food labeling with pesticide warning should be practiced.
- ⊕ Employment of techniques to reduce the concentration of pesticides in potable water through;
 - ⊕ Substituting alternative water sources.
 - ⊕ Distillation of water.
 - ⊕ Use of UV light to decompose the pesticide residue.
 - ⊕ Passing water through an activated carbon filter to remove the residue.
- ⊕ Hospitals should be facilitated with patients' examination for pesticide residue tests.



PESTICIDES an Agricultural Threat



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PESTICIDES, an alarming source of Earning:

The green revolution involves the use of modern machinery and an arsenal of technology, including chemicals such as fertilizers and pesticides to increase food output. The green revolution has been a particular help to our country, since it allows a relatively small number of farmers to feed a large population.

Chemical fertilizers do damage when they are washed into waterways, lakes and underground aquifers. They also poison water supplies and kill aquatic life. In addition, chemical fertilizers destroy the soil's natural balance. This makes the soil vulnerable to erosion, leaves it lacking in nutrients and starts a vicious cycle in which more fertilizer must be used to make up for soil depletion and chemical pesticides in particular do an enormous amount of environmental harm. They kill fish, birds and other wildlife, and can devastate entire species and ecosystem.



HOW CHEMICAL AFFECT THE ENVIRONMENT

Around the world, Farming is seriously eroding the soil and pesticides are polluting the water supply. Soil is not just dirt; it is a finely balanced ecosystem that has taken tens of thousands, and in some cases millions, of years to form. Soil contains minerals, nutrients, organic matter, and living microorganism, which together provide a perfect environment for growing food. The chemicals do more than kill insect pests; they also cause a significant amount of environmental damage. Pesticides applied to crops are washed away by rain into rivers and lakes. From there they work their way up through the food chain, doing damage along the way.

The rain washes chemical fertilizers into rivers, streams, and underground water supplies. The phosphates and nitrogen in the fertilizers cause lakes to eutrophy, or lead to the growth of certain bacteria that use up all the oxygen in the lakes. This leaves no oxygen for animals and plant life, and so water life is killed. Fertilizers washed into water supplies render toxic and undrinkable.

Byproducts of fertilizers, such as nitrous oxide, pollute the air and help cause global warming due to greenhouse effect.

Pesticides and herbicides used in farming are toxic not only to pests, but also to other plants and animals including people. These chemicals wash into water bodies or reservoir and then leach into aquifer. They also make their way into the food chain and kill many animals, often with devastating efficiency.

Pesticide contaminated insects are eaten by animals, especially bird, who can be harmed or killed by pesticides.

Pesticides wash through the soil into underground aquifers, and also into aquifer from rivers and streams that have been contaminated with pesticides. Well water comes from aquifers, so the people who use this water drink pesticide laced water. A study also shows that 10% of the wells contain pesticides.

Microscopic plant and animals in the water ingest pesticides and are in turn eaten by small fish. If the pesticides are the type stored in fat instead of excreted, they become concentrated in the fish. Larger fish then eat smaller fish, and the larger fish store increasing amounts of pesticides. Fish near the top of the food chain ingest the highest concentration of pesticides and can be killed by them. Birds that feed on fish contain even higher concentrations, and are frequently killed as well.

Pesticides kill not only pests, but also pollinating bees and other insects that feed on those pests-leading to the possibility that pest populations will explode once their natural predators are eliminated.



Farm workers are poisoned when pesticides are sprayed on them, or when they work in pesticide-laced field. World Health Organization report estimated that one million people are poisoned by pesticides each year worldwide,