

If families and school staff work together, schools free of pests and pesticides are more likely and all will benefit. See the *Unite for Healthy Schools* factsheet for how to do this.

Pesticides are chemicals designed to kill a variety of pests, such as weeds (herbicides), insects (insecticides), rodents (rodenticides), and mold (fungicides). However, their health effects reach beyond their intended targets because they can also affect human beings. Pesticides in schools can pose real hazards to students and staff. Children are especially sensitive to pesticides because they are still growing and their bodies are still developing. The safety limits for exposure to pesticides has not been established for children.

# HEALTH EFFECTS OF PESTS AND PESTICIDES

Some pests pose hazards. For example, cockroaches drop feces that make asthma episodes more severe. Mice droppings and urine are associated with asthma and allergies and other diseases. Ticks carry diseases such as Lyme disease. Other pests, such as bedbugs brought from home on book bags and clothing, cockroaches already mentioned above, and head lice, do not cause illnesses or disease but are irritating and itchy.

Acute symptoms from exposure to some pesticides include nose, throat and lung irritation, wheezing, coughing, pulmonary edema, skin rashes, headaches, nausea, diarrhea and dizziness. Their symptoms often appear identical to illness from other causes, resulting in frequent misdiagnosis of a pesticide-related illness.

Chronic effects of pesticide exposure may not become



apparent for weeks, months or even years after exposure. Scientific studies have linked pesticides to asthma, cancer (leukemia and lymphoma), reproductive effects, nervous system disorders and immune system deficiency.

## **TOXIC PESTICIDES**

There are many pesticides on the market today which should not be used in a school. Many of these pesticides are extremely toxic not only to pests, but also to humans. They include pyrethroids, carbamates and glyphosphates.

## **LEAST TOXIC PESTICIDES**

If a pesticide must be used, it should be the least toxic one available that is effective. While pesticides should be used as a last resort in schools, some are less toxic than others. These include: boric acid, diatomaceous earth, and silica gel.

### PEST PREVENTION PRACTICES

The best way to eliminate the need for pesticides is to change the conditions that allow the pests to thrive in the first place. These practices include:

- · Careful cleaning
- Pest-proofing waste disposal
- Keeping the structure of the building in good repair and eliminating cracks in the foundation
- Reducing the sources of food by keeping food in airtight and sealed containers
- Disposing of food and food wrappers in covered garbage containers
- Repairing leaky pipes and faucets, fixing holes and cracks and sealing areas around piping
- · Eliminating clutter
- Selecting pest resistant vegetation

#### LAWS THAT APPLY

Federal law has strict requirements for who can apply pesticides, how to use pesticides safely and how pesticides must be labeled, stored and transported. The label will tell you the active ingredients in the pesticide and when people can re-enter an area once pesticides have been used. Each state can make laws that are more stringent than federal law. The New Jersey Integrated Pest Management (IPM) law is a state law that is enforced by the New Jersey Department of Environmental Protection. IPM sets up procedures to control pests and minimize exposure of students and staff to pesticides. It is less expensive than spraying, more effective and can reduce the use of pesticides by 50 to 90 percent.

Here is what every school district legally is

required to do:

- Write an overall IPM policy for the district
- Design a site-specific IPM plan for each school
- Appoint an IPM coordinator to implement the IPM policy and site-specific plans
- Keep records of pesticide applications used on school property
- Annually notify all staff and parents/guardians of the school's IPM policy and the previous year's pesticide usage
- Give 72-hour advance written notice to staff and parents/ guardians of all pesticide use other than low-impact
- Post areas treated with non low-impact pesticides for 72 hours before and after the application
- When a pesticide is needed, first consider the use of low-impact pesticides
- When pesticides with no specific safe re-entry period (the amount of time that must pass after application of a pesticide before it is safe to re-enter the area) are used, time the application so students are not present and won't contact treated areas for seven hours

Since IPM affects everyone in the school, families should take advantage of this law and use it to ensure that the school has implemented safe policies. Families can find out who the IPM Coordinator is in the school, read the IPM policy, find out if pesticides are used in the school and which chemicals can be eliminated.

Families should call the Healthy Schools Now Coalition phone number listed below for direct help with pest and pesticide concerns and any other health and safety organizing issues.

This factsheet is one of a series prepared for the Healthy Schools Now Coalition by the New Jersey Work Environment Council, 7 Dunmore Ave., First Floor East, Ewing, NJ 08618 (609) 882-6100. Website is at: <a href="http://www.njwec.org/healthyschoolsnow.cfm">http://www.njwec.org/healthyschoolsnow.cfm</a>. Funded in part by the Princeton Area Community Foundation and the Schumann Fund for New Jersey.

Healthy Schools Now is a coalition of parents, educators, students and public school advocates dedicated to ensuring that all New Jersey children and school employees learn and work in safe, modern school buildings.



First Edition – January 2015