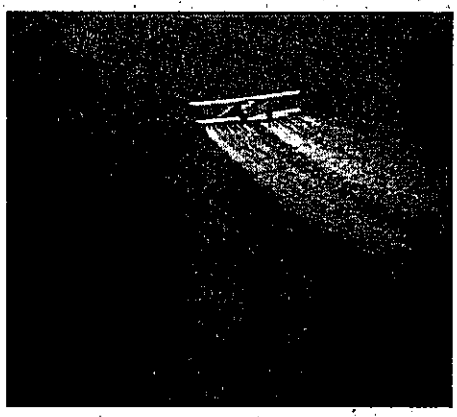
● NEWS FR

CALIFORNIA REMAINS "HOOKED ON POISON"

Disturbingly high levels of pesticide use in California, with use of cancer-causing pesticides more than doubling between 1991 and 1998, are the stark statistics presented in a new report by the Pesticide Action Network (PANNA) and Californians for Pesticide Reform (CPR). In *Hooked on Poison*, PANNA and CPR analyzed pesticide use data for California from 1991 through 1998. They found no effective system in place to help reduce use of the most toxic chemicals and recommended a mandatory phaseout of the most toxic pesticides with increased funding and grower support for transitions to least-toxic pest control.

Although California is home to less than 3 percent of the nation's cropland, 25 percent of national pesticide use occurs in California. Between 1991 and 1998, reported annual pesticide use in California increased from 153 million pounds to 215 million pounds, an average of 6.6 pounds per Californian. The national average is 3.1 pounds per person, less than half that amount. Approximately one-third of the pesticides applied each year in California are what CPR and



U.S. Dept. of Agriculture/Charles O'Rear

PANNA call "bad actors": pesticides that are acutely toxic, carcinogenic, toxic to the nervous system, reproductive or developmental toxicants, or groundwater contaminants.

The statistics above are based on reported use of active pesticide ingredients. The actual total of pesticides released into California's environment is much higher. Certain uses of pesticides, such as consumer use and pesticides applied to hospitals and schools, do not have to be reported. PANNA and CPR estimate that unreported use adds another 50–70 percent to the total amount of pesticide active ingredients used in California.

In addition to the reported active ingredients, pesticides contain unreported ingredients. Many of these chemi- ___ are toxic and over a hundred million pounds of them are released into the California environment.

At least 90 percent of reported pesticide use is for agriculture. PANNA and CPR found that the intensity of pesticide use in agriculture increased 60 percent, from 14.4 to 23.0 pounds per acre between 1991 and 1998. The crop category with the largest increase in intensity was vegetables and melons which increased 103 percent. Fruits and nuts had the second highest increase, 76 percent. The crops with the highest intensity of "bad actor" pesticide use were strawberries, sweet potatoes, carrots, brussels sprouts, potatoes, and watermelons.

Nonagricultural pesticide applications which require reporting in California include roadsides, structures, and landscaping. Statistics indicate much higher use of extremely toxic chemicals in these areas. For example, use in landscaping of metam sodium, a soil fumigant which is both a carcinogen and a developmental toxicant, has increased from 680 pounds in 1991 to 37,500 pounds in 1998.

PANNA and CPR, along with cancer and health organizations and physicians are appealing to the governor of California to show leadership in reducing the massive influx of toxins into California's environment. —*Melissa Lubofsky*

Kegley, S., S. Orme, and L. Neumeister. 2000. Hooked on poison: Pesticide use in California 1991-1998. Pesticide Action Network and Californians for Pesticide Reform. http://www.panna.org/resources/documents/hookedAvail.dv.html.

Melissa Lubofsky is an NCAP volunteer.

● FOOD NEWS

GAO CRITICIZES WEAK PESTICIDE PROTECTIONS FOR FARMWORKERS

There is a "paucity of information about how pesticides affect human health," whether for "farmworkers, farm children, or the population in general," concludes a new report by the U.S. General Accounting Office (GAO) about the impact of pesticides on farmworkers and their children. In addition, the primary means used by the U.S. Environmental Protection Agency (EPA) to reduce farmworkers' pesticide risks, the Worker Protection Standard, is inadequate because "EPA has little assurance that the protections the Standard calls for are actually being provided to farmworkers generally or to children working agriculture."

The report, requested by Representatives Waxman (D-CA), Lantos (D-CA), and Sanders (IND-VT), looked at available information about both the acute and chronic health effects of pesticides. It found "no capability to determine the

Caroline Cox is a JPR's editor.

precise national incidence or prevalence of pesticide illnesses that occur in the agricultural sector." Also, "a number of federally sponsored studies are underway on the chronic effects of pesticide exposure, but it will be many years, perhaps decades, before conclusive results from these studies are known."

EPA believes that a key part of the Worker Protection Standard, prohibiting entry to fields for specified intervals following pesticide treatment, protects children 12 years old and over. However, EPA has been unable to document its analysis in support of this conclusion and

U.S. Dept. of Agriculture/Tim McCabe

the agency has not considered children under 12. The GAO also found that enforcement of the Standard is lax. Enforcement remains "in its infancy" with at least 15 states conducting fewer than 10 enforcement inspections per year. EPA has "little or no information on the results" of these investigations.

The report, while only a small step, should encourage EPA to initiate some critically overdue efforts to protect farmworkers and their children from pesticides. —*Caroline Cox*

U.S. GAO. 2000. Pesticides: Improvements needed to ensure the safety of farmworkers and their children. Washington, DC, Mar. www.gao.gov.

● NEWS FROM AROUND

EPA TAKES ACTION ON CHLORPYRIFOS, FINALLY

Calling the action "a major step to improve safety for all Americans,"[1] the U.S. Environmental Protection Agency (EPA) announced on June 8 that some significant uses of the organophosphate insecticide chlorpyrifos will be cancelled. After December 31, 2001, chlorpyrifos will not be sold for most indoor and outdoor residential uses; most uses in schools, parks, and other institutions; all uses on tomatoes; and uses on apple trees after fruit has begun to form.[2]

Chlorpyrifos, first registered in 1965,[3] is currently the most widely used insecticide in the U.S.[4] Estimated annual use is 24 million pounds, split evenly between agricultural and nonagricultural uses.

A number of chlorpyrifos uses will continue: use on an additional 110 food crops[5] will not be restricted, use to control fire ants and mosquitos is unchanged, and termite treatments are on a slower phaseout schedule. Golf course use will also continue, as well as uses on roadway medians, but at a lower application rate than is currently allowed.[2]

■

Caroline Cox is a JPR's editor.

EPA's decision to restrict use of chlorpyrifos is a result of the agency's evaluation of the insecticide under the 1996 Food Quality Protection Act. The act requires special protections for children and established an extra tenfold safety factor for EPA to use when doing pesticide risk assessments.[2]

In December, 1999, EPA released a preliminary risk assessment for chlorpyrifos, which was criticized because the children's safety factor was reduced from ten to three. EPA released a final risk assessment for chlorpyrifos June 8 in which the children's safety factor was restored to ten.[6]

EPA's decision to restore the children's safety factor was based on studies evaluated by the agency this spring. One new study showed that newborn laboratory animals were more susceptible to chlorpyrifos than adult animals at doses substantially lower than had been observed in earlier studies. Other studies showed that chlorpyrifos exposure caused structural alterations in developing brains, and that these effects were observed at all doses tested for which measurements were made.[5,6]

Clearly, EPA's action restricting chlorpyrifos uses is important. However, it is shocking that EPA did not act sooner; chlorpyrifos has been in widespread use for nearly 35 years.

Although about half of chlorpyrifos use is agricultural, only a few of these uses of chlorpyrifos are affected by EPA's action. It thus fails to protect farmworkers who are occupationally exposed.

The announcement also raises serious questions about the other large families of nerve poisons that are commonly used as insecticides: carbamates (carbaryl, for example) and pyrethroids (permethrin, for example). If cancellation of chlorpyrifos uses just results in increased use of these other chemicals, many of the same risks remain. Implementation of nonchemical pest management techniques is the only long-term solution. —*Caroline Cox*

1. U.S. EPA. 2000. Dursban announcement. Speech given by Carol Browner, administrator. Washington, DC, June 8. www.epa.gov/pesticides.
2. U.S. EPA. Prevention, Pesticides and Toxic Substances. 2000. Chlorpyrifos revised risk assessment and agreement with registrants. Washington, DC, June. www.epa.gov/pesticides.
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4. Aspelin, A.L. and A. H. Grube. 1999. Pesticides industry sales and usage: 1996 and 1997 market estimates. U.S. EPA. Office of Pesticide Programs. Biological and Economic Analysis Div. Washington, D.C., Nov. Pp. 21-22.
5. U.S. EPA. Office of Pesticide Programs. Health Effects Division. 2000. Human health risk assessment: chlorpyrifos. www.epa.gov/pesticides.
6. U.S. EPA. Undated. Overview of chlorpyrifos revised risk assessment. www.epa.gov/pesticides.