

# A growing concern

## Pesticides and children co-exist around schools

*Editor's Note: This is the first of a two-part series. Monday: How some schools steer clear of pesticides.*

By MARTHA MENDOZA  
Sentinel staff writer

**A** CRES OF strawberries are ripening across the street from Ohlone Elementary School.

Budding apple orchards line the roads where children walk to Bradley Elementary School. A vast and juicy raspberry patch backs onto Amesti Elementary School's playground. The view is lush and healthy, but danger hides among the berries, the branches and the dirt.

Each year, thousands of

pounds of pesticides are applied to these crops to thwart diseases, increase production and help agriculture remain the largest industry in the Pajaro Valley.

But the pesticides are also toxins, nerve agents and carcinogens. They can cause tumors in rats, cancer in dogs and neurological disorders in mice.

Now students at several Pajaro Valley schools are complaining of nausea, headaches and fatigue. Some teachers are wondering why their colleagues are getting cancer.

In a search through hundreds of files at the county agricultural commissioner's office, the Sentinel found that each year, farmers next to schools are being cited for using dangerous pesticides with-

### FARMS AND SCHOOLS:



too close for comfort

out the proper precautions.

No scientific connection has been made between medical problems at schools and nearby pesti-

cide use. But farmers say the schools shouldn't be there, health officials say the situation warrants investigation, and parents are concerned.

"Obviously it's not a healthy environment if your child comes home with headaches or feeling nauseous every day they spray," said parent Shannon Goodwin.

### Warnings ignored

**F**ARMERS BEGGED the district five years ago to not build Ohlone School in the middle of a 40-acre artichoke field that had been dusted regularly with pesticides and fertilizers.

Neighbors said the land had been poisoned, and testified that five adults in the area had died of cancer in the past few months.

School administrators listened, but reasoned that agricultural land is less expensive, and flatter, than most in the county, and state officials deemed it safe.

Now parents are beginning to

wonder.

At a PTA meeting at Ohlone School last week, parents discussed their concerns about having their school directly across the street, and downwind, from what is now a 200-acre strawberry field where methyl bromide is used. Some parents say their children are coming home complaining of headaches and drowsiness after the fields are fumigated.

According to the Environmental Protection Agency, methyl bromide is an acute toxin that causes headaches, nausea and muscle tremors from short-term exposure. Long-term effects include muscle ache, fatigue and impaired motor coordination.

Ohlone School Principal Ricardo Balderas said, "We know the pesticide is lethal, we know it's banned by the year 2000 and we're just wondering what's going to happen to us 10 or 20 years from now. Are we guinea pigs?"

Please see PESTICIDES — A10



At left, children play at Ohlone Elementary School amidst the backdrop of a 200-acre strawberry field where methyl bromide is used. Some parents say their children are coming home complaining of headaches and drowsiness after the fields are fumigated. Farmers in the area had requested five years ago that the school not be built in the area.

Photos by  
Dan Coyro/Sentinel

## South County farmer tills through years of frustration

By MARTHA MENDOZA  
Sentinel staff writer

**WATSONVILLE** — For seven years, Arturo Ortiz has battled inspectors, bugs, drought, children and the recession to farm 18 acres of strawberries across the street from Salsipuedes Elementary School.

"I'm sick and tired of farming," said Ortiz, who is 53. "The government here blames us for everything."

In February, county agricultural inspectors revoked his permit to use five kinds of pesticides because he hadn't filed the correct forms at the correct time in the correct office.

He is still allowed to use, chlorpicrin, a form of tear gas, and methyl bromide, a highly toxic soil sterilizer used on strawberry fields.

If inhaled, methyl bromide is extremely toxic to humans, causing acute and chronic effects such as respiratory problems, neurological disorders and even death. It

### More inside

- Why pesticides must be used with caution — A10
- Where pesticide problems have occurred near schools — A10
- Pesticides currently used by local farmers A11

### MONDAY

- How some schools keep pesticides off campus

will be banned in the United States by the year 2000.

Almost all strawberry growers in the county use methyl bromide, but Ortiz is one of only a few strawberry farmers in

the county with strawberry fields next to a school.

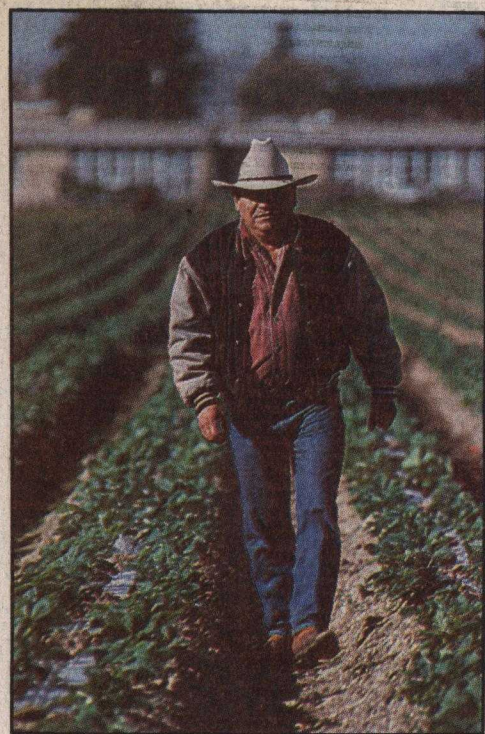
The fields were there first, but since schools were built, it has limited his ability to farm. He waits until Friday nights to fumigate with the methyl bromide, and only uses it once every few months.

Pesticide restrictions are tighter near schools, and children inevitably wander across the street, hop his wood and wire fence, and eat the berries or toss clods in the fields.

"What can I do? I put up the danger signs but they still get in," he said.

In recent months, teachers and parents have raised concerns about methyl bromide used near schools. Some students have complained of headaches, fatigue and nausea after fumigations.

But Ortiz said as long as his competitors are using the pesticide, he probably will, too.



Watsonville farmer Arturo Ortiz, 53, says "The government here blames us for everything."

Please see FARMER — A10



# Pesticides raise concern

“We know the pesticide (methyl bromide) is lethal, we know it’s banned by the year 2000 ... Are we guinea pigs?”

— Ricardo Balderas,  
Ohlone principal

“... agriculture, as it’s practiced in our community, is a very safe industry.”

— David Moeller,  
county agriculture  
commissioner

“There is compelling evidence that environmental factors account for increased cases of breast cancer”

— Dr. Devra Lee Davis,  
adviser to the U.S.  
health department

“Of course things could be improved, but

Continued from Page A1

Strawberry farmers say methyl bromide is safe when used correctly under strict state and federal guidelines.

Across town at Calabasas Elementary School, named after a field of pumpkins that formerly surrounded the school, Principal David Bilardello doesn’t know his neighbors, and said pesticides used on the adjacent strawberry farm are “really not an issue.”

“We have very little contact with the farmers, and there haven’t been problems,” he said.

But county Deputy Agricultural Commissioner Rick Bergman said he has had several complaints about lime sulphur being sprayed near the playground at Calabasas.

## Hysteria or science?

THE SANTA CRUZ COUNTY Farm Bureau’s position has always been that schools should not be placed next to agriculture.

“The two are just not compatible,” said Jess Brown of the Farm Bureau.

Brown said drifting pesticides and chemical spills are only a small part of the problem.

“Certainly when those mistakes happen, you don’t want a school next door,” he said. “But even without pesticides, there are problems.”

Farms are dusty and noisy, and can disturb classrooms. Students get into fields, steal produce and vandalize equipment, he said.

Farmer Tom Am Rhein recently turned down an opportunity to farm next to a school.

“It’s just too great of an economic liability. Once the accusation is made, the farmer is sunk,” he said.

Farmer Bill Ringe, whose children attend Bradley Elementary, says it is unfair to connect cancer, or any health problems at schools, with the neighboring farmers.

“Hysteria can be created really easily here,” he said. “The misconception with most people is that pesticides are poisons. Actually, they’re medicine for the plants. Just because something is toxic to one thing doesn’t mean it is toxic to another.”

Ringe’s assertions are echoed among the agricultural community, which struggles to put food on people’s tables while battling tight government restrictions, as well as criticism about health hazards and environmental damage.

In recent years, that criticism has come not only from environmental groups and advocates, but from state and federal agencies that have imposed stricter regulations on what pesticides can be used.

Locally, farmers must pass tests



Dan Coyro/Sentinel

Farm laborers work the rows of soil with Salsipuedes school in the background.

dents are being exposed to,” he said.

## The smell

THE SCENT of pesticides is noticeable these days at Bradley, Amesti and several other Pajaro schools because farmers are spraying lime sulphur on apple orchards almost every morning.

“It smells like rotten eggs,” said one student.

The yellow dust billows behind the tractors, bursting in a mustard-colored cloud above the branches. Sometimes it puffs over cars on their way to school. Last month it settled in a light film on Amesti’s playground.

Lori McLennan, a parent of two Bradley School students, marched down to the principal’s office earlier this year after she smelled pesticides in the air.

“They said the farmers can’t spray within so many feet and that I don’t need to worry and blah, blah, blah,” she said. “They just seemed really relaxed about it.”

Bradley Principal Paul Owen said he is not concerned, because a parent from his school who is a

years at MacQuiddy Elementary School.

“Every time someone gets cancer here it’s like I got it all over again,” said Ruby Tapiz, a kindergarten teacher at Bradley. “It’s been really difficult.”

Five years ago, Tapiz had a mastectomy after being diagnosed with breast cancer. For six months, she had chemotherapy on Friday nights, threw up all weekend, and came in to teach on Monday morning.

Tapiz said she has never heard of pesticides being connected to breast cancer, and attributes hers to a combination of “age and stress factors.”

Recent studies, including one presented at the American Association for the Advancement of Science conference in San Francisco last month, show that pesticides may be a cause of breast cancer.

“There is compelling evidence that environmental factors account for increased cases of breast cancer, and we’d better pay attention to it,” said Dr. Devra Lee Davis, disease prevention adviser to the U.S. Department of Health and Hu-

## Warning: handle with care

Farmers use pesticides to protect plants from fungus, bugs, worms and rodents so they can get higher yields of high-quality fruits and vegetables.

They also cause a range of acute and chronic health effects, ranging from wheezing and itching to reproductive and immune system damage.

In 1992, 65 percent of the 138,000 pesticide-related poisonings reported nationwide involved children.

A 1993 report by the National Academy of Sciences says children are more susceptible to pesticides than adults because their bodies are still growing, and their nervous systems and organs are still developing.

“The data strongly suggest that exposure to neurotoxic compounds at levels believed to be safe for adults could result in permanent loss of brain function if it occurred during prenatal and early childhood period of brain development,” said the report.

for 80 percent of the annual use nationally, according to the EPA.

No pesticides are sprayed from airplanes onto the orchards and fields near Santa Cruz County schools. Instead, they are either sprayed in a dusty substance up onto leaves and branches, or sprayed on the ground in a powder or liquid form. In some cases, the pesticides are in traps laid out for gophers or buried near rodent holes.

At the National Coalition for Alternatives to Pesticides, Becky Riley said pesticides can travel from fields and orchards in many ways. The most noticeable way they drift is through the air, in small dust clouds.

Pesticides also can travel in scent-free, dust-laden particles that can be inhaled, in rain water, in direct runoff of rain water, through soil seepage, and, according to several recent studies, even in fog.

Although most pesticides break down with time, some remain



## What can you do? Close the schools? Close the farms?

— Dr. Ira Lubell,  
county health officer

### FARMS AND SCHOOLS:



too close for comfort

and get permits from the county agricultural commissioner before they apply any pesticide.

But county officials say tight budgets and limited staff make it tough to enforce regulations.

According to county records, some farms near schools had not been visited since 1989.

The county agricultural commissioner's office has only four inspectors for pesticide enforcement, to monitor 40,000 to 50,000 pesticide applications a year at 2,700 sites. Last year, inspectors found violations at about 30 percent of their 250 visits.

"We can't make the world risk free, but I think we have a regulatory system in place that gives us the assurance that we live in a very safe place and that agriculture, as it's practiced in our community, is a very safe industry. We should enjoy the bounty that comes from successful agricultural industry and not be concerned whether the food supply is safe or whether it's safe to be near agriculture or not," said County Agricultural Commissioner David Moeller.

Still, Pajaro Valley Unified School District Superintendent Anthony Avina isn't so sure his campuses are safe.

"We don't know what our stu-

dent farmer had told him it would be happening.

"It's a safe, mild thing used on fruit trees," said Owen, repeating what he had heard. According to the state Office of Pesticide Research, lime sulphur is non-toxic and doesn't have long-lasting effects, but it can cause nausea and headaches.

Grower Louis Pista grows apples on the 15-acre Frapwell Ranch next to Bradley Elementary School. On his permit, inspectors have written notes year after year advising him to "Take all necessary precautions to prevent problems to Bradley School," and "Please check with the school about spray times."

Principal Owen said he has not heard from Pista.

Pista refused to talk to the Sentinel.

### Cases of cancer

**M**ORE PERPLEXING than the sprays, and more disconcerting than the headaches and nausea, are five cases of cancer among teachers at Bradley Elementary School in the past five years — bone cancer, breast cancer, colon cancer, lymphoma and more.

Ironically, the school's new principal, Paul Owen, arrived this year with cancer, after working for

man services. The cancers are a highly charged issue at Bradley. Some teachers declined to be interviewed for this story. Others didn't return telephone calls.

"A lot of people are concerned that we live in an agricultural area where a lot of sprays are used, but we are all friends — or family — of farmers, and this is a really tight community," said Topiz.

A few miles away from Bradley at Amesti Elementary School, there have been two recent cases of breast cancer — a librarian has died, and a teacher had a mastectomy.

"I'm really concerned. I want to know what is being used, and what we can do about it," said Amesti teacher Marilyn Garrett, who doesn't have cancer.

According to state epidemiologists, about one in three Californians eventually will have cancer. The number of new cases being reported from Pajaro Valley schools is above average, but not similar enough, nor abundant enough, to constitute an official cancer cluster.

Bob Spear, a professor at UC Berkeley's School of Public Health, said sources of cancer are tough to pin down because it can take decades to develop after exposure

to a carcinogen. "The cancer cluster thing is an extraordinarily difficult thing to identify," he said.

### Nothing to see

**A**CCORDING TO county records, a variety of pesticides is used near Bradley and Amesti. These range from guthion — a highly toxic nerve gas that when used incorrectly has damaged chromosomes and caused tumors in laboratory rats — to the comparatively innocuous lime sulphur, which can sting eyes and cause nausea, but has no long-lasting effects.

Last year, Pajaro Valley Unified School District administrators decided to investigate the cancers.

District safety officer Cliff Loudon surveyed the air, water, soil and telephone lines. He ruled out asbestos, lead, radon, and contaminated ventilation systems.

Loudon said last week he still wants to know about PCBs, an oily liquid used for insulation on telephone lines, but he is not particularly concerned about the pesticides used nearby.

"I'm not an expert, but I don't think it's pesticides, because if that was it, the children would be getting ill first, and I haven't seen any breast cancer or prostate cancers in the kids," he said.

Dr. Marilyn Moses, director of the Pesticide Education Center in San Francisco, says the worst effects of the pesticides are not going to show up in the children. Instead, she said, they will become evident when the children have grown up.

"The real problem with this sort of thing is that you don't see anything, but you are adding neurotoxic insults to these children while they are just developing," she said. "This is very subtle, low-grade stuff that the kids are going to pay for many years later."

Moses also said that exposure to combinations of pesticides, and repeated exposures, can compound the risks.

chemically active for years. They can be tracked indoors, and vapors can move through open windows.

Martha Mendoza

"Those children are being exposed to a whole soup of toxic chemicals, many of which are carcinogens," said Dr. Moses.

Although studies of children and pesticides are uncommon, a Missouri Department of Health study associated home and garden pesticide use with childhood brain cancer. A University of Southern California study linked household pesticide use with increased frequency of childhood leukemia.

### Lack of monitoring

**I**N SANTA CRUZ COUNTY, there is no monitoring of the long-term effects of exposure to pesticides. The county Health Services Agency and the county agricultural commissioner track acute, or short-term, illnesses like poisonings, tearing eyes, or nausea in farmworkers, students, or anyone else in the county.

These are seldom reported — two or three times a year — and even when they are, county health officer Dr. Ira Lubell said he is skeptical about the information.

"There's a certain amount of hysteria involved," he said. "If one kid starts vomiting, then 30 kids start vomiting."

Lubell said it would take an obvious cluster of cancers or birth defects to get his agency involved in an investigation of the long-term effects of pesticides.

"Chronic effects would show up in decreased liver function, bone diseases, maybe cancer or neurological problems. We haven't seen higher incidents of these things in our community, but we don't look for them specifically, either," he said.

Tracking those health problems would be complicated, he said, because so many factors affect people's health — what they eat, where they live, genes and more.

"Do I think it could use further investigation? Definitely. Do we have the resources for further in-

Please see PESTICIDE — A11

## Pesticide use and misuse near schools

In a review of the files at the County Agricultural Commissioner's office, the Sentinel found that farmers had been warned or cited for violations near most schools in agricultural areas. No farmers had been fined as a result of the citations. Instead, they were taught about proper safety and use of the pesticides, or barred from using the chemicals.

### 1 Bradley Elementary

1994 permits for a farmer with orchards next to Bradley warn him to "Please check with school about spray times" and "Take all necessary precautions to prevent problems to Bradley School for future sprays." Bradley administrators have not heard from him.

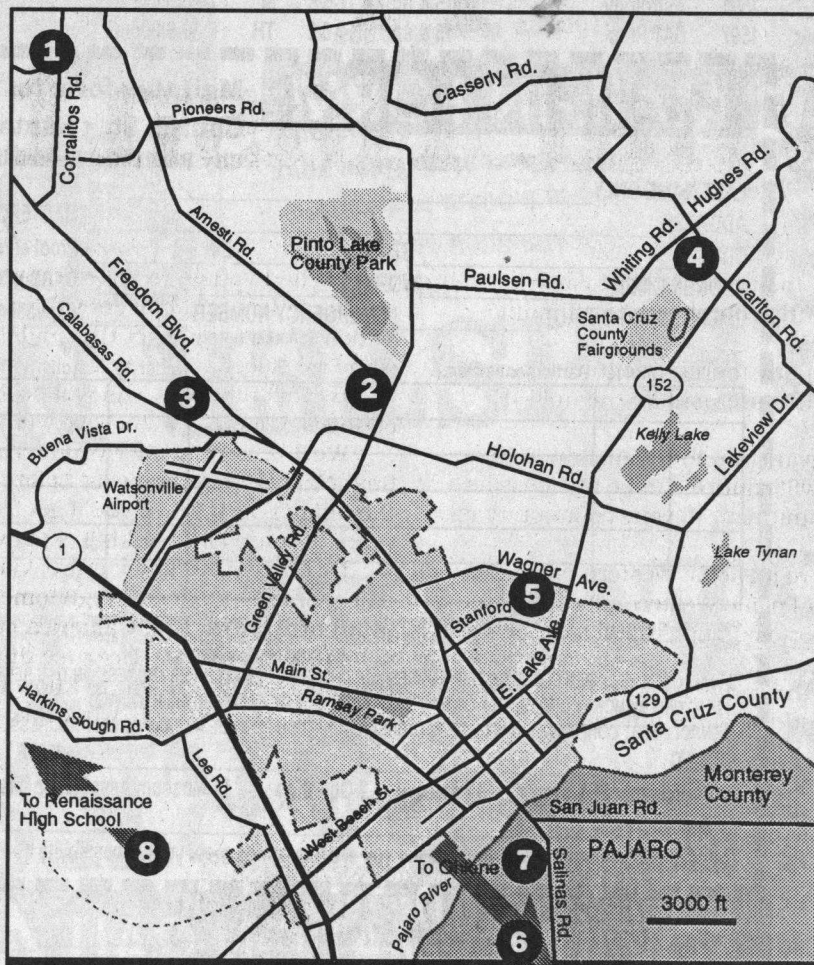
### 2 Amesti Elementary

On Feb. 4, 1994 the playground at Amesti was dusted with lime sulphur when a neighboring farmer treated his raspberry field.

On May 13, 1992, a farmer next to Amesti was given a notice of violation for applying paraquat incorrectly. The person applying the pesticide was not wearing the required protective clothing, waterproof footwear or face shield. Inspectors note that the farmer is "one of the older group of farmers who respond better to educational remedies in our judgment than a punitive action."

### 3 Calabasas Elementary

On July 27, 1993, an apple farmer who shares a fence with Calabasas was given a notice of violation for not taking the necessary precautions when applying aluminum phosphide for gopher control. In addition, the inspector noted that the pesticides were not locked up.



Source: County Agricultural Commission's Office

### 4 Salsipuedes Elementary

On Feb. 28, 1994, a berry farmer with fields next to Salsipuedes lost his permits to use several highly toxic pesticides, including paraquat, because he hadn't been using them correctly.

On May 11, 1993, a farmer across the street from Salsipuedes School was given a notice of violation for having pickers in the field that had just been sprayed.

In 1992, safety officers found containers of pesticide parathion next to a "weeping" case of dynamite in a barn near Salsipuedes. "We envisioned this toxic cloud enveloping the school," said Deputy Agricultural Commissioner Rick Bergman. "It was pretty scary."

### 5 MacQuiddy Elementary

On May 1, 1993, a farmer with strawberry fields next to MacQuiddy was given a notice of violation after pesticides drifted from his fields into a nearby garage.

### 6 Ohlone Elementary

Built four years ago on agricultural land, this school is surrounded by strawberry fields treated with methyl bromide. On a school day last week, fields across the street were posted "poison. Do Not Enter."

### 7 Pajaro Middle

This school backs onto fields regularly treated with pesticides.

### 8 Renaissance High

This school backs onto fields regularly treated with pesticides.

## Farmer

Continued from Page A1

"You don't use the pesticide because you want to hurt school children. You use them because you have to," he said. "If they're so dangerous, why don't they stop selling them?"

Along with the Pajaro Valley's perfect climate and increasing acreage, methyl bromide is a key reason why the strawberry industry here topped a record \$80 million in 1993. By using methyl bromide,

farmers can thwart diseases that prey on the plant and stretch its production limits, gaining 30 to 40 percent greater yields.

"It's not that we use methyl bromide because we like to. We use methyl bromide because we want to grow the healthiest crop that we can," said Frank Westerlund, research director for the California Strawberry Advisory Board in Watsonville at a conference last fall.





Bill Lovejoy/Sentinel

Farming machinery operates near Bradley school.

## Pesticides raise concern

*Continued from Page A10*

vestigation? Definitely not," he said. "Of course things could be improved, but what can you do? Close the schools? Close the farms?"

At Salud Para La Gente, a non-profit health clinic in Watsonville, physician assistant Eileen Donnelly says in her ten years there, she has seen a steady increase in birth defects, miscarriages, asthma and allergies in the patients she sees.

But the clinic has no studies to back up the claims — administrators say studies take more money than they have.

Donnelly said she doesn't need quantitative evidence to know something is wrong.

"I don't feel like studies need to be done," she said. "It just can't be healthy for people to be exposed to that stuff all the time."

### What can be done

**T**HIS MONTH, a row of shrubs will be planted on the border of Amesti School to beautify the campus and create a shield between the adjacent fields and the playground.

The project is a collaborative ef-

fort between the Farm Bureau, the California Nurserymen and the school district.

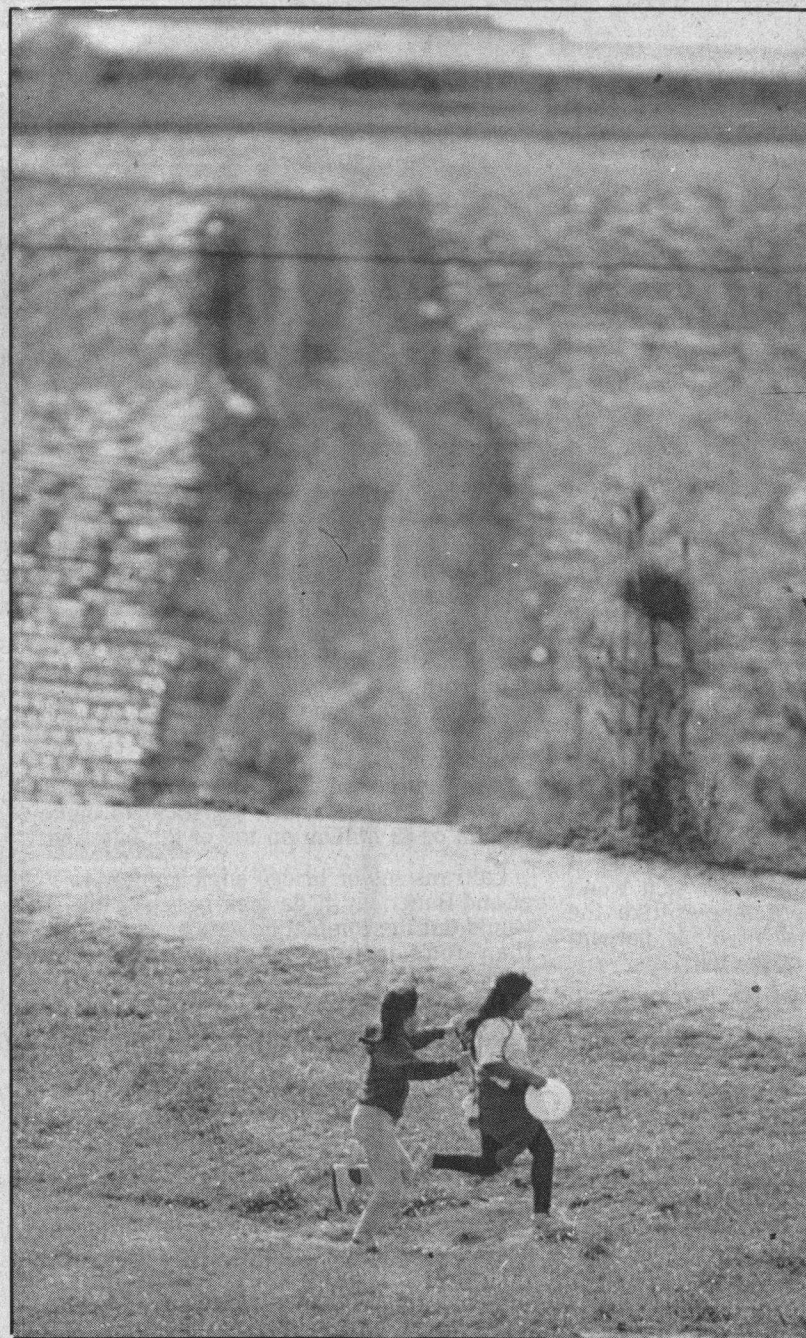
Deputy Agricultural Commissioner Rick Bergman said it would be prudent to plant similar borders at other schools that have apple orchards nearby. Toxicologists say thick, bushy hedges can control drift from nearby fields onto playgrounds.

EPA officials suggest that farmers and school officials work together to make sure pesticides are applied when school is not in session.

Following that advice, a farmer neighboring Bradley School fumigated his former apple orchard with methyl bromide Friday afternoon to prepare the soil for raspberries. Students are on spring break and will not be back for a week.

Amesti school teachers, parents and administrators have formed a committee to get to know their neighbors and work with them on using pesticides carefully.

Students have even been involved, researching and writing about pesticides, agriculture and



Dan Coyro/Sentinel

Kids play before the fields at Ohlone school.

health.

Bergman said he would be happy to work with schools and farmers, and said it is frustrating to hear complaints about pesticide use second-hand.

"We don't get reports from anyone, but we hear rumors," he said.

At Salud Para La Gente, director Barbara Garcia said educating par-

ents, administrators, farmers and students would be a good start.

"The pesticides are poison," she said. "We know that long-term exposure could have potentially devastating effects on people. Having fields next to schools is a potentially dangerous situation, and we need to have a community effort to teach people about the hazards."

## What county farmers use

More than a dozen pesticides are used on fields and orchards near Santa Cruz County schools.

According to county records, they usually are applied correctly and within the federal guidelines. State pesticide regulators say they are safe when used correctly. There are, however, occasional accidents.

The county agricultural commissioner has limited when farmers near schools can spray Guthion, Phosdrin and paraquat. Farmers cannot spray these chemicals within 200 feet of a campus from one hour before school opens until one hour after it closes. The other pesticides are regulated, but there is no special warning for using them near schools.

This list identifies a chemical and its form, with brand name in parentheses.

**ALUMINUM PHOSPHIDE** fumigant: After being buried in rodent holes, it releases poisonous fumes that travel through the tunnels and kill the gophers, rats and other pests. The gas can be lethal if it is inhaled at close quarters in great amounts, a situation unlikely to occur in farming. When used outdoors, it dissipates within a few days.

Used near: Amesti, Bradley, Calabasas, MacQuiddy elementary schools.

**AZINPHOS-METHYL** (Guthion) liquid: A highly toxic nerve gas, if inhaled, these colorless crystals used locally to control worms cause wheezing, bluish skin, aching behind eyes, runny nose and watering mouth. If swallowed, it causes nausea, vomiting and cramps. Repeated exposures to concentrations that are too small to produce symptoms may result in an onset of symptoms.

Used near: Bradley.

**CARBARYL** (Sevin) liquid: Overexposure to this pesticide causes small pupils, watering eyes, runny nose, sweating, nausea, cramps and vomiting. A nerve gas used to control worms, it has caused birth defects in pregnant animals and may cause kidney damage. A 1993 study also showed a possible connection to childhood brain cancer.

Used near: Calabasas, Bradley, MacQuiddy, Salsipuedes; Pajaro Middle School

**CHLOROPICRIN** fumigant: People with asthma and allergies are particularly susceptible to this chemical, which is a tear gas used to dissipate other pesticides. Short-term exposure causes eye irritation, tearing, skin irritation, nausea and vomiting. Long-term exposure could cause increased susceptibility to future overexposure.

Used near: Calabasas, Bradley, Amesti, MacQuiddy.

**LIME SULPHUR** dust: This yellow dusty powder is used to control apple scabs. It is an irritant that smells like rotten eggs. It is not a carcinogen, not systemic, and cannot get inside the body.

insecticides here, it takes very large exposures to cause symptoms. If inhaled, it can cause wheezing, small pupils, headaches and runny nose. If swallowed, it can cause cramps and diarrhea. If absorbed through the skin, it can cause twitching and sweating. High exposure for a long time may cause liver damage.

Used near: Salsipuedes.

**METHOMYL** wettable: Tests have shown long-term overexposure to this pesticide can cause nervous disorders, anxiety, depression and possibly goiters. A nerve gas, it has been detected on some fields up to seven days after spraying. Locally, it is used to control a strawberry pest, the lygus bug, by poisoning the insect's nervous system.

Used near: Salsipuedes.

**METHYL BROMIDE** fumigant: This toxic gas is used to kill living organisms in soil before to planting, as well as to fumigate buildings. On local strawberry fields, it is applied under tarps designed to keep it from dissipating. Federal law mandates that methyl bromide be phased out of use by the year 2000. An acute toxin, it causes headaches, nausea and muscle tremors from short-term exposure. Long-term effects include muscle ache, fatigue and impaired motor coordination.

Used near: Amesti, Bradley, Calabasas, MacQuiddy, Ohlone.

**METHYL PARATHION** (Penncap) liquid: Although a safer alternative to ethyl parathion, there is scientific evidence this pesticide may be carcinogenic. Used in this area to control worms, it has had mutagenic effects on laboratory animals.

Used near: Bradley, Calabasas.

**SYSTHANE** (Myclobutanil) wettable: Used to control mildew, this pesticide has not shown any long-term chronic effects. Short-term exposure can cause itching and rashes, and eye irritation.

Used near: MacQuiddy, Salsipuedes.

**PARAQUAT** liquid: There is no anecdote to poisoning by paraquat, one of the most widely used herbicides in the world. Used locally to control weeds, it takes just half a teaspoon of paraquat to kill someone. It often is used for suicide in Third World countries. In rats, it affects DNA, damages chromosomes and causes tumors.

Used near: Amesti, Calabasas, Salsipuedes.

**STRYCHNINE** (bait): This common rat poison is dangerous only if swallowed. A lethal dose is about a teaspoon, more than can be casually inhaled. In local fields, it is buried as bait for rodents.

Used near: Bradley, Calabasas.  
**2,4-D** (Weed-Be-Gone, Trimec) liquid: Used to control weeds, this highly toxic pesticide has been tied in two separate studies to non-Hodgkin's lymphoma. It may cause reproductive problems. Short-term exposure can irritate skin, breathing and eyes.

## Americans develop big taste for strawberries

The Associated Press

WASHINGTON — Americans are popping more strawberries into their mouths and doing it year-round, according to the Agriculture Department.

vice.

"U.S. strawberry production has been climbing steadily at an average of almost 8 percent a year for two decades, providing consumers with nearly year-round supplies," it said.

during the last two decades, the report said.

"Good-quality strawberries are now available to consumers nearly year-round, thanks to new varieties that bear fruit for months rather than weeks, although shipments and



U.S. strawberry consumption has doubled since the early 1970s, and among U.S. grown fresh fruits, strawberries are now second only to apples in value," said a report this month in Agricultural Outlook magazine, published by USDA's Economic Research Ser-

Development of improved varieties, routine soil fumigation and California's switch to an annual cropping system have raised yields and decreased production costs.

This has kept retail prices relatively stable

prices still fluctuate with the seasonal supply pattern," it said.

The 1993 U.S. strawberry crop was estimated at a record 711,900 tons, worth nearly \$750 million to growers. California output was up 10 percent from 1992.

Overexposure can cause stinging eyes, nausea, rashes and headaches.

Used near: Bradley, Amesti, Calabasas.

**MALATHION** dust: This nerve gas is used in this area to control aphids. One of the least toxic

Used near: Bradley.  
**SOURCES:** U.S. Environmental Protection Agency, National Institute of Occupational Safety and Health, Santa Cruz County Agricultural Commissioner's Office.

Martha Mendoza

(Paid Advertisement)

• COMERICA • PACIFIC WESTERN • COMERICA • PACIFIC WESTERN •