Florida pesticide monitoring draws fire last year, Florida agricultural inspectors levied just $38,590 in fines, while California inspectors collected $5.5 million.

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In California, the country's top agricultural producer, farmers use 51 pounds of pesticides to grow an acre of tomatoes, according to federal figures. Florida farmers employ 196 pounds. An acre of California oranges requires 18 pounds of those active chemical ingredients. Florida oranges need 71 pounds an acre. Some of the chemicals are harmless, but others are "highly toxic," capable of causing illness in humans, especially if they are not used properly, according to the federal Environmental Protection Agency. A number have been shown to cause birth defects in lab animals, and the long-term effects of chronic pesticide exposure are not known. But Florida employs only 40 to 45 pesticide exposure inspectors for all its 43,000 farms, livestock operations and 200 million square feet of nursery foliage, a small fraction of the California pesticide investigation force.

Critics say Florida's monitoring and inspection program is drastically understaffed, underfunded and undermined by political pressures that have made it dangerously ineffective.

"It's a sad situation," says Linda Grisham of Tampa, a former member of the state's now-defunct Pesticide Exposure Surveillance Program and an employment and training director for agricultural workers. "It's dangerous not only for farm workers but for the public in general. The public doesn't have a clue."

State officials did not respond to requests for comment for this article. In the past, Dale Dubberly, chief of the state's pesticide enforcement office, has defended the work of his inspectors. But an investigation by The Palm Beach Post shows that problems with the system exist from the farm field to the seats of government: failure to document exposures, failure to investigate properly those that are discovered, failure to hold growers responsible for violating federal pesticide laws, failure of the medical community to notify the state of possible pesticide cases, failure of state legislators to fund adequate protection and failure of the federal government to properly monitor the state's performance.

"At every level, what you have is a disconnect," says attorney Joan Flocks of Gainesville, another former member of the surveillance board. "There is a lack of awareness, a lack of resources and a lack of will." Environmentalists and worker advocates have long decried the dangers of the massive use of pesticides and fertilizers in Florida. "Lots of places in the country have bad enforcement, but nowhere else is pesticide use as intense as in Florida," says Margaret Reeves, senior scientist at the Pesticide Action Network, a
national watchdog group based in San Francisco. "In Florida, the situation is horrific."
More groups voice concern over chemicals In recent years, the chorus of concern about
pesticides has grown to include homeowners, politicians, tourism officials and fishermen.
The numbers they are encountering are startling. In some categories, California uses more
chemicals, but in most cases it is Florida that utilizes far more pesticides, including
insecticides, herbicides, fungicides, fumigants and defoliants, according to the U.S.
Department of Agriculture.

In the case of oranges, Florida growers use 41.9 million pounds of pesticides over nearly
600,000 acres of crop. And because of the poor quality of much of Florida's soil, they
also use more fertilizer. California farmers use 70 pounds of nitrates and phosphates an
acre, while Florida farmers use 196 pounds an acre.

Mary Hartney, executive director of the Florida Fertilizer and Agrichemical Association,
says the use of those products is absolutely necessary to the state's economy, given the
Florida climate. More fertilizers are needed because of the sandy soil and more pesticides
because of Florida's humid and rainy climate. "A grower simply isn't going to
indiscriminately apply agrichemicals or fertilizers," Hartney says, citing not only
regulations but also the cost. Hartney also questioned the USDA figures, which she says
had sharp variations in amounts of certain chemicals reported. USDA analyst Sarah
Hoffman, in turn, defended the agency's work and said it was based on significant input
from growers.

But the differences cannot be measured just in the amount used per acre. For many
crops, Florida applies pesticides many more times a year, in part because of frequent
rains. Since many exposures come during those field applications, the risks - to
farmworkers and to nearby residents who can be affected if the chemicals drift - can
occur much more frequently. "You are working in one field, and the tractor passes in the
next field spraying," says Epifanio, 58, a veteran Mexican farmworker who asked that his
full name not be used, out of fear for his job. "The wind brings it to you. It happens to
somebody around here every single day."

In recent interviews, some 40 percent of such workers said that had happened to them
during the past six months. Other studies have shown an even higher percentage of
workers affected by spraying. But the Collier County Health Department, which covers
the major tomato-growing community of Immokalee, has been made aware of only two
pesticide exposure cases in five years, and one involved a Raid insect bomb that
exploded. Collier is not alone in its failure to find and document such events. That failure
is caused, in part, by a lack of personnel. The state's 40-45 inspectors not only are
responsible for monitoring chemicals used on all Florida farms but also investigate
nonagricultural pesticide applications, such as golf courses. They also register animal
feeds and seeds used all over the state, as well as products used in mosquito spraying.

Manpower creates stark differences in results In contrast to Florida, California has a
separate Department of Pesticide Regulation that employs around 350. Half of those
perform some monitoring and enforcement work in the field, says Glen Brank,
spokesman for the California agency. In addition, California counties employ another 450 people, most of whom work at least part time in pesticide compliance and enforcement, Brank says. Florida does no pesticide investigating at the county level.

The results of that difference in manpower are stark, even allowing for California's much larger farmworker population, about three times the size of Florida's, which is estimated at 180,000 to 230,000. In 2003, the most recent figures available, California inspectors documented 614 cases of illnesses or injuries that pesticides either "definitely" or "probably" caused. In Florida, Agriculture Department inspectors documented only three. None of those was reported in farm work. Fines levied in all pesticide exposure cases totaled more than $5.5 million in California last year, Brank says. Florida collected $38,590, less than 1 percent of what California did.

"Six-hundred-fourteen to three, that's incredible," says Stuart Brooks, public health professor at the University of South Florida in Tampa. "You have to assume the rate of those injuries and illnesses in Florida is probably about the same. The difference is here we have no personnel for inspections, no money and have no real enforcement." Farmworker advocates also say that, even when farms are cited for violations, they rarely are fined and therefore growers have little impetus to change. "We had a case in Loxahatchee recently where the inspectors went and found a long list of violations," says attorney Greg Schell of the Migrant Farmworker Justice Project of Lake Worth. "They gave the grower a warning. When they went back several months later, he hadn't fixed any of the problems. All they did was give him another warning. The laws have been on the books for years. What sense does that make? Everything is done to accommodate the grower and nothing to protect the worker." Also hampering efforts, the state's medical community has shown little interest in documenting pesticide poisonings. Despite a state law that requires the reporting of any such incident, health departments in the state's 67 counties reported only three such "possible" incidents in fiscal year 2003-04.

In Immokalee, where the recent cases of three children born with birth defects to farmworker families who lived near each other and worked together were reported by The Post, the director of the busiest local clinic, Peter Leventis, said he wasn't aware of the state law requiring pesticide-related incidents be reported. And the state official responsible for taking such reports and assigning investigators, Kim Hainge of the Department of Agriculture, has admitted the reporting system doesn't work. After receiving a total of only 12 exposure reports during the past two fiscal years, Hainge said: "That can't be right."

Critics say the underlying reason for the failure of Florida's system has to do with who is in charge of it. While the California pesticide department is an arm of its Environmental Protection Agency, in Florida the Department of Agriculture and Consumer Services is in charge of pesticide exposure investigations.

"The fox is guarding the henhouse, and everybody who lives in Florida is a hen," says attorney Lisa Butler of Florida Rural Legal Services of Fort Myers. Adds Linda
Grisham: "The agriculture department is trying to increase agriculture. They are advocating for the growers and for the chemical manufacturers. The manufacturers don't want their products taken off the market. "There is a real conflict of mission. I think the staff themselves are conflicted by it."

EPA review of Florida just phoned in Maybe that explains recent investigation figures. Florida pesticide inspectors were scheduled to inspect 500 agricultural operations last year, but visited only 271, according to an annual federal EPA review. State inspectors visited more golf courses than farms.

Despite the obvious shortcomings of the Florida system, the federal agency has approved the state's performance. The most recent yearly review, performed in January, was conducted by telephone. No federal EPA inspectors even visited Florida. "We are very satisfied with the program in Florida," says EPA regional spokeswoman Dawn Harris-Young.

Many critics believe large-scale changes are necessary. "You'll never have real enforcement as long as this is left in the hands of the Agriculture Department," Butler says. Attorney Tania Galloni, formerly of the Migrant Farmworker Justice Project, says the duties of the investigators need to be divided. "There is value in the work that the agriculture department is doing, the technical and monitoring work, but the whole health aspect needs to be done by someone else," she says. "That's the weak link." Others worry that the problem may already be affecting the general population. "If they are not monitoring those dangers to the farmworkers, then how do we know what ends up in our food?" says University of South Florida professor Brooks.

Some politicians are taking notice. "Either those inspectors simply aren't doing their job or they don't have the resources they need to do that job," says state Sen. Tony Hill, D-Jacksonville. "Which one is it? We need to study this. We need to find out." State Rep. Susan Buchar, D-West Palm Beach, says the problem lies with the political power of the agricultural industry. "Highly paid lobbyists representing the agriculture industry combine with our leadership in state government, many of whom are farmers or other agriculture people," Buchar says. "They don't want to see that increased enforcement. We need to make a reasonable effort to protect the people who are putting food on our tables."

In Lee County, the issue has gone beyond farmworker safety and has reached a crisis point, say opponents of state policies. Some of the county's political leaders and tourism officials are decrying the influx of red tide, a toxic algae that has killed dozens of manatees during the past two years and also causes respiratory problems in humans. Some of those local leaders believe that runoff of nitrates and phosphates from agricultural fields has contributed to the size and toxic effects of the tide. State scientists have disagreed and say there is no proof of that.

But Lee County commissioners defied the state and hired their own scientists to do a study. Those scientists found there is a correlation between runoff and the red tide
problem. "We don't have full faith and confidence in the state," says Lee County Commissioner Frank Judah. "What you have in Florida is an unholy alliance between representatives of the agricultural industry, developers and the politicians who they control. They have subverted and undermined the system of stewardship of the environment. We are increasingly sitting in a sea of pollution here in Florida."