Keeping greens clean: industry-run program to improve food safety

by Diane Lindquist

When California vegetable grower Jack Vessey surveyed one of his late-winter spinach fields several months ago, he knew he'd never raise the crop the same way again.

KEEPING GREENS CLEAN - Workers pulled weeds by hand from a spinach field near Holtville, Calif. Harvesting safety precautions will be mandatory under a new Leafy Greens Marketing Agreement. CNS Photo by Laura Embry. FOOD SAFETY - Jack Vessey of Vessey & Co., one of the California's largest spinach growers in Imperial Valley, helped draft the voluntary marketing agreement designed to prevent outbreaks of food-borne illness like the E. coli contamination that lead to a $100 million loss for the state's spinach industry. CNS Photo by Laura Embry. After E. coli-tainted spinach from Northern California killed three people and sickened more than 200 last fall, the California produce industry quickly drew up tough new rules for handling leafy greens from field to fork.

Nearly all of the state's growers and processors, including those handling organic products, have signed on to the Leafy Greens Marketing Agreement.

It's uncertain whether the agreement will prevent another E. coli outbreak, but producers say its stringent measures and inspections are the closest they can come to preventing crop contamination.

"We're going to do everything in our power to prevent anything like that happening again," said Vessey, who helped draft the measures. "We wanted to do the fastest-possible remedy for our industry, and this was the fastest."

Critics say a mandatory government program would be more likely to ensure food safety, but the marketing agreement helped the state's estimated $2 billion leafy greens industry forestall new legislation.

The marketing agreement covers iceberg, romaine, green leaf, red leaf, butter and baby leaf lettuces. It also covers escarole, endive, spring mix, spinach, cabbage, kale, arugula and chard.

Because 98 percent to 99 percent of California growers and processors of leafy greens have signed the agreement, nearly all leafy greens in the U.S. food-distribution chain will be covered. Northern and Central California growers supply 90 percent of the leafy greens that Americans eat during the summer and fall, and California's Imperial County and western Arizona supply 90 percent of those products consumed in the winter and spring.

The economic incentives for a voluntary agreement were strong. The E. coli outbreak in September caused a $100 million loss for California's $160 million spinach crop, and sales are still off.

Vessey said he and other growers in Imperial County, which was not involved in the outbreak, took a 15 percent to 20 percent hit.

Now, representatives from the state Department of Food and Agriculture will inspect fields and processing operations to make certain the new rules are being followed. If not, sanctions will be imposed. They could include other handlers refusing the violators' products.

There is a cost for this vigilance. Consumers should expect to see prices of leafy greens rise soon. Handlers and growers are being assessed 2 cents per carton to pay for the program, and they're expected to pass the costs along. Eventually, a sticker or mark on packages will indicate which products have been produced under terms of the pact.

Tim Chelling, the spokesman for the Western Growers Association, which took the lead in creating the agreement, said the pact's overall cost will run in the millions, but "you're talking about pennies for individual products."

"The costs are not going to be invisible," he said, "but they'll be well worth it as an investment. We want to restore confidence and trust, and you can't put a figure on that."

Growers say that the assessment does not cover their costs in adhering to the agreement's stricter standards.

"I'll have to pay a certain amount per acre," Vessey said. "I'm going to have to hire somebody to run my food-safety program. I'm going to have to do things differently next season."

Those who sign the agreement promise to follow best practices for growing and handling leafy greens, as defined in the agreement, and be subject to periodic government inspections. Among the best practices are more frequent and specific water and soil tests, and greater separation of growing areas from septic tanks.

Growers and processors also must have a trace-back system to quickly identify where any contaminated leafy greens were harvested and processed.

For the most part, health officials and food scientists still can't pinpoint how deadly microbes such as E. coli and salmonella get onto food products in individual outbreaks.

The source of September's E. coli outbreak has been traced to river water and animal feces on a small grass-fed cattle operation in the Salinas Valley that leased land to spinach grower Mission Organics. The tainted spinach was contained in Dole-brand bagged baby spinach processed by Natural Selection Foods in San Juan Bautista, Calif.

But how the spinach got contaminated remains a mystery. It might have been spread by pig or cattle feces, tainted irrigation water, birds flying overhead or poor worker sanitation.

"Possibly, maybe even probably," Chelling said of the odds of avoiding another outbreak through the new marketing agreement. "But nobody is saying this is risk-free. No one is saying they'll get to 100 percent prevention, but this raises the standard."

From the start, the marketing agreement has been under attack by consumer, labor and health groups, who want broader measures required by law.

"This doesn't inspire confidence that the industry is the one overseeing the safety measures," said Elisa Odabashian, director of the West Coast office of Consumers Union, the nonprofit publisher of Consumer Reports magazine.

"It's the fox taking care of the henhouse," she said. "There's still room for contaminated produce to reach the marketplace."

Odabashian also took issue with the mark that will be created to identify the products produced under the marketing pact - products that will cost consumers extra.

"All food should be safe in the marketplace," she said. "People shouldn't have to pay more for safety."

There also are concerns that food sold at farmers markets and roadside stalls are not part of the program and

remain at risk for contamination.

Last year's spinach E. coli flare-up was the 20th U.S. food-borne outbreak in the past 10 years of contaminated leafy greens products from California. The incident, which sickened people in 26 states, raised public consciousness about food safety.

Since then, lettuce served at Taco Bell restaurants, fresh and frozen ground beef, and peanut butter have all been found to have been contaminated with either E. coli or salmonella, which can cause severe cramping, vomiting, bloody diarrhea and, in the worst cases, kidney failure.

The recent discoveries of tainted products from China, including toothpaste, dog food, juice and fish, have prompted calls for more stringent food-safety measures worldwide.

As the spotlight has lingered on food safety, backers of the Leafy Greens Marketing Agreement tout it as a model for global safety practices.

"Other industries in similar situations have taken years to come up with what these guys have come up with in a matter of months," Chelling said.

Canada will limit entry of 14 leafy greens products from California to those handled under the marketing agreement.

The program goes further than the federal Hazard Analysis and Critical Control Point regulations, which focus mainly on good practices in packing, said Joe Pezzini, vice president of operations for Ocean Mist Farms in Castroville, Calif., and chairman of the California Leafy Green Advisory Board.

"We believe this is an unprecedented commitment to food safety," he said. "It created a mandatory level of standards in the industry. What it really does is raise the bar in food safety. There's never been anything like it."

Another component of the agreement is a commitment to research. In addition to the 2-cent carton assessment, agricultural companies and the Produce Marketing Association are contributing millions to fund a food-safety research center at the University of California Davis to learn how microbes contaminate produce.

The Center for Produce Safety will be operating by this winter, said Rob Atwill, its interim director and one of the researchers who will pursue more answers about the deadly pathogens.

"It (E. coli) is a sneaky little bacteria, and it doesn't raise its head that often," he said.

"In the next few years," Atwill said, "we hope to close the knowledge gaps about how the pathogens enter the field of produce."

In the meantime, lettuce and spinach consumers will rely on the measures mandated by the marketing agreement to protect them.

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