Lettuce at centre of e-coli outbreaks traced to California
Experts raise alarm as leafy greens linked to growing number of illnesses

BY MATT MCCLURE, CALGARY HERALD  FEBRUARY 1, 2013

The faraway fields of California were the source last year of lettuce tainted with a potentially-fatal bacteria that sickened scores of Canadians in at least three outbreaks.

And in the wake of a new study that shows leafy greens are now the leading cause of food-borne illness, some scientists are calling for mandatory testing by industry to better prevent contaminated product from reaching market.

Media attention has focused on a recent surge of 30 illnesses in the eastern half of the country linked to E. coli-tainted iceberg lettuce distributed to fast-food restaurants, and another outbreak last spring involving 23 patients in New Brunswick and Quebec who ate bagged romaine lettuce that was laden with the bacteria.

But federal documents — not made public until now — also show a Calgary senior was one of at least three patients who fell sick in a separate outbreak last summer that was also linked to tainted lettuce.
The 84-year-old woman — whom the Herald has agreed not to identify — died last month after being in and out of hospital for months following a severe infection from a strain of E.coli 0157: H7 that was a genetic match to the bacteria found in a package of Tanimura and Antle brand lettuce.

“You assume the companies providing a product have all the controls in place to make sure it’s safe,” the woman’s daughter said.

“For our family, that assumption proved deadly.”

Over 85 per cent of the approximately 350,000 kilograms of the lettuce, spinach and other leafy greens that Canadians consumed last year was imported.

Most of it was grown on huge farms in California and Arizona, where farmers follow voluntary compliance programs in which state officials check every two months to see that contaminated water isn’t used to water crops and fields are fenced to keep out animals.

But Mansour Samadpour, a microbiologist and lab executive based in Washington, said illness statistics show that programs like California’s Leafy Green Marketing Agreement are failing to make salads safer.

More than 1,200 people around North America have fallen sick after eating the product in the half decade since the program was introduced, twice the number who became ill in the previous five-year period.

“The size and number of lettuce outbreaks in Canada during the last year suggest a serious situation, one that’s arguably worse than the recall of tainted beef from XL Foods,” Samadpour said.

“The leafy green marketing agreements set a bar, but it’s still too low.”

Working with Earthbound Farms in the wake of a 2006 outbreak where spinach from the company killed three people and sickened hundreds more, Samadpour has designed a system where product is tested for E. coli and other pathogens before and after it is washed. Lots that test positive are destroyed.

While some retailers like Costco require testing of their suppliers, Samadpour said some in the produce industry balk at the additional cost of about four cents a bag.

The LGMA’s chief executive, Scott Horsfall, said the recent spate of outbreaks in Canada from California lettuce show his members still have work to do on ensuring their product is safe.

“If we learn anything through the investigation done by your country’s authorities or those here that would help us to do a better job, we will make changes,” Horsfall said.

“Every time there is an illness, it’s one too many.”

Still, the Canadian Food Inspection Agency says its requirement that imported product be LGMA-
certified is helping to minimize the risk of contaminated product reaching consumers.

CFIA officials point to a monitoring program begun three years ago that has so far found only one contaminated sample among 362 tests of leafy greens.

But a new study by scientists at Health Canada suggests more testing and tougher regulation may be needed.

According to the article in last month’s Journal of Food Protection, produce-related outbreaks in Canada doubled in the past decade compared to the previous 20-year period, as consumption of fresh fruits and vegetable rose rapidly.

The researchers found leafy greens and herbs were the biggest problem, responsible for 26 per cent of the 1,549 cases of illness between 2001 and 2009.

“Active surveillance and monitoring programs for produce-related sporadic cases and outbreaks should be increased,” the study said.

While allowing that the California marketing agreement may have improved consumer protection, the authors warned that “new regulations to address some of the on-farm issues may be needed in the future."

But a senior official at the Public Health Agency of Canada said he is not concerned by the three outbreaks in the past year linked to California lettuce because overall numbers of E. coli-related illness from all food sources are trending down.

“We’re really happy about that,” said Dr. Gregory Taylor, the agency’s deputy chief public health officer. “That means something’s working.”

But Taylor’s counterparts south of the border at the Centres for Disease Control are concerned by a report released this week that shows about one in five of all food-borne illnesses is linked to leafy green vegetables.

The review of outbreak data for the decade ending in 2008 also found tainted lettuce and spinach caused 14 per cent of hospitalizations and six per cent of deaths.

While leafy greens resulted in the largest portion of sicknesses due to Shigella, Cyclospora and Norovirus, they were a close second to beef as the source of E.coli infections.

“There’s clearly been a number of outbreaks that have demonstrated the potential for manure to contaminate crops in the field,” said Dr. John Painter, the CDC epidemiologist who was the lead author of the study.

“A report like this highlights the concern about leafy greens ... so there’s a need to target food safety interventions.”
Last month, the Obama administration proposed enforceable food safety standards for large produce farms across the United States that would replace today’s voluntary compliance programs.

But Samadpour says the new rules are vague and fail to require testing that would act as a check on tainted leafy greens reaching the market.

“If regulators want industry to be safe, they need to prescribe exactly what’s required,” he said.

According to 2011 figures, nearly 60 per cent of the $540 million in leafy greens bought by Canadians were bagged salads.

While the ready-to-eat product is convenient, the director of the University of Georgia’s Center for Food Safety said recurring outbreaks and recalls means consumers shouldn’t trust that it’s safe.

“The industry says we triple wash with chlorine but we know that’s not effective in killing bacteria if they are present in large numbers,” Michael Doyle said.

“I think we need to require a reliable regimen of testing of these bagged products, but the problem is it costs money.”

He said one large manufacturer had confessed to him recently it was cheaper to recall product found to be tainted than to have advanced food safety interventions at their processing plants.

In the current regulatory environment, Doyle said society’s most vulnerable — the young, the old and those with compromised immune systems — should avoid eating raw, unpeeled produce.

He said those who do eat salad should make it from whole heads, after disposing of the outer leaves that are most likely to be contaminated, and carefully washing the rest.

Tanimura and Antle did not respond to a request for an interview about its food safety program and how its tainted shipment of lettuce to Canada last summer was only detected when a CFIA official took a random swab at an import facility in Winnipeg.

The company recalled the affected lots, but it was too late to prevent two patients in Ontario and the Calgary woman from becoming sick.

Speaking to a reporter this week, her daughter cried as she recalled the last months of her mother’s life spent in and out of hospital as medical teams struggled in vain to return her to health.

“There was only a downward spiral without any hope of recovery,” she said.

“What happened to her and to our family should not have to happen to anyone ... something needs to change.”

mmclure@calgaryherald.com

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