

Patti Waller, M.S.
Barbara Kowalczyk, M.A.

Searching for the Source: One Family's Story

Editor's note: The Journal recognizes the importance of providing readers with practical and relevant legal information through Legal Briefs columns. In every other issue of the Journal, this information is presented by one or more of several insightful and dedicated columnists: Bill Marler, Denis Stearns, Drew Falkenstein, Patti Waller, and David W. Babcock, all of the law firm Marler Clark.

*The attorneys at Seattle-based Marler Clark, LLP, PS (www.marlerclark.com) have developed a nationally known practice in the field of food safety. Marler Clark represents people who have been seriously injured, or the families of those who have died, after becoming ill with foodborne illness during outbreaks traced to restaurants, grocery chains, and other food suppliers. The attorneys have litigated thousands of food contamination cases throughout the United States, many of them high-profile, including the Jack in the Box and Odwalla *E. coli* outbreaks; the Malt-O-Meal, Sun Orchard, and Chili's Salmonella outbreaks; the Senor Felix Shigella outbreak; and the Subway and Chi-Chi's hepatitis A outbreaks.*

The recent outbreak of *E. coli* O157:H7 associated with spinach put the spotlight on local, state, and federal health agency investigators. It made headline news for days, and long after officials deemed the outbreak to be "over," media attention continued. An army of government and industry investigators sought to determine how contamination had occurred and to pinpoint the source. For years, documented outbreaks have been attributed to leafy greens grown in the Salinas Valley, and now there may finally be some answers. The more than 200 victims of the 2006 spinach-associated outbreak will know how a presumably safe food became contaminated with the deadly *E. coli* O157:H7.

Not every person with a foodborne illness is so "lucky." Rangel and co-authors analyzed *E. coli* O157:H7 outbreak data collected by the Centers for Disease Control and Prevention (CDC) for the years 1997–2002.¹ In that time, states reported 350 outbreaks, representing 8,598 cases, 1,493 hospitalizations, 354 cases of hemolytic uremic syndrome (HUS), and 40 deaths. The route of transmission was unknown in 21 percent of the 350 outbreaks, and 812 infected individuals never knew how they became ill. Consumption of contaminated food accounted for 183 (52 percent) of the 350 outbreaks. Although 61 percent (5,269) of the cases could attribute their illness to food, the specific food vehicle was never identified for 646 individuals, many of whom undoubtedly suffered greatly. Furthermore, being included in the case count of a reported outbreak implies that there was at least a cursory investigation. CDC data suggest that the majority of the 73,000 cases of *E. coli* O157:H7 infection estimated to occur annually are sporadic cases or not reported.² For these individuals, the odds that the source of their *E. coli* O157:H7 infection will be identified are abysmally low.

Grief is a natural reaction to loss. An infection with *E. coli* O157:H7 can inflict many losses ranging from loss of trust in the food supply to loss of life or the life of a loved one. When there is no accountability or even an explanation as to how a foodborne illness occurred, pain and grief are compounded. What follows is the story of what one family did to identify the source of *E. coli* O157:H7 illnesses that changed their lives forever.

Kevin Kowalczyk's Story

On Tuesday, July 31, 2001, two-and-a-half-year-old Kevin Kowalczyk awoke with diarrhea and a mild fever. The following day, Kevin was seen at the emergency room. A stool sample was collected, and he was sent home. The next day he was much sicker and was hospitalized for dehydration and bloody stools. Kevin's parents, Barbara and Michael, were given the diagnosis: *E. coli* O157:H7. Kevin developed HUS, and the family spent the next eight days watching their beautiful son suffer an excruciating and unstoppable disease. On August 11, 2001, Kevin died.

The Response of the Public Health Department

Understandably, Kevin's family sought to make sense of Kevin's death. Just two weeks earlier he had been a healthy, happy two-year-old. They looked to public health for answers. The local health department interviewed family members during Kevin's illness in an effort to identify the source of the *E. coli* O157:H7. Michael, Barbara, and Kevin's sister, Megan, submitted stool samples for laboratory testing. After waiting a month to hear from the health department about the results, Barbara called and was appalled to learn that Michael and Megan's stools had been found to be positive for the bacterium several weeks earlier. Fur-

thermore, Barbara was told that Kevin's infection was considered to be an isolated case and that because the public was not imminently at risk of infection, the investigation was closed.

Frustrated and angry, Kevin's parents sought help from Marler Clark, the Seattle law firm that has represented thousands of victims of foodborne illness. Bill Marler agreed to help the family. He and the Kowalcyks embarked on a three-year quest to identify the source of Kevin's *E. coli* O157:H7 infection.

The Investigation

Marler Clark obtained copies of local and state health department documents related to Kevin. These records showed that Kevin, Megan, and Michael Kowalcyk had laboratory-confirmed cases of infection with *E. coli* O157:H7. On July 27, 2001, Megan had a stomach ache and loose stools. Kevin's symptoms started four days later. It is not clear whether Kevin had delayed onset or was secondarily infected. Michael's onset was on August 4. His infection was likely acquired secondarily. Potential sources of exposure included consumption of both home- and temporary food service-prepared hamburgers, cantaloupe, and salad, and swimming pool exposure. There was no evidence of an outbreak.

Follow-up letters were sent to local, state, and federal health agencies asking if other cases of *E. coli* O157:H7 had occurred that summer and, if they had, whether the victims shared sources of exposure with the Kowalcyks. The local public health department responded that there were no other cases; however, state health records showed that six other individuals living in the vicinity had had confirmed cases of *E. coli* O157:H7. Isolates obtained from all six had the same subtype, as determined by pulsed-field gel electrophoresis (PFGE) analysis, as Kevin's isolate had. State records also showed that separate clusters of *E. coli* O157:H7 with the same subtype were reported in two other states that fall. Marler Clark submitted public-records requests for redacted copies of questionnaires from cases involving the same subtype. One investigation yielded few clues; the second cluster occurred in a state adjacent to the Kowalcyk home state and was associated with daycare.

Eighteen months had passed since Kevin's death, and the Kowalcyks were no closer to learning the source of his *E. coli* O157:H7 infection. Then Marler Clark received a CDC line listing showing that 100 isolates with the same subtype had been submitted from 2000

to 2002 to the PulseNet database. The subtype, assigned PulseNet pattern EXHX01.0074, had been seen in 92 human specimens and in eight meat isolates taken from meat recalled by the U.S. Department of Agriculture. Could Kevin's infection have been linked to the contaminated meat? More information was needed to make that determination.

Thirty-five of the 100 isolates with Pattern EXHX01.0074 had undergone additional PFGE testing, which differentiated them into 12 distinct categories. Kevin's isolates had not undergone additional testing. After several months and some beseeching letters, the public health laboratory in Kevin's home state agreed to conduct further tests. Just two years shy of Kevin's onset date, it appeared that the source had been identified. Kevin's isolate and isolates obtained from ground beef manufactured in his home state were indistinguishable by two-enzyme testing. The Kowalcyks were elated to learn that someone might finally be held accountable for the death of their son.

Sadly, the Marler Clark investigation would be unsuccessful. An epidemiological assessment of Megan and Kevin's exposure history implicated ground beef purchased at a local grocery store. The store had a practice of adding beef trim ground at the store to purchased ground beef. But records showed that none of the recalled meat had been delivered directly to the store or indirectly through a distributor. Billing records from the beef manufacturer confirmed that none of the recalled meat had been sold directly or indirectly to the store. After three years, the investigation had reached a dead end. Bill Marler had to tell Barbara and Michael Kowalcyk the dreaded news that they would never be able to conclusively prove the source of Kevin's illness.

Public Health and Foodborne Illness—What Is Needed?

State and local public health officials are the country's front line of foodborne-illness surveillance. Victims look to them for answers. Regrettably, public health staff cannot always respond to requests for further information, or do not acknowledge a family's need to know when answers are needed the most. The result is an appearance of lack of compassion. Many foodborne-illness victims reporting frustrating experiences with their public health departments have contacted Safe Tables Our Priority (S.T.O.P.), a national, nonprofit organization dedicated to prevent-

ing suffering, illness, and death from foodborne disease.

As demonstrated during the recent spinach-associated *E. coli* O157:H7 outbreak, foodborne-disease surveillance has improved markedly. One-third of the states involved in the investigation reported only one or two cases. Without PulseNet, OutbreakNet, Epi-X, and other recent developments, those cases might have been labeled as "isolated" or "sporadic" and might not have been investigated. Significant strides have been made since 2001, when Kevin Kowalcyk became infected with *E. coli* O157:H7 and died. Still, foodborne illness continues to be misdiagnosed and underreported, leaving victims feeling frustrated and ignored.

What can local and state public health departments do to respond more appropriately to the foodborne-illness victim who is looking for answers? The following list is not a complete one in the eyes of victims, but some of these efforts would help:

- Support routine testing of stool cultures for *E. coli* O157:H7 and other foodborne pathogens.
- Provide complete, proactive, and timely information to the public that could help prevent foodborne illness.
- Be more responsive to foodborne-illness victims and provide them with information on additional resources, such as Safe Tables Our Priority (S.T.O.P.).

Foodborne illness is a serious public health issue. Its impact can last a lifetime, and it happens to real people. Just listen to the victims. Just ask the Kowalcyk family. 🐄

Disclaimer: Legal Briefs is published for informational purposes only; none of the information is intended to be, nor is, formal legal advice. NEHA and the *Journal of Environmental Health* are not liable or responsible for actions taken on the basis of the information contained in these columns.

References

1. Rangel, J.M., Sparling, P.H., Crowe, C., Griffin, P.M., & Swerdlow, D.L. (2005). Epidemiology of *Escherichia coli* O157:H7 outbreaks, United States, 1982–2002. *Emerging Infectious Diseases*, 11(4), 603–609.
2. Mead, P., Slutsker, L., Dietz, A., McCaig, L.F., Bresee, J.S., Shapiro, C., Griffin, P.M., & Tauxe, R.V. (1999) Food-related illness and death in the United States. *Emerging Infectious Diseases*, 5(5): 607–625.