FOOD & AGRICULTURE

How Nuisance Law Can Improve Food Safety

Tort can combat foodborne illnesses caused by livestock waste.

BY TIMOTHY D. LYTTON

The contamination of fresh produce by deadly microbial pathogens is arguably the most urgent food safety problem currently facing US consumers. Tainted salad greens alone are responsible for an estimated 2.3 million cases of acute gastroenteritis each year at an annual healthcare cost of $5.2 billion. The escape of manure from concentrated animal feeding operations located near growing fields is a key cause of the problem.

Efforts by growers to prevent crop contamination and efforts by processors to disinfect tainted produce have proven inadequate. The beef and dairy industries have successfully blocked efforts to strengthen environmental regulations to eliminate the discharge of manure, and cattle operations have failed to adopt voluntary measures—such as animal vaccination and antimicrobial feed supplements—that would reduce the risk of contamination.

Nuisance claims against cattle feeding operations for the escape of manure would complement existing environmental regulations and incentivize ranchers to vaccinate their herds and employ antimicrobial feed supplements. These claims would not be obstructed by federal statutes or right-to-farm laws, and they would provide livestock farmers a powerful incentive to avoid contamination.

FRESH PRODUCE AND FOODBORNE ILLNESS

Foodborne illness is a significant public health problem. The Centers for Disease Control and Prevention estimates that contaminated food causes 48 million cases of acute gastroenteritis each year, resulting in 128,000 hospitalizations and 3,000 deaths at an annual cost of $15.5 billion. Fresh produce—

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often considered the healthiest of foods—poses the greatest risk. Contaminated fruits and vegetables sicken more people than any other single category of food. Vegetable row crops account for roughly 60 percent of *E. coli* O157 illnesses, three times the rate for contaminated beef. Fruits and vegetables are also responsible for foodborne illness outbreaks caused by pathogens such as *Salmonella*, *Listeria*, *Cyclospora*, and norovirus.

Manure from nearby cattle operations is a likely source of the microbial pathogens responsible for some of the most egregious outbreaks. *E. coli* O157 and other microbial pathogens that cause foodborne illness outbreaks live in the intestines of cattle and are shed into the environment when the cattle defecate. Although these bacteria are harmless to cattle, they are highly toxic to humans. Contaminated cattle feces come into contact with crops that humans eat in a variety of ways. Rainwater runoff and flooding can convey manure from grazing lands or feedlots into irrigation canals or directly into growing fields. Manure stored in lagoons can infiltrate groundwater and pollute wells that serve as water sources for produce farms.

BOB DAEMMRICH / ALAMY

Dried manure can create dust that blows onto nearby crops. Flies, birds, rodents, other wildlife, and domestic animals can transport pathogens from manure on grazing lands and feedlots to growing fields. Farm vehicles and field workers can transfer manure on tires and shoes from grazing fields, feedlots, or adjacent roadways onto growing fields. Although this contamination problem originates in cattle operations, the burden of fixing it has fallen on growers and processors.

GROWERS AND PROCESSORS

Growers and processors are subject to extensive government regulations and industry standards designed to reduce microbial contamination of fresh produce. One set of regulations and standards imposes rigorous preharvest requirements on growers to guard against contamination of their crops during cultivation. These include:

- testing water quality and organic fertilizers and taking remedial measures where samples exceed specific thresholds for microbial contaminants;
- clearing buffer zones and constructing barriers to prevent animal intrusion, water runoff, and dust migration onto fields;
- training fieldworkers to practice good personal hygiene and sanitize farm vehicles and harvesting equipment; and
- distancing growing operations from cattle grazing and feedlots.

Another set of regulations and standards compels processors to sanitize fresh produce through post-harvest treatments designed to neutralize pathogens during processing. Methods of sanitization include washing products with chlorinated water, treating them with ozone gas, irradiating them, exposing them to ultraviolet or blue light, and blowing cold plasma over them. Refrigeration also retards pathogen growth.

Unfortunately, despite these costly efforts, outbreaks have persisted. So have urgent calls for additional measures. Of course, it is possible that reliance on growers and processers to reduce microbial contamination of fresh produce has achieved an optimal level of safety. But because current science cannot provide meaningful benchmarks or metrics for assessing the effectiveness or efficiency of these efforts, there is no way to know.

CATTLE OPERATIONS

Instead of trying to mitigate the effects of contaminated manure migrating on to growing fields and into processing plants, an alternative approach is to prevent the escape of manure from cattle operations and eliminate infections through animal vaccination and antimicrobial feed additives.

Manure management is an essential part of operating a cattle feedlot or dairy farm. In seeking greater efficiency through economies of scale, meat and dairy production have shifted from pasture and range grazing to confined feeding operations.

These operations produce large quantities of manure. An average steer produces about 60 pounds of manure per day, which amounts to 21,000 pounds per year. A single dairy farm with 2,500 cows produces a waste load equivalent to that of a city of 411,00 people. A large feedlot can contain as many as 150,000 head of cattle and generate 34 million gallons of waste annually.

Most large, confined feeding operations dispose of manure by using or selling it as fertilizer. Improperly managed manure can escape into nearby waterways, leach into groundwater, or be carried away from pens and fields by rainwater runoff, wind, and flies. Manure containing zoonotic pathogens such as *E. coli* O157, *Salmonella*, *Campylobacter*, and *Giardia lamblia* that finds its way into agricultural water sources presents a hazard to human health.

Government regulators, industry experts, and academic researchers concerned about food safety believe that more should be done to reduce the escape of manure containing microbial pathogens from cattle operations. One approach would be to prevent the discharge of contaminated manure from feedlots and dairy farms. A second approach would be to eliminate pathogens from manure.

Preventing manure discharge / An extensive regulatory infrastructure exists to prevent the discharge of waste from animal feeding operations. Under the federal Clean Water Act (CWA), the Environmental Protection Agency developed and oversees the National Pollutant Discharge Elimination System (NPDES) program. The program mandates that animal feeding operations discharging pollutants into waters of the United States obtain a permit, which requires compliance with minimum standards for manure management. With some variation, state regulators who administer the program typically require that animal feeding operations

- prevent animals from entering surface waters;
- divert rainwater runoff away from manured areas;
- design wastewater containment to withstand a 25-year, 24-hour storm;
- construct retention ponds that are impermeable;
- minimize infiltration of water in manured areas into underlying soils; and
- file annual reports describing their compliance efforts and documenting any discharges.

California, where much of the country's fresh produce is grown, additionally requires recordkeeping on all manure applied to fields—where, when, and how much—and provides for water quality monitoring. Some states also require feedlots and dairy farms to adopt dust control measures such as removing manure frequently, piling manure between cleanings, sprinkling corrals with water, covering manure piles, and planting downwind boundary trees.

The NPDES permitting regime, although extensive, contains significant gaps:

- It does not cover runoff from cattle grazing in pastures and on ranges.
- In most cases, it permits stormwater runoff from fields to which manure has been applied.
- Water quality monitoring is limited by a lack of scientific consensus regarding what to test for and how to test for it, as well as by the wide variability of pathogen survival based on the organism and environmental conditions.
- In some states, animal feeding operations are only required to obtain and comply with the terms of a permit if they have previously discharged pollutants (although they are still subject to penalties *ex post* for any discharges).
- Finally, the US Supreme Court's 2023 decision in *Sackett v. EPA*, which narrowed the definition of "waters of the United States," reduces the reach of the NPDES program.

Despite the concerted efforts of government regulators and cattle operations subject to their oversight, manure from feedlots and dairy farms persists as a source of microbial contamination in agricultural water.

Trade associations representing the beef and dairy industries have successfully resisted attempts to expand the scope and increase the stringency of administrative regulations governing manure management in cattle feeding operations. During agency rulemaking, industry groups have consistently advocated limiting the scope of operations obligated to obtain an NPDES permit. In lawsuits brought by these groups, federal courts have repeatedly struck down EPA efforts to extend the NPDES permitting regime beyond operations that have already discharged wastes. More recently, even the EPA itself has shown limited enthusiasm for greater oversight of animal feeding operations. In 2017, environmental groups petitioned the EPA to expand the scope of operations covered by its permitting regulations, tighten the agricultural stormwater exemption, revise its technical standards in light of new science, and impose stricter standards on manure management, water quality monitoring, and reporting. The EPA did not respond to the petition until the environmental groups filed a lawsuit five years later. Forced to issue a response, the EPA denied the petition and established a federal advisory subcommittee to study the problem and make recommendations within 12–18 months, punting the matter to the next administration. The committee met three times in 2024 but has yet to issue a report. The chief counsel for the National Cattlemen's Beef Association applauded the EPA's denial of the petition for "protecting cattle producers from frivolous distractions and allowing them to return to the important job of stewarding our natural resources and feeding the nation." Industry groups have also successfully blocked proposed legislation that would have allowed the US Food and Drug Administration to enter cattle operations during food-

borne illness outbreak investigations to obtain environmental samples that could identify the source of outbreak pathogens.

Vaccinating cattle and supplementing feed / In addition to preventing the discharge of manure from cattle operations, eliminating pathogens from the manure can also protect fresh produce from contamination. Methods of facilitating bacterial dieoff before spreading manure on fields include composting and anaerobic digestion—the former an old practice and the latter an emerging technology. Recent research suggests that ranchers and dairy farmers could address the problem even earlier in the causation chain by reducing the fecal shedding of harmful pathogens. Field trials have demonstrated that vaccination dramatically reduces the number of cattle that shed pathogenic *E. coli* and the fecal bacterial concentration in those that do. In addition, studies have shown that supplementing feed with probiotics or various foods with natural antimicrobial effects—such as orange peel, cottonseed, and seaweed—reduces shedding. Conversely, the common use of distillers grains in feed is associated with increased shedding. Research also suggests that easing the stress on cattle during handling may reduce fecal shedding. Other studies indicate that treating water troughs with antimicrobial agents, reducing stocking density, and improving pen cleaning may reduce transmission and shedding.

Experts caution that none of these measures can completely eliminate fecal shedding of bacterial pathogens by cattle. Moreover, cattle are not the only source of microbial pathogens that contaminate crops. Outbreak investigations indicate that birds and other wild animals may contaminate agricultural water sources or intrude on to fields. Nevertheless, experts agree that reducing fecal shedding by cattle would complement current hazard reduction efforts in the pre- and post-harvest stages of production. Additionally, insofar as cattle and surrounding wildlife serve as sources of infection for each other, addressing infection among cattle might also reduce the prevalence of infection among birds and other wild animals.

Unfortunately, cattle feeding operations have shown little interest in implementing these measures because they lack sufficient economic incentives. Vaccination, feed supplementation, and reducing stock density would impose additional costs on cattle operations without any direct economic benefit to cattle operations. *E. coli* O157 is harmless to cattle, so vaccination does not enhance animal health. In fact, one study found that the stress of moving animals around for vaccination decreased their average daily weight gain. Additionally, ranchers, feedlot operators, and dairy farmers do not need to worry about infected cattle causing harm to consumers of their products because *E. coli* O157 and other harmful microbial pathogens can be effectively neutralized during processing using kill steps such as steam pasteurization of beef carcasses and pasteurization of milk products.

Industry associations have also opposed mandatory cattle vaccination for *E. coli* O157. Although vaccines have been approved and commercially available since 2009, the American Meat Institute's director of scientific affairs insists that more scientific research is necessary to determine vaccine efficacy, and a spokesman for industry leader Cargill characterized the company's research into the vaccine as "inconclusive."

Engaging farmers / Recently, researchers at the University of California, Davis, in conjunction with the California Department of Food and Agriculture, established the California Agricultural Neighbors initiative to facilitate dialogue between cattle operations and produce growers. Initial workshops in 2019 prompted the formation of a steering committee of stakeholders, a larger dialogue group, and a technical committee of experts, culminating in an "Action Report" published in 2022 that calls for enhanced communication, additional research, more sophisticated risk models, and improved capacity to transfer new scientific knowledge into practice. The FDA endorsed these efforts in its 2020 Leafy Greens STEC Action Plan.

Although dialogue is a vital first step in fostering a cooperative approach to reducing microbial contamination of fresh produce, motivating cattle operations to take a more active role in addressing the problem will likely require more than informative presentations, brainstorming sessions, and tepid calls for "neighborly courtesy." Cattle operations have no economic incentive to eliminate cattle infections. Vaccination and feed additives are added expenses that do not provide any benefit to beef and dairy operations.

Current approaches focused on growing conditions and post-harvest processing have been inadequate to prevent microbial contamination of fresh produce from cattle manure. Beef and dairy industry groups have opposed efforts to expand the scope and increase the stringency of regulations governing manure management, and they lack incentive to voluntarily implement universal vaccination of cattle against *E. coli* O157 and antimicrobial feed supplementation. Given this resistance, it is time to consider a new strategy.

NUISANCE CLAIMS

Nuisance lawsuits against cattle operations for the escape of contaminated manure would complement enforcement of environmental regulations and incentivize ranchers, feedlot operators, and dairy farmers to pay for vaccinations and feed additives. Nuisance law comprises public and private nuisance. The Restatement (Second) of Torts, an American Law Institute treatise that summarizes the general principles of US tort law, defines a public nuisance as "an unreasonable interference with a right common to the general public." Statutes in several states define a public nuisance as "anything" that is "injurious to health" and "interfere[s] with the comfortable enjoyment of life or property" of a "considerable number of

persons." A private nuisance, under the Restatement definition, is "a nontrespassory invasion of another's interest in the private use and enjoyment of land." A defendant is subject to liability for private nuisance only if the invasion of the plaintiff's interest in the use and enjoyment of land is "either (a) intentional and unreasonable, or (b) unintentional and otherwise [subject to] liability for [recklessness, negligence, or strict liability] for abnormally dangerous conditions or activities."

The discharge of manure contaminated with microbial pathogens such as *E. coli* O157 from cattle operations could serve as a basis for public and private nuisance claims. The Restatement explicitly states that pollution by animal wastes of surface or ground waters that interferes with agricultural uses or is detrimental to public health may subject the polluter to liability for both public and private nuisance. Intentional discharge of manure in violation of a cattle operation's permit would be illegal and therefore unreasonable. Unintentional discharge in violation of a cattle operation's permit would constitute negligence per se. Alternatively, a cattle operation's storage of hundreds of thousands or millions of gallons of cattle wastewater could be considered an abnormally dangerous activity that would subject the operation to strict liability if the wastewater escapes. Remedies for successful nuisance claims include the award of damages and injunctions to abate the nuisance.

The discharge of manure containing deadly pathogens into agricultural water supplies and, subsequently, into the food supply seems to be an obvious nuisance. So why are nuisance lawsuits against cattle operations in response to foodborne illness outbreaks from contaminated fresh produce so rare? The reasons vary. Potential plaintiffs—including government entities, farmers, food companies, and outbreak victims—may erroneously believe that such lawsuits would be preempted by federal law or precluded by right-to-farm provisions, or they may be disincentivized from bringing nuisance lawsuits for financial or practical reasons. In fact, neither federal law nor state right-to-farm laws pose substantial barriers to nuisance claims against cattle operations for pollution that affects neighboring produce cultivation. However, local politics, high litigation costs, complex causal chains, liability insurance exclusions, and insufficient economic incentives present significant challenges.

Preemption and right-to-farm defenses / Although nuisance lawsuits potentially overlap with implementation of the CWA, they are not preempted. The US Supreme Court addressed this issue in the 1987 case *International Paper Co. v. Ouellette*, holding that the CWA does not preempt state nuisance claims against polluters provided that plaintiffs sue under the law of the state in which the pollution originates.

Additionally, most right-to-farm statutes would not shield cattle operations from nuisance claims brought by neighboring produce farms. As is typical in many states, California's right-to-farm law protects agricultural entities from nuisance claims that are "due to any changed condition in or about the locality"—for example, construction of a new residential housing development. However, where fresh produce cultivation has long coexisted alongside cattle operations or predates it, right-to-farm statutes would not bar nuisance claims against cattle operations for pollution of neighboring farms. Moreover, some right-to-farm laws bar only nuisance claims by neighboring landowners engaged in "surrounding nonagricultural uses."

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These statutes would not apply to nuisance claims by fresh produce growers even if their operations do not predate those of the defendant cattle operation. Additionally, right-to-farm laws typically do not shield defendants whose agricultural operations have "substantial adverse effect[s] on the public health and safety." Thus, if an investigation identifies the discharge of contaminated manure from a cattle operation as the root cause of a foodborne illness outbreak, right-to-farm laws would not protect the cattle operation against subsequent nuisance claims.

Potential plaintiffs / Although neither federal preemption nor state right-to-farm laws present significant obstacles to these nuisance claims, such claims have not emerged as a response to foodborne illness outbreaks. Some categories of potential plaintiffs are reluctant to sue. Others have little motivation or few opportunities to do so.

Government entities / Consider government entities. State public nuisance statutes typically authorize local or state public officials to file lawsuits for the abatement of a public nuisance. At first glance, a feedlot or dairy farm's discharge of manure contaminated with deadly pathogens into local water supplies appears to be a prime candidate for a public nuisance action for abatement. The Restatement (Second) of Torts explicitly mentions "pollution of surface waters, ground waters or water

in watercourses and lakes" as an example of an unreasonable interference with a right common to the general public that constitutes a public nuisance. However, local officials may be reluctant to antagonize profitable businesses within their jurisdictions, especially in tightknit farming communities where government officials and business owners may have longstanding personal ties. State officials may be similarly reticent to alienate the beef and dairy industries, both of which wield considerable lobbying power.

Farmers / Fresh produce farmers are a second category of potential plaintiffs. Cattle manure that ends up on land or water owned by a farmer constitutes a nontrespassory invasion that is sufficient to support a claim for private nuisance. The same is true if manure infiltrates water sources to which the farmer has riparian rights, such as neighboring streams or irrigation canals. However, growers may be reluctant to sue neighboring cattle operations because they do not want to undermine collaborative resolution of this and other problems, or they fear antagonizing business owners with local political clout and influence in agricultural trade associations such as the local farm bureau.

Moreover, foodborne illness is seldom traced back to a particular farm, so leafy greens growers very rarely incur liability for contamination that they might seek to recoup through nuisance actions from cattle operations. Even when, on rare occasion, a farmer does incur liability, it is typically covered by insurance. This might incentivize insurance companies to bring a subrogation action against the responsible cattle operation. However, litigation costs are considerable, especially given the need for extensive expert analysis and testimony, and lawsuits against smaller cattle operations might yield insufficient damages to cover litigation costs because standard farm insurance pollution exclusions might mean that the manure discharges are not covered.

Food companies / Companies in the supply chain, including processors, distributors, retail sellers, and restaurants, are a third category of potential plaintiffs that could sue for private nuisance. Manure that was discharged from a cattle operation and subsequently contaminated food might constitute a nontrespassory invasion of a plaintiff's processing plant, distribution warehouse, supermarket, or restaurant where the spread of a foodborne pathogen interfered with the plaintiff's use of its property—for example, if the plaintiff needed to suspend operations to sanitize production equipment, storage rooms, store shelves, or food preparation areas.

Alternatively, businesses in the supply chain could sue for public nuisance to recover the costs of product recalls and lost sales revenue. The general bar on recovery for purely economic loss in negligence actions does not apply to public nuisance claims. Private plaintiffs seeking to sue under the theory of public nuisance for interference with a right common to the general public must demonstrate that they "have suffered harm of a kind different from that suffered by other members of the public exercising the right common to the general public that was the subject of interference." Businesses in the supply chain could point to the costs associated with recalls and sanitizing facilities to fulfill this special injury requirement. However, the challenge of convincing courts and juries that a manure discharge from a feedlot was a proximate cause of the interference with use of a distribution warehouse or restaurant kitchen gets harder as plaintiffs' damages occur further downstream in the supply chain and other potential sources of contamination accumulate.

In practice, companies in the supply chain also lack incentive to seek recovery of their business losses by suing cattle operations for nuisance. To begin with, product recall insurance covers many of these expenses. Moreover, many supply contracts include indemnification clauses that make suppliers financially responsible for all costs associated with product contamination, including recalls. Insurers who provide recall and products liability coverage to businesses in the supply chain might have subrogation rights to bring private or public nuisance claims against a cattle operation that is responsible for the contamination. However, once again, pollution exclusions in the defendant cattle operations' liability policies might limit the available recovery, especially against small cattle operations.

Outbreak victims / Consumers sickened and the survivors of consumers killed by contaminated food are a fourth category of potential plaintiffs. They could bring public nuisance claims against cattle operations that discharged contaminated manure linked to an outbreak for operating in a manner injurious to the health of a considerable number of people. Physical illness or death qualifies as a special injury. However, as a practical matter, the insurance proceeds from settlement with the produce farmer and subsequent sellers in the supply chain are likely to satisfy plaintiffs' damages. Such settlements are common in foodborne illness outbreaks and leave outbreak victims with no financial incentive to pursue claims against cattle operations.

Although there are several categories of potential plaintiffs who could bring legally viable nuisance claims against cattle operations for polluting neighboring produce farms, no category of plaintiff has sufficient incentives and opportunities to file lawsuits.

CIVIL LITIGATION AND FOOD SAFETY REGULATION

What changes are necessary to create conditions more favorable to nuisance litigation? Would nuisance litigation improve food safety?

The evidence necessary to support nuisance claims against

cattle operations relies on identifying specific cattle operations as sources of contamination that cause foodborne illness. Successful outbreak investigations conducted by public health officials are essential to establishing this link. Consequently, additional investment in outbreak investigation is key to increasing opportunities and incentives for nuisance claims against cattle feeding operations.

However, resource constraints limit the number and thoroughness of federal outbreak investigations. Additional investment in public health surveillance to identify outbreaks and environmental sampling to trace outbreaks back to sources of contamination would create more of the evidence necessary to support viable nuisance claims. Such investment could be targeted toward advances in illness reporting infrastructure, pathogen testing technologies, and sampling methods. Consumer advocacy groups should pressure the FDA and its congressional overseers to expend more resources on outbreak investigations. Given the power of the beef and dairy industries, this may be easier said than done, but significant foodborne illness outbreaks tend to increase political pressure on Congress to act—typically by holding high-profile hearings that provide consumer advocates a powerful platform, put industry executives on the defensive, and sometimes prompt new expenditures or laws.

Moreover, the recurrent identification of outbreaks linked to leafy greens may eventually shift the incentives for local officials and growers as they weigh the costs and benefits of suing local cattle operations. Outbreaks in 2018 and 2019 stoked public concern and launched efforts to enlist the voluntary help of ranchers, feedlot owners, and dairy operators in reducing the hazard of manure discharges. If these efforts do not yield substantial results, then public pressure may motivate local officials and growers to file nuisance claims to force cattle operations to take more responsibility for hazard reduction. Similarly, as insurance losses mount in claims against farmers and businesses in the leafy greens supply chain, insurers may become more willing to file subrogation actions against cattle operations—especially if outbreak investigations provide evidence of causation. Finally, Marler Clark, the dominant plaintiffs' firm in food safety litigation, has a long record of funding efforts to advance food safety that do not provide any immediate monetary payout. These include extensive lobbying for new food safety regulations as well as underwriting *Food Safety News*, a daily online news outlet staffed by professional journalists and read widely by policymakers, industry experts, academics, journalists, and consumers. Armed with sufficient causal evidence, plaintiffs' firms like Marler Clark might be willing to file impact litigation against cattle operations linked to outbreaks.

Nuisance litigation can result in court injunctions to abate the nuisance, which might include additional measures to prevent manure discharge and mandatory cattle vaccination or feed supplementation. Additionally, responding to outbreaks with nuisance litigation would prompt media coverage, mobilization of survivors and their families, public concern, and consumer advocacy—all of which are sources of pressure on Congress to reduce the risk of foodborne illness by increasing appropriations, passing new laws, and pushing relevant agencies to improve their enforcement efforts. Nuisance litigation would highlight contaminated manure discharge from cattle operations as a key cause of foodborne illness outbreaks. Reform advocates could leverage heightened awareness of the problem to lobby for new legislation that regulates cattle operations, such as expanding the NPDES permit program to all cattle operations, requiring cattle vaccination and feed supplementation, and granting FDA access to cattle operations during investigations.

CONCLUSION

The discharge of manure from cattle operations contaminates fresh produce that sickens consumers. Neither current efforts by growers to prevent contamination of their crops and by processors to sanitize tainted produce nor existing environmental laws governing manure discharge from cattle operations have adequately addressed the problem. Nuisance litigation would incentivize additional measures to prevent manure discharges and to eliminate human pathogens from manure through cattle vaccination and antimicrobial feed supplements. However, although nuisance claims would be legally viable, potential plaintiffs lack sufficient incentives and opportunities to file lawsuits against cattle operations. Greater investment in foodborne illness outbreak investigations would catalyze such litigation, which would have beneficial effects on food safety.

There is nothing radical or even particularly surprising about the idea that the discharge of contaminated manure into the air and water surrounding fresh produce fields is a nuisance. However, given the historical reluctance of those affected to sue feedlot operators and dairy farmers, nuisance litigation represents a novel approach to the problem. *R*

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