FOOD SAFETY AND THE CIVIL JUSTICE SYSTEM

AMERICAN ASSOCIATION for JUSTICE

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INTRODUCTION

Every year, 48 million people fall sick, 128,000 are hospitalized, and at least 3,000 die from foodborne illnesses, costing the nation approximately $77 billion. And this is only the tip of the iceberg, as for each reported case many more go unreported.

As frightening as such statistics sound, the situation threatens to get worse as giant food companies are increasingly instituting industrialized farming strategies that render our food supply heavily susceptible to contamination. Factory farms' intensive use of pharmaceuticals in livestock is associated with the rise of antibiotic-resistant "superbugs," and the vast amounts of waste produced contaminates groundwater and nearby crops to the extent that leafy green vegetables like spinach and lettuce are now the second-most frequent cause of food-related hospitalizations and the fifth-most frequent cause of food contamination death.

Even when consumers are made sick by food, the vast majority of cases are never specifically identified—81 percent of foodborne illnesses remain the product of unknown agents. Thus there are no consistent market repercussions for food companies that allow their products to become contaminated, and no economic motivators to keep the promise of safe food. This "inefficient market" places the burden of keeping the food supply safe with regulators. Yet state and federal regulators have found themselves both overwhelmed and toothless in the face of industry power.

When food companies put profits before safety, and the regulatory system proves unable to force change, it has fallen to the civil justice system to protect consumers. Lawsuits have proven to be the most effective, and sometimes the only, mechanism for deterring negligent behavior and rooting out systemic problems in the food chain.

THE DANGERS

48 million people fall sick every year from eating food contaminated with salmonella, E. coli, and other contaminants

128,000 are hospitalized

3,000 die

Food both sustains and excites us. It provides us with the fundamental nourishment necessary for life but also thrills us with moments of great joy. But food can also make us sick, and even kill us. A typical meal features ingredients from a dozen different sources, and we place our trust in each one with every bite we take. For millions of consumers, that trust is violated by negligent food providers every year, and for thousands the consequences are fatal.

Most of us know at some level that food can be dangerous, but more often than not, we try to avoid thinking about the safety of our food. All of us have heard horror stories about contamination by alien-sounding bacteria, but we tend to believe the food products we choose are safe, until we hear otherwise. We're already inundated with advice about diet, about foods to avoid, about eating organic and eating local, and the thought of adding one more thing to worry about, particularly something as unappetizing as contamination, is too unappealing to consider. Every now and again we may hear a horror story that we can't ignore—listeria-ridden ice cream, salmonella-tainted peanuts, spinach with E. coli—and then, after that story is forgotten, we allow our concerns to fade into the background.

The reality is that every year, 48 million people fall sick, 128,000 are hospitalized, and at least 3,000 die from eating contaminated food.[1] And such statistics represent only the tip of the iceberg. For each reported case many more go unreported. Salmonella, for instance, sickens 1 million people, hospitalizes 19,000, and kills nearly 400 every year, yet for every diagnosed case 29 more go undiagnosed. The vast majority of what we know colloquially as "stomach flu" are actually cases of foodborne illness.[2]

In other words, foodborne illnesses are both very common, and very misunderstood. And despite the attention brought by high-profile outbreaks, the landscape of food safety in the United States is in danger of becoming far worse.

Centers for Disease Control (CDC) Estimates of Annual Foodborne Illness in the United States

	Disease Agent	Estimated Illnesses
1.	Norovirus	5,461,731
2.	Salmonella	1,027,561
3.	Clostridium	965,958
4.	Campylobacter	845,024
5.	Staphylococcus	241,148

	Disease Agent	Estimated Hospitalizations
1.	Salmonella	19,336
2.	Norovirus	14,663
3.	Campylobacter	8,463
4.	Toxoplasma gondii	4,428
5.	E. coli (STEC)	2,138

	Disease Agent	Estimated Deaths
1.	Salmonella	378
2.	Toxoplasma gondii	327
3.	Listeria	255
4.	Norovirus	149
5.	Campylobacter	76

THE $77 BILLION PROBLEM

Foodborne illnesses cost the United States **$77 billion** per year

Many of the risks associated with food safety originate with the industrialization of farming, the methods of which build-in tremendous risk to food safety. Factory farms seek to maximize production in limited physical space in order to cut costs. The irony is that foodborne illnesses cost the nation approximately $77 billion each year, meaning that the food poisoning we suffer is our receipt for the costs we have subsidized.[3]

Unlike traditional animal farms, the industrialized farms, or CAFOs (Concentrated Animal Feeding Operations), are almost by default heavily susceptible to food safety problems. Factory farms produce vast amounts of waste and feature heavy use of pharmaceuticals in an attempt to both maximize production and thwart the inevitable problems of disease. The repercussions of such methods are extensive: the intensive use of pharmaceuticals in livestock is associated with the rise of antibiotic-resistant "superbugs," and the vast amounts of waste produced contaminates groundwater and nearby

crops—an impact that can be seen in the fact that leafy green vegetables like spinach and lettuce are now the second-most frequent cause of hospitalizations and the fifth-most frequent cause of food contamination death.[4] Added to which the immense cost-cutting power of CAFOs has significantly undercut more sustainable farming practices that better support local economies and provide safer food. The overcrowding and unsanitary conditions that are fundamental to industrialized farming significantly increase the chances of bacterial contamination entering the food supply. And given the size of

CAFOs, such contamination can have far wider consequences than contamination that may occur on traditional, smaller farms.[5] But what makes an already imperfect situation intolerable are the frequent incidences of reckless negligence by food producers trying to cut corners.

A Consumer Reports investigation found that more than **65%** of chicken breast contained E. coli

THE FOOD GOLIATHS

The factory farms are themselves cogs in vast vertically-oriented corporate food production companies. In the case of chicken, for instance, the various stages of chicken production—breeding farms, and growout houses, etc.—are independent farmers working under contract with giant corporations, such as Tyson, Smithfield, Cargill and Hormel.[6] The farmers are responsible for the equipment and all associated costs, while the food company retains ownership of the chickens. Ninety percent of the nation's chicken is produced in this manner.[7] The result is not only bad for consumers—a *Consumer Reports* investigation found that more than 65 percent of all chicken breasts contained the fecal contaminant E. coli, 18 percent of which were the particularly worrisome ExPEC strain of E. coli, associated with urinary tract infections, and half also contained multi-drug resistant bacterium—but also for the farmers themselves.[8] Farmers who work for giant integrated food companies often live below the poverty line and are forced to compete with neighboring farms to cut costs. Farmers who speak up are given lower quality chickens or have their contracts ripped up entirely.[9] The only "people" who gain from such factory farms are the food corporations that run them.

THE PROMISE OF SAFETY

81%
of foodborne illnesses remain the product of unknown agents

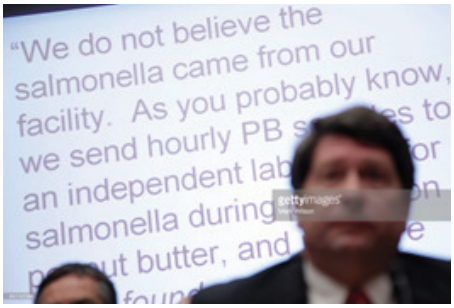
We have many choices when it comes to food, but safety is not one of them. Even consumers who are careful to follow safe food practices at home can and do get sickened by contaminated food. Studies show that consumers would be more than willing to pay more for safer food, but there is little we can do at the store to evaluate the safety of our food.[10] We can't see safe food because the bacteria that cause foodborne illnesses are invisible to the naked eye. We can comparison-shop for price, taste, and alleged "healthiness," but there is no way to know how safe a product is likely to be. Thus, perhaps the most fundamental attribute of food is unknown to us, and we must take the safety of our food on faith and accept the promise of food production companies. Even when consumers are made sick by food, the vast majority of cases are never specifically identified—81 percent of foodborne illnesses remain the product of unknown agents—and so we rarely know which company has broken its promise.[11]

The result is that the food industry is largely immune to market forces when it comes to safety. There are no consistent market repercussions for food contamination, and thus no economic motivators to keep the promise of safe food, resulting in what economists describe as an "inefficient market." We have nothing to protect us but our trust in food manufacturers to do the right thing, and when that trust is violated the only true recourse is the civil justice system.

Take, for example, the 2009 peanut scandal. Executives at the Peanut Corporation of America (PCA) had known for at least three years that they had a salmonella problem but put profits ahead of safety and continued to ship their products to unsuspecting customers. The PCA products were incorporated into hundreds of products under a wide variety of labels, making the chances of foodborne illnesses being traced back to PCA highly unlikely. The executives knew that it would take an astonishingly serious problem

to occur before any contamination would be tracked back to them. And that's exactly what happened. The U.S. Centers for Disease Control (CDC) would eventually trace the shipment of the PCA products to more than 2,000 accounts, including the popular Keebler and Austin brands of peanut butter crackers, both of which were found to be subject to contamination.[12]

At least ten people died in the outbreak. Investigators eventually traced the problems to PCA's Blakely, Georgia, plant where they found machinery held together by duct tape, roof leaks, mold and roaches, and other unsanitary conditions. Until it was shut down, the plant had processed 35 million pounds of peanuts annually. Salmonella was also traced to another PCA plant in Plainview, Texas, where state health investigators found dead rodents, rodent excrement, and bird feathers in a crawl space in the vicinity of production equipment. The foul conditions at the Texas plant had gone unnoticed by regulators in part because the plant operated without a license for nearly four years. Food and Drug Administration (FDA) investigators reported "12 instances where the firm, as part of its own internal testing program, identified some type of salmonella," and yet still released the product.[13]



Stewart Parnell, owner and president of PCA, refuses to answer questions during a House Energy and Commerce Committee hearing in 2009.

"Turn them loose."

In internal emails revealed in court, PCA President Stewart Parnell responded to his managers' reports of tainted products saying "Just ship it," and in another instance, "turn them loose."[14]

This is the reality of the food market at work. Consumers cannot judge food by safety, and so the economics of the marketplace provide no motivation for producers to emphasize safety. In the words of Seattle University Law Professor and attorney Denis Stearns:

[S]hould any of this be a surprise to anyone? What was the incentive to invest in modernizing the plant, in employee training, and in vigorous internal oversight? There was none, except for the slight risk that the shocking problems would somehow come to light. And the problems did not. For years.[15]

TOOTHLESS OVERSIGHT

Once the PCA contamination had killed multiple people, the FDA began an after-the-fact investigation. It did not prevent the outbreak, nor discover it once it started killing people. This is because regulators, just like consumers, rely on the assumption that industry would act in a way that would protect the health and safety of its customers.

Federal oversight of the food industry is both overwhelmed and toothless. Oversight of food providers is fragmented between 15 different federal agencies, but primarily falls under the jurisdiction of the FDA and the United States Department of Agriculture (USDA). Yet even their jurisdictions are fragmented. The FDA covers shelled eggs, but the USDA covers egg products such as liquid eggs. The USDA regulates chicken farms, but the FDA covers the feed on those farms. Sausage meat is regulated by the USDA, but the casings that hold the meat fall under the FDA's responsibility. The FDA oversees cheese pizza, but the USDA is responsible for pepperoni. Fish falls under FDA jurisdiction, unless it is catfish, which is covered by the USDA.

The FDA oversees cheese pizza, but the USDA is responsible for pepperoni.

In reality, this tug-of-war means little because both agencies offer less-than-ideal oversight. The FDA does not have the funds or manpower to properly oversee food production and FDA inspections are rare. The actual inspections themselves, when they happen at all, are performed by private auditors, which results in systemic conflict of interest. Auditors want to be hired, so they have an incentive to both offer the cheapest inspections and the highest scores.[16] The *Washington Post* quoted Mansour Samadpour, president of IEH Laboratories & Consulting—a

leading food safety laboratory—as saying, "I have not seen a single company that has had an outbreak or recall that didn't have a series of audits with really high scores."[17] During the 2011 Listeria outbreak connected to Jensen Farms cantaloupes, Samadpour told CNN, "these so-called food safety audits are not worth anything."[18]

In 2010, Congress passed The Food Safety Modernization Act (FSMA), to give the FDA additional legal authority, but only approximately half the funds the Congressional Budget Office (CBO) said were needed for FSMA implementation was ever appropriated.[19] As a consequence, FDA inspections tend to be rare, sometimes several years apart. More

SALMONELLA V. E. COLI – TO BE AN ADULTERANT OR NOT TO BE AN ADULTERANT

It isn't just agencies that are fragmented; even the diseases are split up. In 1994, the Food Safety and Inspection Service (FSIS) officially deemed E. coli an adulterant, but only in raw ground beef. In "intact" cuts of meat—steaks and roasts—E. coli was not considered an adulterant, on the grounds that it would be cooked out. In 2011, the USDA expanded the number of E. coli strains that are classified as adulterants. Salmonella, however, was not considered an adulterant—an argument the USDA made in court cases in the 1970s.

In 1974, the American Public Health Association (APHA) sued the USDA claiming that labels on meat that said "USDA inspected and passed" were misleading in part because they failed to warn consumers of the potential for Salmonella contamination. The USDA opposed the APHA's suggestion for a stronger label on meat that warned consumers to store and cook meat appropriately. The U.S. Court of Appeals for the D.C. Circuit sided with the USDA's reasoning that salmonella cannot be considered an adulterant because:

> "As the Department said in its letter of August 18, 1971 'the American consumer knows that raw meat and poultry are not sterile and, if handled improperly, perhaps could cause illness.' In other words, American housewives and cooks normally are not ignorant or stupid and their methods of preparing and cooking of food do not ordinarily result in salmonellosis."

In 2001, the USDA tried to shut down Supreme Beef Processors Inc. for repeatedly failing tests for salmonella contamination, but was prevented from doing so after the Fifth Circuit Court of Appeals ruled that, because salmonella was not officially an adulterant, the agency had no enforcement authority to stop the company from continuing to produce contaminated meat.[20]

Under the HIMP pilot, the line speed was increased to as high as 175 birds per minute—0.3 seconds per bird—and inspectors only looked for cosmetic issues

than four years after the passage of the FSMA, the FDA is still in the process of developing rules to implement it.

The USDA conducts more frequent inspections than the FDA and stations inspectors in processing plants. A soup plant may see daily inspections of its chicken noodle soup, because that falls under the USDA's jurisdiction, but tomato soup, which falls under the FDA, will go untested. But even the USDA's inspection process is far from comprehensive, and food safety advocates are concerned that regulators are ceding too much inspection oversight duties to the companies that need inspecting. Internal USDA emails show the inspectors' concerns, with one writing, "Bottom line, we don't regulate the meat companies; they regulate us."[21]

A 2010 survey by the Union of Concerned Scientists provided a remarkable insight into the hold the industry has over regulators. More than 1,700 individuals—working on food safety at all levels in the FDA and USDA—responded to the survey. More than 38 percent of those respondents said public health has been hurt by businesses influencing food safety policy at the two agencies. One-in-four had recently seen industry interests forcing their agency to withdraw or modify a policy or action designed to protect consumers.[22]

The USDA maintains it has no legal authority to mandate a recall of contaminated food. The end result is that corporate food interests frequently put profits before safety. Corporations that know they are producing contaminated food frequently continue to do so because federal regulators have lamentably little power to stop them. Take the case of Foster Farms chicken, for instance. In October 2013, the CDC issued a public warning after epidemiologists determined with reasonable certainty that chicken from Foster Farms was the "likely source" of a salmonella contamination that had sickened as many as 18,000. But the USDA was unable to persuade the

THE CONSEQUENCES OF LINE SPEED

One example of the consequences of line speed is the inhumane handling of poultry. Nearly 1 million chickens and turkeys are unintentionally boiled alive because fast-moving production lines fail to kill the birds as designed. These birds must *theoretically* be discarded, because when not drained of blood they are more likely to carry bacteria or disguise the presence of disease.[24]

company to recall the chicken until July 2014 after they were able to make a genetic match between salmonella strains from an infected customer to a contaminated package of Foster Farms chicken that the family still had in the freezer. And even then, the company only recalled chicken produced during one week in March.[23]

As scary as the current picture of food regulation may seem, it may get a lot more frightening in the future. Federal regulators are increasingly relying on the industry to regulate itself. In other words, despite all the evidence that safety takes a back seat to profits, and that the market is inefficient at promoting safety, regulators have doubled down on the idea of trusting the food industry. For instance, in August 2014, the USDA approved widespread adoption of a streamlined poultry inspection program—the Hazard Analysis and Critical Control Points-based Inspection Models Project (HIMP) project—designed to replace Food Safety Inspection Service (FSIS) inspectors with company employees while increasing line speeds so high that those employees had only a fraction of a second to inspect poultry.[25] Under a traditional inspection routine, an inspector would inspect a maximum of 35 birds per minute, and would look for both cosmetic issues—bruises, blisters, and broken bones—and diseases such as leucosis, septicemia, tumors, as well as visible fecal contamination. Under the HIMP pilot, the line speed was increased to as high as 175 birds per minute—0.3 seconds per bird—and inspectors only looked for cosmetic issues.[26] Even advocates of the program, such as the former Undersecretary for Food Safety Dr. Richard Raymond, admitted that this was little more than "doing quality control for the meat and

IMPORTED FOOD

Imported food accounts for as much as 15 percent of the food in U.S. households. More than two thirds of all produce and 80 percent of all seafood comes from overseas—60 times more than the 1990s—and the percentage is expected to grow even more in the future. As flawed as the United States' system of oversight is, producers in other countries are often not held to the levels of accountability that federal regulators and the civil justice system maintain in the United States. Food imports come from more than 150 countries—some of which consists of ingredients, or is processed in, multiple countries—and enters the United States through more than 300 ports of entry. FDA inspectors cover only one percent of foreign firms importing food into the United States.[29]

poultry industry, using your and my tax payer dollars to protect the company brand name."[27]

Affidavits from former inspectors describe a frightening picture. Production lines were "running so fast it is impossible to see anything on the carcass." Inspector complaints about fecal contamination were met with the response, "It's not whether or not people are going to eat [expletive]—they are. It's just how much."[28] Other statements from the inspectors included: "We used to be stop [sic] the line for bile contamination, chronic pleuritic [inflammation of the membranes enveloping the lungs], hair/toenails/scurf and have these defects trimmed/removed, under HIMP, these are considered 'Other Consumer Protections' and we are no longer allowed to stop the line so they may be removed."[30] Another inspector reported, "The only way this plant could possibly be meeting these standards is by manipulating employees, USDA inspectors, and their own records and processes. I have personally witnessed all three." That inspector also claimed, "I am almost certain that products with [tuberculosis] are being sold raw on a regular basis," and said that company supervisors harassed the inspectors if they tried to report problems.[31]

Not surprisingly, food companies loved the program, yet for years the pilot version of the program received scathing criticism from food safety groups and the Government Accountability Office (GAO). Despite the criticism, the USDA ordered full scale adoption of the program with just one concession: line speeds were restricted to 140 birds per minute, giving inspectors 0.43 seconds to inspect each bird.[32]

THE IMPORTANCE OF THE CIVIL JUSTICE SYSTEM

It is in the landscape of this market and regulatory failure that the civil justice system has proven to be the most effective, and sometimes the only, mechanism for the protection of consumers.

Producers, suppliers and buyers may be strictly liable for injuries caused by contaminated products, which gives them a powerful incentive to promote safety. According to one food industry lawyer, Brad Sullivan,

"[l]awsuits do more than compensate consumers for economic losses from foodborne illnesses—they provide a potentially powerful economic signal to firms to invest more in food safety."

An empirical study published in the Houston Law Review found that litigation provided significant incentives toward food safety and deterrents against negligent conduct. The researchers concluded, "lawsuits do more than compensate consumers for economic losses from foodborne illnesses—they provide a potentially powerful economic signal to firms to invest more in food safety."[33]

"liability exposure is a major driver of risk management among growers."[34] Unlike the system of private auditing, the civil justice system operates without the incentive to cut costs. Attorneys, as law professors Timothy D. Lytton and Lesley K. McAllister put it, "identify the optimal level of rigor in food safety auditing and to bring claims against those who fall short of it."[35]

Litigation is "a central element of accountability" — FDA

Experts have long recognized that a system based largely on the industry's voluntary good faith will always be flawed. As Diana Crumley, Texas Health and Human Services Commission Counsel, put it, "While compliance-based enforcement strategies may be effective when firms 'want to comply,' traditional economic theory surrounding optimal deterrence suggests that some producers will only comply when the costs of noncompliance outweigh the benefits of noncompliance."[36]

The civil justice system is not just the major deterrent to negligent behavior, it also serves as the most effective tool for rooting out systemic problems in the food chain. While regulators' investigatory efforts are limited to the external factors of the food chain—for instance tracking genetic links between the sick and the food consumed—private attorneys frequently use discovery to compel producers, suppliers, buyers, and auditors to disclose inside information, which helps to trace the specifics of how food was allowed to become contaminated in the first place. Such discovery efforts by attorneys can also pinpoint the negligent parties. This power contrasts with that of regulators, who are often restricted to asking the guilty party for nothing more than a voluntary recall with no admission of negligence. Even regulators themselves recognize the need for private litigation. Michael R. Taylor, the FDA's highest-ranking food-safety official, described litigation as "a central element of accountability."[37]

Regulators are also limited to little more than press releases in their ability to distribute facts about contamination, whereas litigation frequently exposes the details of negligence to the media, heightening awareness of food safety and bringing the deterrent effect not just of civil penalties, but of market consequences.[38] As law professor Alexia Brunet Marks puts it, "in a perfectly competitive market, firms receive negative signals about their errors and the market corrects itself. In the context of food safety, for firms to alter corporate behavior to invest in food safety, manufacturers must face costs when they violate rules."[39]

THE TEN WORST OUTBREAKS

Blue Bell Ice Cream and Listeria (2015)

3 deaths

In 2015, the CDC traced a listeria outbreak to Blue Bell ice cream products. Through use of a database of bacteria DNA, the agency eventually found that Blue Bell's listeria problem dated back as far as 2010, suggesting that the contamination had been present for at least five years.[40] Though the CDC only identified 10 victims, all of whom were hospitalized, the infection was severe, with 3 of the 10 dying.[41] The three that died had been hospitalized in Kansas for unrelated conditions, and eaten the ice cream as part of meals provided by the hospital.

Inspections between 2007 and 2012 by Texas state health officials found numerous violations of food safety, including water condensate dripping from a pipe onto ice cream wafers.[42] Even when equipment underwent Blue Bell's routine cleaning procedures, inspectors were able to find the listeria pathogen on the inside and outside of the equipment.[43]

Blue Bell ignored federal recommendations aimed at preventing foodborne illnesses, including a recommendation to test the product once listeria had been found in the facility. The company eventually recalled 8 million gallons of ice cream, and promised to institute new, stricter procedures about notifying agencies when contaminants were found, but the CDC warned that consumers might still have Blue Bell products frozen in their homes.[44]

Foster Farms Chicken and Salmonella Heidelberg (2013)

18,000 infected

In the summer of 2013, officials at the CDC and the FSIS became convinced that a cluster of infections of a strain of salmonella known as Heidelberg originated with Foster Farms chicken.

On August 9, federal investigators notified Foster Farms of their findings. When USDA inspectors arrived at Foster Farms facilities, tests showed salmonella on about 25 percent of the chicken. Foster Farms, however, continued to distribute chicken, even as more cases of salmonella infection were coming to light.[45]

On October, 8, two months after notifying the company, the CDC issued its first public warning that chicken from Foster Farms was the "likely source" of a salmonella contamination that had by then spread to 17 states. By that time the CDC had confirmed 278 infected patients in 17 states.

Still Foster Farms did not recall its chicken, because even with all the mounting evidence linking the contamination to its facility, without a proven genetic match, it did not have to. It was not until July 2014, nearly a year later, that federal authorities were able to find a genetic match to conclusively identify Foster Farms as the problem. By this time the CDC had confirmed 634 cases of Heidelberg infections, with an estimated 18,000 further infections unreported. Foster Farms finally agreed to issue a recall, but shockingly only limited to chicken produced during only one week in March, the batch conclusively identified by the genetic match.

Jensen Farms Cantaloupes and Listeria (2011)

147 infected, 33 dead

In 2011, contaminated cantaloupes from Jensen Farms in Colorado caused a listeria epidemic that killed 33 people. The FDA said contamination was likely caused by pools of stagnant water and old, hard to clean equipment. Jensen Farms' two co-owners were arrested. By the time the Listeria outbreak was over, a total of 147 persons from 28 states had been infected.[46]

The Jensen Farms facility had been given a "96% score" by its auditor, PrimusLabs, despite the fact that the auditors noted the absence of an

antimicrobial wash, which ordinarily would be reason for an immediate shut down.[47] Mansour Samadpour, president of food safety laboratory IEH Laboratories & Consulting, told CNN in reference to the Jensen Farms case:

"They are not food safety audits. They have nothing to do with food safety… If this industry is sincere and they want to have their products be of any use to anyone, they should be printing their audit reports on toilet paper… People who are commissioning these audits don't seem to understand that they are … not worth the paper that they're written on."[48]

Despite facing criminal charges with a maximum sentence of six years in jail and $3 million in fines, the two Jensen brothers were eventually sentenced to five years' probation and ordered to pay $150,000 each in restitution to the victims. Most of the victims were compensated over three years later in a settlement.[49]

Cargill Turkey and Salmonella Heidelberg (2011)

136 infected in 34 states, 1 confirmed death

On August 3rd 2011, Cargill Meat Solutions Corp.—a division of Cargill, the largest private company in America for the last thirty years—issued one of the largest food contamination recalls in history, pulling 36 million pounds of ground turkey off the market after a CDC investigation traced the meat to an outbreak of the multi-drug-resistant Salmonella Heidelberg across 34 states. At least 37 people were hospitalized and one died in the outbreak.[50]

The contamination was traced to a Cargill plant in Arkansas, which took in chickens from as many as 180 growers working under contract. Cargill shut down the plant, added antimicrobial washes, and instituted what it described as "the most aggressive Salmonella monitoring and testing program in the poultry industry."[51]

By mid-August, just weeks after the original outbreak, the plant had reopened and was producing vast amounts of turkey. The salmonella, however, was not gone. Just a week after reopening, a sample tested positive for the potentially deadly strain of salmonella again. Despite "the most aggressive Salmonella monitoring and testing program in the poultry industry," it was not until September 11 that Cargill issued a second recall, more than two weeks after the contamination had been discovered.[52]

DeCoster Eggs and Salmonella (2010)

62,000 infected

More than half a billion eggs were recalled from Quality Egg LLC in Iowa after 1,939 people were infected with salmonella, with a further 60,000 suspected of being sickened. Litigation

revealed that the owners, Jack and Peter DeCoster, knew that their eggs were contaminated, but did little to mitigate the problem. The DeCoster's own testing over a period of 144 days found Salmonella 47 times, and the FDA would later estimate that an individual who ate DeCoster eggs had a 1 in 516 chance of being infected with Salmonella.[53]

Jack and Peter DeCoster testifying on Capitol Hill in 2010.

Jack DeCoster had a long record of previous food safety violations, as well as a shocking history of fines and legal cases regarding labor, environmental, and public health offenses.[54] In the 1980s, DeCoster eggs were so strongly linked to Salmonella outbreaks that at least two states banned their sale. In one 1987 incident at Coler Memorial Hospital in New York, 500 people were poisoned and nine died from Salmonella traced to mayonnaise made with DeCoster eggs.[55]

Jack and Peter DeCoster were eventually sentenced to three months in federal confinement, but at the time of writing were still free pending an appeal.[56]

Peanut Corporation of America Peanuts and Salmonella (2009)

9 dead

In January 2009, three-year-old Jacob Hurley began vomiting and suffering from bloody diarrhea. His parents took him to a pediatrician, who encouraged them to try and get him to eat again. Jacob's parents gave him his favorite food—Austin Toasty Crackers with Peanut Butter. Lab tests would later reveal three out of six packets of the Austin Crackers were contaminated with salmonella. Jacob's parents had unwittingly been feeding him the very source of his problems. It took Jacob 11 days to recover, yet in many ways he was lucky. At least nine other people died in the outbreak, which originated with Peanut Corporation of America (PCA).[57]

Jacob Hurley is comforted by his father during a House Energy and Commerce Committee hearing in 2009.

Executives at PCA knew their products were contaminated with salmonella, but put profits ahead of safety and continued to ship them to unsuspecting customers. Investigators eventually traced the problems to PCA's Blakely,

Georgia, plant where investigators found unsanitary conditions, including machinery held together by duct tape, roof leaks, mold, and roaches. Until it was shut down, the plant had processed 35 million pounds of peanuts annually. Salmonella was also traced to another PCA plant in Plainview, Texas, where state health investigators found dead rodents, rodent excrement, and bird feathers in a crawl space in the vicinity of production equipment. The foul conditions at the Texas plant had gone unnoticed in part because the plant operated without a food manufacturer's license for nearly four years.[58]

FDA investigators reported "12 instances where the firm, as part of its own internal testing program, identified some type of salmonella," and yet still released the product. In internal emails revealed in court, PCA President Stewart Parnell responded to his managers' reports of tainted products saying "Just ship it," and in another instance, "turn them loose."[59] In another email discussing positive salmonella tests, Parnell wrote, "We need to protect ourselves and the problem is that the tests absolutely give us no protection, just an indication at best." In 2014, a Georgia jury convicted Parnell of conspiracy and fraud, the first federal felony conviction ever for a food company executive in a food safety case.[60]

Hallmark/Westland Beef and downer cows (2008)

143 million pounds of beef recalled

A 2008 Humane Society video exposed employees of Hallmark/Westland forcing "downer" cows—cows too sick to walk—into kill pens by ramming them with forklifts and blasting them with high pressure hoses. Downer cows are thought to be at greater risk than healthy cows for diseases such as mad cow disease, and are more likely to be contaminated with fecal matter and disease-causing bacteria.

The Humane Society had been tipped off about the abuse by Dean Wyatt, an FSIS veterinarian who had flagged numerous industry violations. Wyatt was consistently overruled and, when company officials complained, FSIS retaliated ordered him to undergo further training.[61]

ALEC AND "AG-GAG" BILLS

The American Legislative Exchange Council (ALEC), the shadowy front group that ghostwrites state laws for corporate America, has long pushed model legislation to stop the kind of whistleblowing that Dean Wyatt did to reveal the Hallmark /Westland abuse. These so-called "ag-gag" bills often go so far as to criminalize whistleblowing and videotaping of animal abuse and farming violations. Five states have passed such laws, and 20 more have seen ag-gag bills introduced and defeated.[62]

The USDA launched an investigation which found that Hallmark/Westland had not been notifying inspectors about sick cows. The February 2008 recall of 143 million pounds of beef, spanning two years of production, was the largest beef recall in U.S. history. Hallmark/Westland was the prime supplier of beef to schools—37 million pounds of the recalled meat had been designated for school hamburgers, chili and tacos—and much of the meat had already

Still from Humane Society video of downer cows being forced into kill pens with forklifts

been delivered and consumed. Four years later in 2012, the now-bankrupt company agreed to a $497 million fine, though the judgment was little more than symbolic because of the company's insolvency.[63]

Mission Organics Spinach and E. coli (2006)

200 sickened, 5 dead

At least five people died in 2006, and more than 200 more were sickened and left vulnerable to future health problems from spinach contaminated with a virulent strain of E. coli. Of the confirmed cases, more than 100 people were hospitalized with about 15 percent suffering from kidney failure. Family members reported finding infected relatives as young as three and as old as 86 with blood pouring out of them.

In September 2006, the FDA warned U.S. consumers to stop eating all fresh spinach because the agency could not be sure where the contamination originated. It would take six months for investigators to trace the outbreak to a field in California that had been exposed to animal feces. After the outbreak, the leafy green industry developed new rules expanding the buffer between crops and pasture areas.[64]

Pilgrim's Pride Poultry and Listeria (2002)

46 sickened, 7 dead

In 2002, a listeria outbreak that eventually caused 46 people to be sickened, 3 to suffer miscarriages and 7 to die, was traced back to a Pennsylvania meat-processing plant owned by Pilgrim's Pride. Federal food inspector Vincent Erthal revealed to the *AP* that he had filed two years' worth of reports detailing the persistent sanitary violations at the plant, but his reports had been ignored.[65]

Pilgrim's Pride had found positive results for listeria in its plant, but did not warn regulators because tests of its product came up negative. Eventually the company was forced to recall 27.4 million pounds of chicken and turkey meat. In response to the outbreak, federal officials instituted tougher protocols, including recommendations

to test facilities for bacteria, and more intensive scrutiny for companies that either failed to test, or withheld positive results.[66]

Jack in the Box E. coli outbreak (1993)

708 sickened, 171 hospitalized, 4 dead

The Jack in the Box E. coli O157:H7 outbreak proved to be food safety's wakeup call. Few people had ever heard of E. coli before the incident, in which contaminated hamburgers sickened hundreds. Litigation would eventually reveal that Jack in the Box's supplier, Vons Companies, Inc., knew that as much as half the meat it was supplying had bacteria levels that violated quality standards. Jack in the Box, in turn, decided not to cook the meat to internal temperatures mandated by regulators because executives believed it made their patties "tough."[67]

The Jack in the Box restaurant in Tacoma, Wash., where a 2-year-old boy ate before dying of food poisoning last month. The company, whose business and stock have been hurt, is trying to regain the public's trust.

Jack in the Box's Worst Nightmare

Media coverage of the landmark Jack in the Box case

The scrutiny from federal agencies, the media, and the subsequent litigation prompted a paradigm shift in food safety procedures. According to CDC epidemiologist Patricia Griffin, "What changed after Jack in the Box is people started making the connection: This is not bacteria. This is animal fecal matter in our food."[68] Awareness of E. coli and other contaminants grew exponentially. Federal agencies increased recommended internal temperatures for cooked meat, safe food-handling labels were introduced, and food companies throughout the food chain (McDonalds had also suffered less serious E. coli outbreaks around the same time) began reforming their practices with safety in mind.[69] But most importantly, the Jack in the Box outbreak prompted the FSIS to declare E. coli O157:H7 an adulterant in ground beef, which forces meat processors to test ground beef for the pathogen and face criminal penalties if they don't. In 2011, the USDA expanded the number of E. coli strains that are classified as adulterants.[70]

FOOD SAFETY WHAT WE CAN DO

WHAT CONGRESS CAN DO

Make multi-drug-resistant salmonella strains an official adulterant.

Under food safety regulations, E. coli is officially an adulterant, while salmonella is not. Making E. coli an adulterant forced the beef industry to take real steps to prevent contamination. Now, E. coli contamination in ground beef is far rarer than it was 20 years ago. Salmonella contamination rates, however, have stayed relatively consistent. Legislation has been proposed to make antibiotic-resistant salmonella an adulterant just like E. coli, and experts believe such a move would have a drastic impact on contamination rates, and thus prevent many of the more than one million illnesses, 15,000 hospitalizations and hundreds of deaths caused by salmonella each year.[71]

In March 2014, U.S. Secretary of Agriculture Tom Vilsack testified before the U.S. House Appropriations Subcommittee on Agriculture, where the issue of salmonella contamination

was raised by Rep. Rosa DeLauro (D-Conn.). Secretary Vilsack testified that the USDA did not have the authority to declare salmonella an adulterant, to which Rep. DeLauro responded, "ask us for the authority." The USDA has yet to ask Congress for the authority.[72]

Shortly after that hearing, Rep. DeLauro and Rep. Louise Slaughter (D-N.Y.) introduced the "Pathogen Reduction and Testing Reform Act of 2014," which would amend the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act to give the FSIS the ability to declare pathogens such as salmonella adulterants.[73]

Pass legislation to create a single agency to oversee food safety

In early 2015, two proposals to centralize food safety oversight were made public. In late January, Congress introduced H.R. 609 and S. 287, which would consolidate food safety agencies and allow citizens to pursue civil actions to enforce the law. Additionally, the Obama administration proposed the creation of a single food agency to better protect the nation's food supply. It is vital that any future law provide a regulatory "floor" – a minimum standard, as opposed to a "ceiling" above which corporations would be immune for misconduct – and thus not preempt state law and civil remedies.[74]

WHAT THE INDUSTRY CAN DO

Implement random testing of their own products

The FDA recommends, but does not require, that food companies test their products for contamination. Implementing random testing is both good for business and for safety.

Vaccinate herds

Vaccinating cattle has proven to reduce E. coli shedding by as much as 58 percent, but most of the cattle industry has not adopted the practice. Contamination from E. coli variants sickens as many as 175,000 people each year and costs the nation as much as $993 million in direct economic costs.[75]

WHAT WE CAN DO

In general, safe cooking and preparation of food can help kill existing bacteria and prevent it from spreading.[76]

Always wash your hands before you start preparing food.

Cook meat and eggs to the recommended safe internal temperatures. Do not eat or drink foods containing raw eggs. Examples include homemade eggnog, hollandaise sauce, and undercooked French toast. Never drink raw (unpasteurized) milk. If you are served undercooked meat, or eggs in a restaurant don't hesitate to send your food back to the kitchen for further cooking.

Avoid cross-contamination by preventing foods that will not be cooked (like salads) from coming into contact with raw foods of animal origin (e.g., on dirty countertops, kitchen sinks, utensils, or cutting boards), for instance by using two cutting boards and designating one for meat. Wash hands, kitchen work surfaces, and utensils with soap and water immediately after they have been in contact with raw foods of animal origin.

Clean sponges daily. Sponges are the number one source of germs in the whole house, and can transfer bacteria all over your kitchen. Toss them in the dishwasher with a drying cycle or microwave them for two minutes. Dishcloths tend not to harbor as much bacteria but also should be cleaned often.

Safe Minimum Internal Temperatures

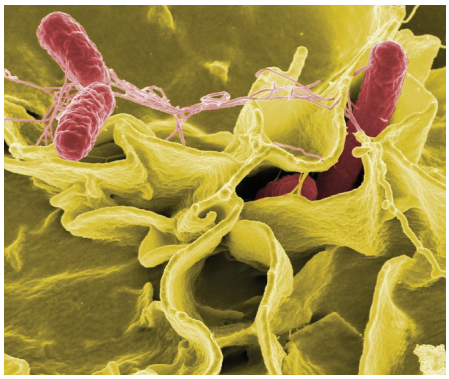
Product	Temperature
Poultry	165°F
Beef, Pork, Veal & Lamb (steaks, chops, roasts)	145°F and allow to rest for 3 minutes
Ground meats	160°F
Ham	145°F and allow to rest for 3 minutes
Eggs	160°F or until the yoke is solid
Fish & Shellfish	145°F

"Rest time" is the amount of time the product remains at the final temperature, after it has been removed from a grill, oven or other heat source. During the rest time, the meat's temperature remains constant or continues to rise, which destroys harmful bacteria.

APPENDIX — SALMONELLA, LISTERIA, AND E. COLI

SALMONELLA

Salmonella causes approximately one million illnesses, 19,000 hospitalizations and 380 deaths in the United States each year.



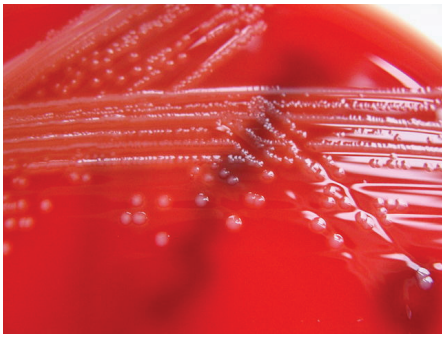
Salmonella infections generally have an incubation period of between 6 and 72 hours, and result in a broad range of symptoms, including diarrhea, abdominal cramps, and fever. In a small percentage of cases, patients develop bacteremia, which can cause abscesses, arthritis, endocarditis, or other severe illness. Infants, the elderly, and immune-compromised persons are at greater risk for bacteremia or invasive disease.

Overall, approximately 20 percent of cases each year require hospitalization, five percent of cases have an invasive infection, and one-half of one percent die. Infections in infants and in people 65 years of age or older are much more likely to require hospitalization or result in death.

Poultry products and eggs are frequently contaminated with Salmonella enteritidis, while beef products are commonly contaminated with Salmonella typhimurium. Bacteria can even be found on the outside of shell eggs. Other food sources of Salmonella may include raw milk or other dairy products and pork. Salmonella outbreaks also have been traced to contaminated vegetables, fruits, and marijuana.

LISTERIA

Listeria causes an estimated 1600 illnesses and 260 deaths per year.



Listeria is widespread in the environment and the food supply, and its ingestion is common, but only results in illness in a small percentage of cases. The illness, when it does develop, is known as listeriosis. Symptoms can develop from two to 70 days after eating contaminated food, and include fever, chills, severe headache, vomiting, and diarrhea. At its most severe, listeriosis can cause septic shock, meningitis, brain abscess, encephalitis (inflammation of the brain or brain stem), endocarditis (inflammation of the heart-membrane), and death.

Babies can be born infected if their mothers eat contaminated food during pregnancy. Pregnant women make up around 30 percent of all infection cases, and 60 percent of cases involving the 10-to-40-year age group. Those with weakened immune systems are most at risk, including:

- Pregnant women.
- Newborns: Newborns rather than the pregnant women themselves suffer the serious effects of infection in pregnancy.
- Persons with cancer, diabetes, or kidney disease.
- Persons with AIDS: They are almost 300 times more likely to get listeriosis than people with normal immune systems.
- Persons who take glucocorticosteroid medications (such as cortisone).
- The elderly.

E. COLI

E. coli (Escherichia coli) is bacteria that lives in the digestive tracts of humans and animals.

There are many types of E. coli, most of which are harmless, but some

can cause serious health problems, including bloody diarrhea, urinary tract infections, severe anemia or kidney failure, and even death.

E. coli can get into the food chain during processing if the food or water has been contaminated by feces. Infected meat must be cooked to 160 °F (71 °C), or the bacteria can survive.

A recent study published by the CDC found that E. coli O157 outbreaks linked to ground beef decreased in the last decade compared to the previous 20 years. Additionally, "Outbreaks attributed to foods generally consumed raw had higher hospitalization rates than other outbreaks, and leafy vegetables were the major source of outbreaks in the fall."[77]

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