

Chapter 3

The Intersection Between Liability Law and Economics and Its Relevance to Foodborne Illness Litigation

Overview of the Incentive System To Provide Food Safety

U.S. firms that make or distribute food products have a variety of incentives to reduce microbial pathogen contamination to safe levels. A system of market, regulatory, and legal components provides these incentives to firms to produce safe food products (Garber, 1998a 1998b, extended to food safety). These incentives generally take the form of “negative incentives” or adverse consequences for firms responsible for selling pathogen-contaminated food. The basic components of this incentive system are:

1. Market forces: firms risk losing business reputation, market share, and sales revenue if consumers become concerned about safety problems with a firm’s products.

2. Food safety laws and regulations: firms that violate Federal, State, or local food safety laws or regulations may be subject to various penalties imposed by courts or government agencies, including fines, product recalls, and temporary or permanent plant closures.

3. Product liability law: firms found responsible under product liability law for contaminated food products that made people ill may have to pay financial compensation to the plaintiffs as well as punitive damages. Firms also pay court costs and legal fees, regardless of most outcomes.

Product liability law deals with products that are defective either because they pose hazards or because they are of inferior condition or quality (Keeton et al., 1984, p. 677). In essence, product liability operates within this system of market, regulatory, and legal components and the combined incentives from this system encourage firms to provide safer products. Here we are concerned only with products that pose microbial food safety hazards.

The complexity of our food safety system and the interconnectedness of the three components is shown by the 1996 outbreak of foodborne illness due to *E. coli* O157:H7 contamination of unpasteurized apple juice manufactured by Odwalla, Inc. This outbreak raised consumer concerns nationwide about the safety

of fresh juice, and prompted many juice manufacturers to voluntarily begin pasteurizing juice products not previously pasteurized. The increasing number of foodborne illness outbreaks due to *E. coli* O157:H7 contamination of unpasteurized juice products also led the U.S. Food and Drug Administration (FDA) to propose new regulations for juice products (Buzby and Crutchfield, 1999). These changes in market forces and government regulations were in addition to the adverse consequences for Odwalla, which included a voluntary product recall costing \$12.5 million, a 17-percent drop in revenue during the first 6 months after the outbreak, a record \$1.5 million Federal fine for interstate shipment of an adulterated food product, and 21 personal injury lawsuits (Buzby and Crutchfield, 1999; Roach, 1999; Munarriz, 1997).

Intersection Between Law and Economics

Of the three components of the food safety incentive system, this report focuses on product liability and, specifically, on how foodborne illness is treated under product liability law. Product liability law specifies the exact circumstances under which firms are held liable for injuries or deaths due to contaminated food products, shifting some economic costs of foodborne illness from consumers to the firms responsible for causing illness. (See appendix for more information on the applicability of product liability law to foodborne illness.) For an overview about some of the literature on the intersection between law and economics and on how lawyers and economists view liability law from different perspectives, see box, “Intersection of Law and Economics” (p. 10). This chapter outlines the role of insurance for foodborne illness because insurance alters how the legal system provides incentives to firms to produce safer food. The chapter concludes by arguing that the combination of high transaction and information costs may lead to less than desirable levels of food safety in the United States.

In a world of perfect information and competition, markets would penalize firms that produce unsafe products. Firms would receive negative signals about their errors and the market would correct itself.

Although the U.S. food market cannot be characterized as having perfect competition, both economists and legal analysts agree that liability law provides some economic incentives to avoid actions that may violate laws. However, the extent to which liability law is economically efficient is unclear.

Economists tend to analyze liability law in terms of a search for efficiency in risk-bearing and incentives (see Cooter, 1991).⁶ Economic theory suggests that foodborne illness litigation provides signals to firms to invest more in food safety, ultimately resulting in a lower incidence of foodborne illness and an increase in general social welfare.⁷ One underlying economic premise of foodborne illness litigation is that a firm receives the appropriate incentives for efficient behavior (e.g., to produce safer products) if it compensates all victims who are made ill by microbial contamination of the firm's food and if, for each case, the level of monetary compensation equals total damages.⁸ In reality, perfect compensation does not occur for all foodborne illness cases and outbreaks because relatively few firms are held responsible for monetary damages caused by contamination of their food products.

Potential liability is one part of firms' anticipated costs of operation, and firms will take the optimal amount of food safety precautions consistent with minimizing their total costs of production (Johnson et al., 1989). Doing everything physically possible to make food safe is not economically efficient. Instead, a firm will incur increased costs of food safety precautions up to the point where the marginal costs of these actions equal the marginal expected benefits of reducing their risks of being sued for a foodborne illness incident, paying legal compensation, and paying any Federal or

State penalties for violation of regulations. The calculation of these expected costs involves the probability of paying damages (i.e., compensation) in a lawsuit, the size of the potential litigation costs, and any negative impacts to the firm's reputation and sales. Even if firms are not directly affected by legal action, many buy product liability insurance coverage to limit direct losses due to lawsuits, transforming the expected risk of lawsuits into a routine business expense.

The legal system could provide optimal deterrence if firms could correctly anticipate the compensation that the legal system would impose (Viscusi, 1989). However, three obstacles limit a firm's understanding of the true compensation they may have to pay following a risky activity (Viscusi, 1989, p. 82). First, compensation may not reflect the true damages that a plaintiff suffered. Second, compensation awards do not reliably indicate damages to actual victims. Victims who did not receive compensation, particularly those who never filed a claim, are overlooked. Third, some firms do not contemplate paying compensation awards, such as firms with short time horizons like speculative ventures. Other firms, when faced with the possibility of particularly large claims, may limit liability by reorganizing under Federal bankruptcy law (Viscusi, 1989).

Most food firms are insured, and insurers pay the losses and costs of any litigation and damages, so immediate legal incentives for firms to produce safer food are limited to the value of lost business reputation. However, other legal incentives are likely to include future increases in insurance costs if insurers raise rates or drop coverage for firms that cause insurance losses.

Insurance and Foodborne Illness

Consumers ill with foodborne illness have reduced incentives to pursue legal claims if health insurance or employee benefits programs cover some of the costs of their illness. Levit and Freeland (1988) found that, after private and public insurance (e.g., social insurance), patients directly paid for only 56 percent of all national health-care expenditures. They also found that, in general, the more expensive the service, the less (proportionally) did individuals pay (e.g., individuals directly paid only 10 percent of hospital-care expenses). Because consumers tend to be risk averse, they want insurance coverage for when they become ill.

⁶ Economic efficiency occurs when a firm's money and other resources are allocated in such a way that additional increases in an activity cannot be achieved without giving up a portion of some other activity.

⁷ Liability law deters or discourages food firms from operating in ways that might result in foodborne illness: if firms perceive a risk of incurring liability-related economic costs, they will allocate resources to reduce the probability that their products will cause foodborne illness.

⁸ Perfect compensation is a monetary compensation that restores a victim to the same level of well-being that would have been enjoyed had the externality (e.g., illness or accident) not occurred (Cooter, 1991). Of course, we cannot interpret this literally, as few, if any, plaintiffs would willingly accept some externalities (Cooter, 1991), such as the death of a child, paralysis, or chronic complications, in exchange for money.

Firms also tend to be risk averse, and consequently they want insurance coverage to manage risks (Shapiro, 1991). As part of a firm's risk-management strategy, firms purchase insurance to limit their exposure to financial, legal, and other risks by sharing these risks with insurance companies. Almost all defendant firms have "third-party insurance," or "liability insurance" for legal risks, and Clark (2000)⁹ neatly summarizes how insurance works for firms:

Large corporations typically have layers of "excess" insurance running into the tens or hundreds of millions of dollars. These excess insurers, in turn, insure themselves against the risk that they have to pay all of their money out by going to the 'reinsurance' market where they acquire the ability to recoup the vast majority of their insured losses from reinsurers. When a company is sued, its insurance company (a) provides a legal defense at the insurer's cost and (b) pays any resultant settlement or judgment. Insurers, not defendants, control litigation and determine what will be

paid and when it will be paid [in the case of settlements].

Comprehensive information about product liability insurance coverage in the food industry is not readily accessible because the insurance industry is highly competitive and data about premiums and paid claims are valuable market information. One example of the insurance available to food firms is the "products contamination coverage" sold by the insurance subsidiary of the National Food Processors Association. This coverage includes assistance to deal with regulatory investigations and media inquiries, as well as product testing and compensation for the costs of product recalls, lost profits, and damage to brand names. Many food firms might obtain less comprehensive coverage. Further research is needed to establish how product liability coverage varies among different kinds of food firms. Some observers believe that nearly all food firms have at least some coverage against foodborne illness due to a firm's products (Clark, 2000).

In short, although both health-care insurance and liability insurance benefit foodborne illness victims with compensation, they both distort incentives for firms to produce safer food. Health insurers seldom try to recover the costs of medical care for foodborne illness patients from the firms responsible for contaminated

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Intersection of Law and Economics

Adam Smith and Jeremy Bentham were among the first scholars to analyze the intersection of law and economics, and in the 1920's and 1930's, members of the legal-realist movement argued that the only function of tort law was to provide social insurance, since they believed tort law had no effect on the accident level (Landes and Posner, 1987). Although another wave of scholarship in law and economics occurred in the 1960's with seminal articles by Ronald Coase (common law as a mechanism for internalizing social costs) and by Guido Calabresi (model of efficient accident law), sustained scholarship in this area lagged for another decade (Landes and Posner, 1987). Since that time, Richard Posner, Steven Shavell, Kip Viscusi, and others have added to the literature (e.g., Posner, 1997; Shavell, 1987; Viscusi, 1996). It is now widely accepted that law provides economic incentives to make safer products, though more research is needed on the extent and relative strength of these incentives, particularly compared with incentives from government regulation and market forces.

A review of the legal and economic literature in the past decade suggests that lawyers and economists tend to emphasize different aspects of liability law. The legal literature commonly emphasizes that the objectives of liability law are to deter injurers and to compensate victims (e.g., Rose-Ackerman, 1991). The economic literature generally adds the concept of efficiency and analyzes law as a mechanism to achieve greater efficiency in risk management and incentives. This distinction is relevant here because this report not only investigates how the legal system deters production of unsafe food and compensates consumers for their foodborne illnesses, but also comments on efficiency and effectiveness issues.

food products because it is not cost effective. Consequently, health insurance limits the extent to which food firms receive signals to produce safer food. Meanwhile, liability insurance distorts incentives to produce safer foods, particularly if insurers are involved in settlements that are kept confidential.

Transaction and Information Costs

Viscusi (1989) has argued that tort liability causes an underproduction of health and safety in the United States because of high transaction and information costs. The same claim can be made for foodborne illness. High transaction costs and information costs dissuade food-poisoning victims from filing lawsuits, hinder a plaintiff's ability to prove causality, limit feedback to firms to produce safer food, and pose costs to plaintiffs and defendant firms. The result is a level of food safety that is less than the socially optimal level provided by a perfectly competitive market.

Transaction Costs

Both plaintiffs and defendants may incur high transaction costs (RAND, 1998a), that is, the amount of money spent for legal fees. Trials tend to cost anywhere from \$50,000 to tens of millions (Kumamoto and Henley, 1996). One study found that, of total expenditures on tort cases during 1983-88, 22 percent were plaintiffs' legal costs, 28 percent were defendants' legal costs, and only 50 percent represented net compensation received by plaintiffs (RAND, 1998a). Large transaction costs suggest that liability is an expensive way to compensate victims (Shapiro, 1991, p. 4).

For plaintiffs, transaction costs are primarily the costs of a product liability lawsuit (i.e., dollars spent for lawyer fees, court filing fees, expert witness fees). This definition can be expanded to include other costs, such as emotional stress, and money spent (e.g., travel costs) and time lost from work and other activities by the plaintiffs and their families while preparing for and appearing in court.

Plaintiffs routinely pay attorneys at least a third of any court award or settlement as a contingent fee (Cooter, 1991). If plaintiffs pursue litigation under a contingent fee basis, then transaction costs are limited to time lost from work and other disruptions of daily activities, because their attorney assumes the responsibility for the financial costs associated with filing and pursuing

the lawsuit (Clark, 2000).¹⁰ Therefore, high information costs and the uncertain outcome of a lawsuit may provide greater disincentives for these plaintiffs to pursue litigation than do transaction costs. Additionally, most foodborne illnesses are relatively mild and short-lived and do not incur medical and other costs high enough to make litigation worthwhile for a plaintiff to pursue litigation. Similarly, for particular foodborne-illness cases, the potentially modest rewards may be too low to attract an attorney to represent a plaintiff's claim on a contingent fee basis.

However, plaintiff attorneys are not obligated to take a case on a contingent fee basis but may rather prefer a fixed fee or an hourly rate. In these situations, a plaintiff must decide whether he or she can afford attorneys' fees and costs to pursue a case.

For defendant firms, a lawsuit's transaction costs include lawyer fees, witness fees, time lost from usual business activities (due to discovery requests for firm records, rehearsal of employee witnesses, courtroom appearances, etc.), potential loss of business reputation associated with adverse publicity from a public trial and consequent decline in sales, and increases in product liability insurance premiums. The appendix discusses incentives for firms to settle rather than go to trial.

Information Costs

High information costs may also discourage or prevent potential plaintiffs from filing foodborne illness claims. In particular, as discussed in the previous chapter, plaintiffs may lack information to link an illness to their consumption of a specific food that was contaminated with a specific pathogen because of a specific defendant's act or failure to act. And even if a plaintiff could afford to spend a great deal of money for supporting information for a case, the information necessary for successful litigation may be unavailable.

The most crucial issue in litigation for foodborne illness is causation, and epidemiologists and other medical professionals are generally needed to make such links. Plaintiffs typically try to obtain and use such expert medical or epidemiological testimony to support their claim. For example, where possible, plaintiffs obtain information from local and State public health authorities as well as from the CDC, particularly for

¹⁰ Of course, cost sharing depends on a fee agreement.

outbreaks in which health authorities determined a food-pathogen linkage. Public health authorities who investigate a case or an outbreak may be called to give a deposition or to testify as to their findings in court. However, because of conflicts of interest, they provide this information as part of their job rather than as an expert witness for the plaintiff (Rosenbaum, 2000). Public health officials from outside an area and the arena of the investigation may be used as experts (Rosenbaum, 2000).

One common starting point in investigating causation is identifying the foodborne illness either by medical testing procedures or by simpler, descriptive techniques, such as determining if the ill consumer's symptoms are consistent with typical acute and chronic symptoms for the particular foodborne illnesses being considered. Information about what the consumer ate prior to the illness is needed to identify a likely food source. If a pathogen is identified, the time frame under investigation can be narrowed down to match the typical incubation period of an implicated foodborne illness. Multiple food sources that could have caused an illness complicate the determination of causation. If an illness and a suspect food (e.g., raw eggs)

are identified, the next step in the investigation is generally to identify the likely party that contaminated the food. Knowledge of the actual food-handling steps used by the implicated firm may be used. In outbreak situations, circumstantial evidence may also be used, that is, information about the circumstances that help establish connections between a plaintiff's illness and the implicated food and firm. For example, evidence that other people got sick after eating the same food can lay the foundation for proving that the food was unwholesome (Draper, 1994).

Information about medical expenses and costs of lost productivity helps support a plaintiff's claim. Additionally, plaintiffs may also need "information about the costs of safety measures that the risk-reducing party might have taken" (Viscusi, 1989, p. 72).

Monetary costs to a potential plaintiff of obtaining information necessary to prove causation may be high, and such information may not be available at all. Similarly, the time necessary to obtain this information may also be high or infeasible. In general, costs are lower if an illness is part of an outbreak investigated by public health authorities or widely reported by the media.