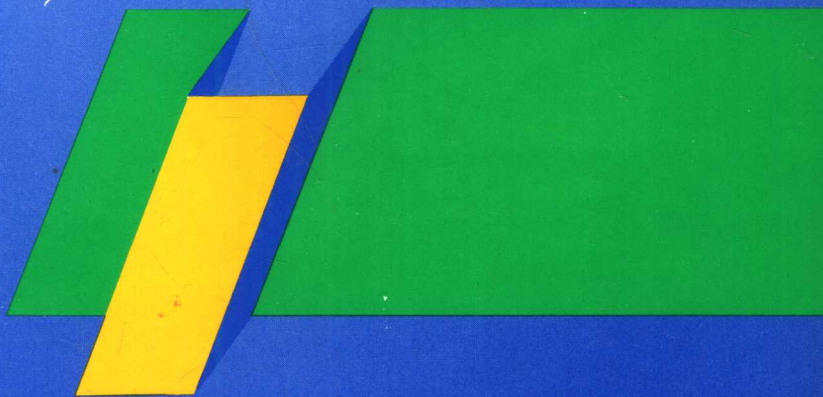


Liability

Perspectives and Policy

ROBERT E. LITAN
and
CLIFFORD WINSTON
Editors



511
I27
187

Liability

Perspectives and Policy

Robert E. Litan and Clifford Winston
editors

The Brookings Institution
Washington, D.C.

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984. ∞

Copyright © 1988 by

THE BROOKINGS INSTITUTION

1775 Massachusetts Avenue, N.W., Washington, D.C. 20036

Library of Congress Cataloging-in-Publication Data

Liability: perspectives and policy / Robert E. Litan and Clifford Winston, editors

p. cm

Includes bibliographical references and index

ISBN 0-8157-5272-5 ISBN 0-8157-5274-7 (pbk.)

1. Liability (Law)—United States 2. Insurance, Liability—United States 3. Torts—Economic aspects—United States.

I. Litan, Robert E., 1950–

II. Winston, Clifford,

1952–

KF1250.L53 1988

346.7303—dc19

[347.3063]

88-7254

CIP

9 8 7 6 5 4 3 2 1

Board of Trustees

Louis W. Cabot

Chairman

Ralph S. Saut

Vice Chairman;

Chairman, Executive Committee;

Chairman, Development Committee

Samuel H. Armacost

J. David Barnes

Rex J. Bates

A. W. Clausen

William T. Coleman, Jr.

Richard G. Darman

Thomas R. Donahue

Charles W. Duncan, Jr.

Walter Y. Elisha

Robert F. Erburu

Roberto C. Goizueta

Robert D. Haas

Philip M. Hawley

Roy M. Huffington

B. R. Inman

Vernon E. Jordan, Jr.

James A. Joseph

James T. Lynn

Donald F. McHenry

Bruce K. MacLaury

Mary Patterson McPherson

Maconda B. O'Connor

Donald S. Perkins

J. Woodward Redmond

James D. Robinson III

Robert V. Roosa

B. Francis Saul II

Henry B. Schacht

Howard R. Swearer

Morris Tanenbaum

James D. Wolfensohn

Ezra K. Zilkha

Charles J. Zwick

Honorary Trustees

Vincent M. Barnett, Jr.

Barton M. Biggs

Eugene R. Black

Robert D. Calkins

Edward W. Carter

Frank T. Cary

Lloyd N. Cutler

Bruce B. Dayton

Douglas Dillon

Huntington Harris

Andrew Heiskell

Roger W. Heyns

John E. Lockwood

William McC. Martin, Jr.

Robert S. McNamara

Arjay Miller

Charles W. Robinson

H. Chapman Rose

Gerard C. Smith

Robert Brookings Smith

Sydney Stein, Jr.

Phyllis A. Wallace

THE BROOKINGS INSTITUTION is an independent organization devoted to nonpartisan research, education, and publication in economics, government, foreign policy, and the social sciences generally. Its principal purposes are to aid in the development of sound public policies and to promote public understanding of issues of national importance.

The Institution was founded on December 8, 1927, to merge the activities of the Institute for Government Research, founded in 1916, the Institute of Economics, founded in 1922, and the Robert Brookings Graduate School of Economics and Government, founded in 1924.

The Board of Trustees is responsible for the general administration of the Institution, while the immediate direction of the policies, program, and staff is vested in the President, assisted by an advisory committee of the officers and staff. The by-laws of the Institution state: "It is the function of the Trustees to make possible the conduct of scientific research, and publication, under the most favorable conditions, and to safeguard the independence of the research staff in the pursuit of their studies and in the publication of the results of such studies. It is not a part of their function to determine, control, or influence the conduct of particular investigations or the conclusions reached."

The President bears final responsibility for the decision to publish a manuscript as a Brookings book. In reaching his judgment on the competence, accuracy, and objectivity of each study, the President is advised by the director of the appropriate research program and weighs the views of a panel of expert outside readers who report to him in confidence on the quality of the work. Publication of a work signifies that it is deemed a competent treatment worthy of public consideration but does not imply endorsement of conclusions or recommendations.

The Institution maintains its position of neutrality on issues of public policy in order to safeguard the intellectual freedom of the staff. Hence interpretations or conclusions in Brookings publications should be understood to be solely those of the authors and should not be attributed to the Institution, to its trustees, officers, or other staff members, or to the organizations that support its research.

Foreword

IN RECENT years the United States has witnessed an unprecedented growth in personal injury lawsuits. State and federal courts have been flooded with litigation involving medical malpractice, unsafe products, and environmental hazards. Jury awards and out-of-court settlements for medical expenses, income losses, and the pain and suffering of victims have routinely amounted to hundreds of thousands of dollars. At the same time, premiums for liability insurance have risen steeply, and some companies have refused to cover new clients or withdrawn coverage entirely. These developments have threatened the functioning of the entire civil litigation process and touched off a national debate over what should be done to bring order to our system of dealing with personal accidents and injuries. Some critics have urged fundamental reform of the civil liability system to limit awards. Others have contended that more extensive regulation of the insurance industry would reintroduce stability.

In this book Robert E. Litan, Clifford Winston, and a team of economists and lawyers evaluate the issues underlying this debate and suggest policies to ameliorate the problems of both the courts and the insurance industry. They examine the functions of tort law in providing compensation and deterring harmful behavior, the apparent liberalization of tort doctrines that has contributed to higher damage awards and affected the availability and cost of insurance, and the ways in which changes in the system have affected the provision of medical services, the development of safer products, the maintenance of safety in the workplace, and the protection of the environment. The authors also identify critical gaps in knowledge that need to be filled before any sweeping changes can be advanced. Thus, although they provide specific policy recommendations,

they are cautious about calling for radical changes, such as replacing the tort system with broad administrative compensation programs, unless sound evidence supporting such programs becomes available.

Robert E. Litan and Clifford Winston are senior fellows in the Brookings Economic Studies program. Robert Litan is also counsel to Powell, Goldstein, Frazer and Murphy. Other contributors are John Calfee, assistant professor of management, University of Maryland; Patricia M. Danzon, professor of health care systems, University of Pennsylvania; Scott E. Harrington, associate professor of insurance, University of Pennsylvania; Peter Huber, private consultant, Washington, D.C., and senior fellow, the Manhattan Institute; George L. Priest, professor of law, Yale University; Peter Swire, associate, Powell, Goldstein, Frazer and Murphy; and W. Kip Viscusi, professor of economics, Northwestern University.

The editors wish to thank Paul L. Joskow and participants in the June 1987 Brookings Civil Liability Conference for helpful comments on the chapters.

Various individuals made useful contributions to specific chapters. Chapters 1 and 8 benefited from research assistance by Theo Correl. Chapter 2 benefited from the comments of Ralph Winter, Marilyn Simon, and Richard Craswell. Chapter 3 benefited from the comments of David Brummond and Chuck Berry; research assistance was provided by Chong Lee. Chapter 4 received data on malpractice rates from Benson L. Dutton, Jr.; research assistance was provided by Jan Mills. Chapter 7 benefited from research provided by Scott Brooks and Jon Lewis.

James R. Schneider edited the manuscript, Victor M. Alfaro and Almaz S. Zelleke verified its factual content, and Margaret Lynch prepared the index.

Funding for this project was provided in part by the A. V. Starr Foundation, Dow Chemical Company, Bell Atlantic, the Alex C. Walker Foundation, and the Aetna Foundation.

The views expressed in this book are those of the authors and should not be ascribed to those persons or organizations whose assistance is acknowledged or to the trustees, officers, or other staff members of the Brookings Institution.

BRUCE K. MACLAURY
President

*April 1988
Washington, D.C.*

Contents

1. The U.S. Liability System: Background and Trends	1
<i>Robert E. Litan, Peter Swire, and Clifford Winston</i>	
The Changing Function of Tort Law	3
Compensation through Tort Law: Blessing or Curse?	11
Outline of the Book and Key Conclusions	14
2. Economic Aspects of Liability Rules and Liability Insurance	16
<i>John E. Calfee and Clifford Winston</i>	
A Simple Model of Liability	16
Liability Rules	19
Liability Theory and Liability Issues	29
Final Comments	34
Appendix: Mathematical Derivations	34
3. Prices and Profits in the Liability Insurance Market	42
<i>Scott E. Harrington</i>	
Overview of the Market	43
Overview of Financial Results	49
Errors in Estimating Reserves	53
Disputes about Profitability	59
Growth in Premiums and Losses	67
Causes of Underwriting Cycles	77
Premium Increases for General Liability Insurance	82
Policy Implications	89
Appendix A: Profit Measurement	91
Appendix B: Calculation of Break-Even Prices	96

4. Medical Malpractice Liability	101
<i>Patricia M. Danzon</i>	
Trends in Claims and Premiums	102
Costs and Benefits of the Tort System	110
Alternative Institutional Arrangements	121
Conclusion	126
5. Environmental Hazards and Liability Law	128
<i>Peter Huber</i>	
Origins of Environmental Liability Law	129
New Science, New Sociology, and the Legal System	131
The Diffusion of Environmental Liability	132
Legislative Initiatives	139
Linking Cause and Effect	141
Judgment without Verdict	144
Insurers Depart	146
Options	147
Conclusion	153
6. Liability for Occupational Accidents and Illnesses	155
<i>W. Kip Viscusi</i>	
Policy Objectives and Instruments	155
The Role of the Market	158
Direct Regulation of Risk	161
Workers' Compensation	164
Civil Liability Litigation	171
Toxic Tort Compensation Schemes	180
Conclusion	183
7. Products Liability Law and the Accident Rate	184
<i>George L. Priest</i>	
Trends in Products Liability Litigation and Accident Rates	187
The Economic Argument for Strict Products Liability	194
Reforming Products Liability Law	207
The Stakes in Products Liability Law	222
8. Policy Options	223
<i>Robert E. Litan and Clifford Winston</i>	
Modifying Insurance Regulation	224
Tort Reforms	227
Alternative Compensation Mechanisms	238
Conclusion	240

Tables

- 1-1. Average Jury Awards in Cook County, Illinois, and San Francisco, Selected Periods, 1960-84
- 2-1. Effects of Liability Rules under Simple Market Conditions
- 3-1. Shares of National Net Premiums Written for Leading Property and Liability Groups, 1985
- 3-2. Selected Financial Results for the Property-Liability Industry, 1972-86
- 3-3. Adjusted Income Measures as a Percentage of Earned Premiums and Adjusted Surplus, 1972-86
- 3-4. Combined Ratios and Operating Ratios, by Insurance Line, 1977-86
- 3-5. Accident Year Loss Ratios by Insurance Line: Originally Reported (R) and Developed through 1985 (D), 1976-85
- 3-6. Estimated Reserve Inadequacy for General Liability Lines, Based on Paid-Loss Development Methods, as of 1985
- 3-7. Annual Percentage Changes in A. M. Best and Standard & Poor's Common Stock Indexes, 1981-86
- 3-8. Growth Rates for Net Premiums Written, Net Premiums Earned, and Incurred Losses, by Line of Insurance, 1977-86
- 3-9. Growth Rates for Net Premiums Written, Net Premiums Earned, and Incurred Losses Relative to GNP, by Line of Insurance, Selected Periods, 1976-86
- 3-10. Growth Rates for Accident Year Incurred Losses, by Line of Insurance, Selected Periods, 1976-85
- 3-11. Growth Rates for Paid Losses, by Line of Insurance, Selected Periods, 1976-85
- 3-12. Growth Rates for Direct Premiums Written and Losses Paid per Capita, by Line of Insurance, for Ten Largest States, Selected Periods, 1976-84
- 3-13. Actual and Projected Earned Premiums for General Liability Using 1981 Ratio of Earned Premiums to Discounted Accident Year Losses, 1982-86
- 3-14. Actual and Predicted Prices for General Liability, 1981-86
- 3-15. U.S. Government and Prime Municipal Bond Yields, 1977-86
- 3-16. Paid-Loss Development Factors, 1976-84
 - 4-1. Claims Filed per 100 Physicians, Selected States, 1980, 1984
 - 4-2. Average Indemnity per Paid Claim, Selected States, 1980, 1984
 - 4-3. Premium Rates for a \$100,000-\$300,000 Policy, Mean Percentage Change Nationwide from Previous Year, 1978-84
 - 4-4. Malpractice Premiums and Losses, Percentage Changes Nationwide from Previous Year, 1978-85

4-5. Percentage Changes in Median Premiums, Net Income, and Fees, by Specialty, 1983-86	113
5-1. Summary of Selected Toxic Tort Cases, 1983-86	136
6-1. Summary of Labor Market Studies of Wage Premiums for Job Risks	160
6-2. Cost per Life Saved for OSHA Standards	162
6-3. Worker Responses to Hazard Warnings	163
6-4. Workers' Compensation Benefits and Related Financial Effects, 1976-83	166
6-5. Distribution of Liability Awards by Severity of Bodily Injury, 1977	173
7-1. Federal Products Liability Cases Filed, 1974-86	187
7-2. Products Liability Trials and Verdicts, Cook County, Illinois, and San Francisco, 1960-84	188
7-3. Deaths per 100,000 Resident Population, by Accident Type, Selected Years, 1950-80	190
7-4. Worker Job Deaths per 100,000 Workers and Total Disabilities, Selected Years, 1945-83	191
7-5. Disabling Work Injuries per Million Employee Hours, by Selected Industry, Selected Years, 1950-70	192
7-6. U.S. Product-Related Injuries Requiring Hospital Emergency Room Treatment, Fiscal Years 1974-81	193
8-1. State Insurance Reforms, January 1986-May 1987	225
8-2. State Tort Reforms, January 1986-May 1987	230
8-3. Damages Caps Adopted by the States, January 1986-May 1987	232

*The U.S. Liability System:
Background and Trends*

Robert E. Litan, Peter Swire, and Clifford Winston

THE AMERICAN civil litigation system, in recent years, has been placed on trial. Critics charge that the explosive growth in the number of liability lawsuits, coupled with dramatic increases in jury awards and settlements, has caused an insurance crisis—steeply higher premiums for liability insurance and, in some instances, coverage curtailed or withdrawn. For many lines of commercial liability insurance, including products liability and medical malpractice, premiums have skyrocketed in just a few years. For other lines, notably those covering nurse-midwives, municipalities, and day care centers, coverage is simply no longer available in some areas. As a result, the crisis may be dampening productivity growth and pushing up prices for a broad range of goods and services, crippling the international competitiveness of the American economy at a time when it can ill afford it. Only fundamental reform of the nation's civil justice system, critics warn, will make liability insurance more available and affordable.

This outlook is not universally shared. Skeptics acknowledge that property and casualty insurance companies suffered unusually large losses in 1984 and 1985—\$1.9 billion and \$3.8 billion, respectively—but they attribute these setbacks to excessive rate cutting in earlier years and to falling returns from the industry's portfolio investments. These critics also deny that the civil justice system needs fundamental overhaul. The liability insurance industry, they charge, has launched a "tort reform" campaign to cover its own underwriting mistakes and even perhaps its collusive behavior. The only reform required in their view is more intensive regulation of the industry.

The controversy is not a new one. Public concern over the efficiency and fairness of the civil liability system ebbs and flows with the apparently cyclical performance of the property and casualty insurance industry. The

previous insurance "crisis," for example, occurred in the mid-1970s, when liability premiums also escalated and coverage was curtailed. The events prompted Congress and state legislatures to examine possible reforms to the nation's tort laws. But relatively little change at either the federal or state levels resulted.

More has happened during the current crisis. Although Congress has thus far failed to agree on any reforms to the civil justice system, most states have recently modified their liability laws—imposing caps on awards and adjusting tort doctrines so that they do not unduly favor plaintiffs—in an attempt to reduce liability costs. In the meantime, however, many customers have abandoned their insurers and chosen to form insurance syndicates of their own or even to self-insure. This has led to a vicious cycle. Because the customers who drop their insurance tend to be low-cost risks, insurers are left with servicing higher-risk customers. This "adverse selection" process forces premiums up still further and in turn induces still more low-risk customers to seek alternative ways of meeting their liability costs.

Nevertheless, calls for reforming the system of civil justice are less urgent now than they have been in recent months. As in previous insurance cycles, increases in premiums have moderated. In some instances, coverage that was withdrawn has reappeared. In 1986 the property and casualty industry earned 11.6 percent on its equity, a return lower than the manufacturing sector average of 13 percent during the past decade but still considerably better than the disappointing performance of the previous two years.

The issues raised by the most recent crisis, however, will not disappear. If nothing else, the dramatic increases in premiums and curtailments of coverage have called greater attention to the nation's civil justice system—whether it is working satisfactorily, and if not why—than at any point in recent memory. Moreover, interest in these issues will intensify if and when the underwriting cycle reverses course and turns against the industry once again.

It is essential therefore that there be a framework within which to evaluate and develop policies that merit consideration. This book attempts to supply that framework by bringing together analyses of the major issues raised by the recent crisis. It also examines certain underlying causes of the recent dramatic changes in insurance markets, assesses the merits of conflicting opinions, and identifies critical gaps in knowledge that must be filled before fundamental disputes can be resolved and sound public policy developed.

The Changing Function of Tort Law

Injuries pose three different and potentially conflicting challenges for all societies. One is efficiently to *deter* behavior that causes injuries. A second and related objective is to exact *retribution* against those responsible. Most societies use some combination of criminal and civil penalties—jail sentences and fines—to meet these goals. The third challenge is to *compensate* victims for their injuries. Compensation may be supplied by the government or by the private sector (through insurance), and may or may not be linked to specific injuries or types of accidents. *Tort law*—rules allowing accident victims to seek compensation through the judicial system from the parties responsible—can be considered a mechanism for meeting all three of these challenges.

Tort rules will efficiently deter accident-causing behavior if responsibility for the costs of injuries is imposed on those who can avoid or prevent accidents most cheaply. If they are well designed, liability rules encourage “cheapest-cost avoiders” to take efficient precautions, unless it is less expensive simply to pay for the cost of injuries. For example, suppose that the plaintiff in a lawsuit could have avoided a \$10,000 injury only by taking precautionary measures costing \$1,000 but that the defendant manufacturer could have avoided the accident by spending just \$100. Holding the defendant—the cheapest-cost avoider—responsible for the costs of the injury would encourage others similarly situated to take efficient precautions to prevent future such accidents.

Of course, tort law administered in this fashion imposes higher costs on those whose activities entail the risk of injury—say, manufacturers of hazardous substances—which requires them to charge higher prices on their products or services to cover the costs of preventing future accidents. Some producers or organizations might even decide not to offer certain products or services because of the liability risks. But if producers and other participants in the economy are not charged for the costs they impose on others through accidents and injuries, resources will be misallocated toward activities that create or perpetuate risks.

Tort law also provides a means for compensating injured parties or *spreading losses* by making individuals or firms with greater resources, either on their own or through their liability insurance policies, pay for the costs of injuries. Misfortune can strike suddenly and unpredictably. A car accident can paralyze and forever change the life of an injured driver or passenger. A drug once thought to be totally safe can later be discovered to cause cancer among many who use it. All societies must choose how

these and similar losses should be borne, either solely by victims or spread in some way among other parties.

One method for spreading losses is to have government-administered (and taxpayer-financed) programs for compensating injured parties, as is the case in New Zealand and Sweden and to a limited extent in the United States through the disability component of the social security system. Compensation through the tort system is an alternative means. In practice, tort law administers compensation through private third-party insurance, which individuals and firms purchase to cover the costs they might owe to injured victims. Liability insurance spreads losses not only among all policyholders but, in the case of business purchasers, among consumers, in the form of higher prices of products or services, and workers, in the form of lower wages. If premiums are based on experience or risk, liability insurance can also deter activities that create risks.

A third objective of the tort system is to exact retribution against wrongdoers regardless of cost. The idea here, of course, is that justice requires wrongdoers to pay a price for their harmful behavior. Criminal laws are designed to accomplish this by punishing those who intentionally inflict harm on others. Many legal scholars argue that the common-law tort system, which requires negligent parties to compensate those they injure, should also be used to assign culpability. Given its focus on the economic functions of the civil liability system, however, this book concentrates primarily on the objectives of deterrence and spreading loss.

As it turns out, these two objectives can conflict. If individuals may recover only those losses that defendants could more cheaply avoid, then the loss-spreading function of the civil liability system will be limited. In particular, injured parties who could have avoided their accidents more cheaply than potential defendants may receive no compensation at all, even in cases where the defendants may have been able to take practical preventive measures. Conversely, if the system is to be used liberally to spread losses, many individuals and firms will be forced to bear costs they may have no way of preventing. Thus, for example, losses may be easily spread by requiring manufacturers to pay for injuries that scientists may some day link to their products. But if the manufacturers have no way at the time to prevent the injuries, then requiring them to shoulder the cost many years later will do nothing to promote deterrence.

The discussions in this book broadly suggest that, in fact, changes in tort law and the growth of third-party insurance during the past two decades have sharply increased the use of the tort system to spread losses, but at the cost of reducing the system's ability to deter harmful activities

efficiently. It was not always this way: a variety of tort doctrines formerly limited the ability of plaintiffs to recover. From the mid-nineteenth century until very recently, for example, plaintiffs could win a tort action only by proving that their injuries were "proximately caused" by the defendant's negligence or by behavior that a "reasonable man" would not have displayed. And plaintiffs could only recover for purely economic damages or medical costs and lost income; they could not be compensated for pain and suffering or emotional distress. At one time, plaintiffs injured by defective products could recover only from the retailers from whom they purchased the products (in legal terms, those with whom they were "in privity"), not from manufacturers. Even when defendants were negligent, plaintiffs could not recover at all if through their own negligent conduct they contributed to their predicament. And some potential defendants, notably federal, state, and local governments, were immune from suit.

Americans have gradually grown more receptive, however, to using the tort system as a vehicle for compensation. Having enjoyed significant advances in living standards, many Americans could afford to pay more attention to the environmental, health, and safety effects of industrial growth. In the 1960s and 1970s Congress responded by authorizing major programs to regulate exposure to harmful substances in the workplace, in products sold to consumers, and in the general environment.¹ During the same years, judges and juries eased the availability and raised the levels of compensation provided through the tort system. Finally, individuals have increasingly sought compensation from the courts because existing insurance policies or government compensation funds have offered less generous compensation prospects.

The increasing importance of the loss-spreading objective of the tort system has been manifested in three ways. Changes in tort doctrines have made it easier for plaintiffs to recover in any given litigation. Successful plaintiffs in certain classes of tort cases have enjoyed larger damage awards and settlements. And the combination of both trends appears to have induced many more individuals to file lawsuits.

Liberalization of Tort Doctrines

Tort law in the United States is largely based not on statutes but on common law, a body of legal principles developed case by case by judges, primarily those in state courts. It is difficult therefore to generalize about

1. See Robert E. Litan and William D. Nordhaus, *Reforming Federal Regulation* (Yale University Press, 1983), pp. 34-58.

the status of tort law in all jurisdictions. Nevertheless, certain important changes in doctrines have occurred in the past several decades, all of which have expanded the system's function in spreading losses:

—Whether by applying the negligence test in a flexible fashion or by imposing liability on parties whose behavior is causally related to accidents but who are not necessarily negligent (so-called strict liability), the courts have increased manufacturers' liability for defective products. Early in the twentieth century courts began to weaken the privity doctrine by allowing plaintiffs and then members of their families to recover directly from manufacturers for injuries caused by defective products. More recently, certain courts have held that a product can be defective even if it conforms to prevailing regulatory standards and if the manufacturer had no knowledge at the time of design or production that it would entail the risks later attributed to it in litigation.

—The negligence standard itself has been extended through litigation to impose liability on a wide class of service providers not previously accustomed to being sued. Day care centers, ski lift, ice rink, and amusement park operators, taverns and restaurants, and not-for-profit organizations have all been taken to court for failures to warn of certain dangers and for the careless conduct of their employees. The exposure of these defendants to liability claims has been widened by the doctrine of joint and several liability, which allows prevailing plaintiffs to recover up to the full amount of a total damage award from any single defendant if the other defendants are unable to pay, and by the collateral source rule, which prohibits juries from reducing damages by subtracting insurance monies or other compensation plaintiffs receive from other sources.

—The concept of contributory negligence has been relaxed in many states so that negligent plaintiffs are no longer totally barred from recovery. Instead, they find their damages reduced by the proportion by which their negligence contributed to their injury. In addition, beginning with the Federal Tort Claims Act of 1946, which waived the federal government's sovereign immunity, courts have made state and local governments liable for tort suits.

—Courts have relaxed the standards plaintiffs must satisfy in proving, under either the negligence or strict liability doctrine, that defendants have caused their injuries. This trend has been manifested primarily in product liability and so-called toxic tort cases, which have frequently required courts to decide whether plaintiffs' injuries have been caused by their exposure, often over long periods of their lives, to substances recently discovered to be associated with the development of cancer or other seri-

ous diseases. Courts have adopted a range of rules to determine causation in such cases. Some have placed liability on the first or last source to which plaintiffs can establish they were exposed; others have made *all* manufacturers of the substance jointly and severally liable. In one noted case involving the exposure of Vietnam veterans to the chemical Agent Orange, a federal court actively encouraged a \$180 million settlement even though no hard scientific evidence had been uncovered that linked the chemical to the medical infirmities claimed by the plaintiffs.

—Finally, courts in certain jurisdictions have liberally interpreted statutes of limitation, which bar plaintiffs from recovering if they wait too long after suffering injury (typically more than three or four years) to file suit. In many toxic tort, product liability, and medical malpractice cases, it is difficult to determine when injury actually occurs. It could occur with the first exposure to a substance or operation, or it could develop decades later when the symptoms of disease become observable. Although jurisdictions differ widely on this issue, the trend has been for courts not to invoke the statute of limitations to bar suits involving long-latent injuries.

Higher Damage Awards and Settlements

The tort system allows for compensation to injured parties through lawsuits and, far more importantly, through claims resolution by liability insurance companies. Indeed, of the millions of insurance claims filed each year, typically only 2 percent are resolved through litigation. Of cases brought to court, less than 5 percent are tried to verdict; the rest are settled.²

In addition, the amounts actually received by successful plaintiffs are often much smaller than those originally awarded by juries. Trial judges and appellate courts may, for instance, override jury verdicts; or in some cases the defendant may not have sufficient resources (even with insurance) to satisfy the judgment. One recent study of 198 tort verdicts in 1984 and 1985 that resulted in awards of \$1 million or more found that the successful plaintiffs received the original jury award in only 51 cases; the final distributions to plaintiffs in the other cases were, on average, 30 percent less than the amount originally awarded.³

In short, jury awards represent only the tip of the tort system and

2. William E. Bailey, "The High Cost of Insurance: Who's to Blame?" *The Brief*, vol. 16 (Winter 1987), pp. 15–18.

3. Ivy E. Broder, "Characteristics of Million Dollar Awards: Jury Verdicts and Final Disbursements," *Justice System Journal*, vol. 11 (Winter 1986), p. 353.