# The Law and Economics of Public Health

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# Frank A. Sloan

Center for Health Policy
Duke University
Durham
NC 27708, USA
fsloan@duke.edu

# Lindsey M. Chepke

Center for Health Policy Duke University Durham NC 27708, USA Ichepke@duke.edu



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# Foundations and Trends<sup>®</sup> in Microeconomics

Published, sold and distributed by: now Publishers Inc. PO Box 1024 Hanover, MA 02339 USA Tel. +1-781-985-4510 www.nowpublishers.com sales@nowpublishers.com

Outside North America: now Publishers Inc. PO Box 179 2600 AD Delft The Netherlands Tel. +31-6-51115274

The preferred citation for this publication is F. A. Sloan and L. M. Chepke, The Law and Economics of Public Health, Foundations and Trends  $^{\textcircled{R}}$  in Microeconomics, vol 3, no 5-6, pp 331–490, 2007

ISBN: 978-1-60198-074-8 © 2007 F. A. Sloan and L. M. Chepke

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Volume 3 Issue 5-6, 2007

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Foundations and Trends<sup>®</sup> in Microeconomics, 2007, Volume 3, 6 issues. ISSN paper version 1547-9846. ISSN online version 1547-9854. Also available as a combined paper and online subscription.

Foundations and Trends<sup>®</sup> in Microeconomics Vol. 3, Nos. 5-6 (2007) 331–490 © 2007 F. A. Sloan and L. M. Chepke DOI: 10.1561/070000020



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# Frank A. Sloan<sup>1</sup> and Lindsey M. Chepke<sup>2</sup>

- Center for Health Policy, Duke University, 302 Towerview Drive, Box 90253, Durham, NC 27708, USA, fsloan@duke.edu
- <sup>2</sup> Center for Health Policy, Duke University, 302 Towerview Drive, Box 90253, Durham, NC 27708, USA, lchepke@duke.edu

## **Abstract**

The fundamental question addressed by this paper is whether or not and the extent to which imposing tort liability on potential injurers improves the public's health. Conceptually, imposing the threat of litigation on potential injurers gives them an incentive to exercise more care than they would absent the threat. While the conclusion might seem to be obvious at first glance, in reality, the conclusion is far from obvious. For one, insurance coverage may blunt incentives to take care. Also, the tort system may operate far less perfectly than the theory would have it. In the end, the question must be answered on the basis of empirical evidence.

Keywords: Medical malpractice; tort liability; product liability; workers compensation; public health.

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# 1

# Introduction

The allocation of most goods and services in market-oriented economies is left to market forces. For some goods and services, however, there is a collective decision that some form of government intervention in resource allocation is appropriate. There are other reasons for government intervention, such as pursuit of fairness and justice, but the goal on which we will focus in this review is pursuit of economic efficiency—that is, the goal of attaining the highest level of wellbeing of members of society from a given level of resource endowments.

One rationale for promoting economic efficiency through public intervention is the presence of externalities in production and/or consumption of a good or service. Another concerns situations in which consumers are not well-positioned to make rational decisions about resource allocation because they lack the requisite information, e.g., such as inability to make rational choices due to youth or lack of cognitive ability, or a product's characteristics include risk inherent in consuming the good.

Government intervention may take one or more forms, including tax-subsidy arrangements, various forms of regulation ranging from mandates to outright bans on a particular activity, and implementation

#### 2 Introduction

of legal rules that are enforced by the state or by litigation brought by private parties (see, e.g., Breyer, 1982). Laws may be efficiencyenhancing if they reduce costs of market transactions.

In principle, regulation is designed to serve the public interest. Yet as several scholars have noted (Stigler, 1971; Peltzman, 1976; Becker, 1983; Laffont and Tirole, 1994), the regulatory apparatus is often subject to control or substantial influence by the stakeholders it is established to regulate (for a somewhat more favorable view, see Brever, 1993). While individual citizens have a vested interest in market outcomes, their interest is often distributed among many different outcomes. By contrast, the stakeholders' self-interest is often highly concentrated. It is often worthwhile for stakeholders to invest in influencing regulatory decisions in pursuit of private gain rather than the public interest (Wilson, 1980). Even if stakeholders were ineffective in promoting their self-interest, public employees may lack adequate resources to make timely decisions. For tobacco, a strong case can be made that tort litigation radically changed the political balance between tobacco manufacturers and interests supporting tobacco control (Trogdon and Sloan, 2006).

Much research in the law and economics literature, at least narrowly defined, has been theoretical. By contrast, there are large pertinent empirical literatures, particularly pertaining to findings relating legal practices to the public health that are not in publication outlets typically read by specialists in law and economics but which offer important implications for the field. Empirical research findings on the relationship between law and the public's health are scattered in different literature ranging from economic journals to medical journals, journals on addictive behaviors, law reviews, and books. No study to date has assembled the empirical evidence from various areas, ranging from motor vehicle liability and dram shop liability, to medical malpractice, to products liability as it applies to pharmaceutical products and medical devices. This is the task of this paper.

The fundamental question addressed by this paper is whether or not and the extent to which imposing tort liability on potential injurers improves the public's health. Conceptually, imposing the threat of litigation on potential injurers gives them an incentive to exercise more care than they would absent the threat. While the conclusion might seem to be obvious at first glance, in reality, the conclusion is far from obvious. For one, insurance coverage may blunt incentives to take care. Also, the tort system may operate far less perfectly than the theory would have it. In the end, the question must be answered on the basis of empirical evidence.

The following sections discuss theory and empirical evidence in several areas of personal injury to which tort liability has been applied. Section 2 describes the general law and economics framework used to assess both positive and normative issues as they apply to tort liability. Sections 3–8 present the rationale for, and empirical evidence, on particular applications of tort liability as it applies to personal injury.

Section 3 describes motor vehicle torts. Judged in terms of the sheer number of legal claims, this is the most active area among those we discuss. Compared to several others, motor vehicle liability is widely accepted as socially beneficial. State legislatures have passed legislation on an ongoing basis, but such legislation tends to be below the public radar screen.

Section 4 is about dram shop liability, statutory or common law, which reaches the alcohol seller legally responsible for loss from injuries directly caused by a minor or an obviously intoxicated adult who, after leaving the establishment, injures or kills a person or persons in a roadway accident. Less frequently, common law imposes liability on social hosts that serve minors or obviously intoxicated adults. There is less empirical evidence on social host than on dram shop liability.

Section 5 is about medical malpractice. This topic commands considerable public attention particularly during times of crisis, which follow substantial increases in medical malpractice insurance premiums and sometimes withdrawal of insurers from this line of business. Only a small part of the literature on medical malpractice focuses specifically on injury deterrence. In contrast to dram shop liability and to a lesser extent motor vehicle liability for which there is evidence that tort law deters accidents and injuries, based on what we know, there is little evidence that the threat of medical liability leads to improvements in the public's health. Reforms that have been enacted do not address structural flaws in the medical malpractice system as it exists today.

#### 4 Introduction

Section 6 discusses tobacco litigation. Tobacco is distinct in that the alleged misconduct generally occurred several decades before the lawsuits against the tobacco manufacturers were filed, in particular, the litigation that resulted in payment to plaintiffs. This type of litigation is controversial since it would seem that smokers would have known about the health harms of tobacco consumption, and they decided to smoke anyway. Tobacco litigation has improved the public health mainly by its effect on the price of cigarettes and the political fallout that has facilitated passage of legislation raising cigarette excise taxes.

Section 7 focuses on products liability for pharmaceuticals, medical devices, and vaccines. The case for imposing liability on the manufacturers of these products is namely that patients are not sufficiently informed about the underlying risks of consuming these products. But, as we discuss, empirical evidence on this point is scanty at best. Products liability has had a major impact on availability of some products. Whether the public's health has been measurably improved by having pharmaceutical products liability remains to be demonstrated.

In Section 8, we describe the rationale for and empirical evidence on workers compensation. From an historical viewpoint, workers compensation should be discussed as the first application of the role of tort liability in the public's health. However, litigation brought by injured employees against their employers has been virtually eliminated in the United States and in other countries for about a century, having been replaced by employer-provided insurance coverage for work-related injuries and illnesses. An exception is that products liability remains in force. Employees can file products liability suits against manufacturers of products, alleging that these products caused work-related injuries or illnesses, but the employer is not named as a co-defendant. There are advocates for introducing workers compensation type insurance in other contexts, such as for injuries sustained in the process of receiving medical services. However, no other field has gone as far in substituting insurance for tort as has workers compensation.

In Section 9, we evaluate the evidence from the various applications and present our conclusions and suggestions for future research.

- Abraham, K. S. (1986), Distributing Risk: Insurance, Legal Theory, And Public Policy. New Haven: Yale University Press.
- Abraham, K. S. (2001), 'The rise and fall of commercial liability insurance'. Virginia Law Review 87, 85–109.
- Abraham, K. S. (2002), 'The insurance effects of regulation by litigation'. In: W. K. Viscusi (ed.): *Regulation Through Litigation*. Washington, DC: AEI-Brookings Joint Center for Regulatory Studies.
- Abraham, K. S. (2005), 'Liability insurance and accident prevention: The evolution of an idea'. *Maryland Law Review* **64**, 573–612.
- Advisory Commission on Childhood Vaccines (2004). 56th Meeting of the Advisory Commission On Childhood Vaccines (ACCV) And Conference Call, March 16, 2004, (http://www.hrsa.gov/osp/vicp/minmar04.htm accessed Dec. 21, 2004).
- Bacigal, R. J. (1990), The Limits of Litigation: The Dalkon Shield Controversy. Durham, NC: Carolina Academic Press.
- Baicker, K. and A. Chandra (2004), 'The effect of malpractice liability on the delivery of health care'. Forum for Health Economics and Policy 8(1), 1010.
- Baker, T. (2005), *The Medical Malpractice Myth*. Chicago, IL: University of Chicago Press.

- Ball, L. K., R. Ball, and R. D. Pratt (2001), 'An assessment of thimerosal use in childhood vaccines'. *Pediatrics* **107**(5), 1147–1154.
- Barnett, P., T. Keeler, and T. Hu (1995), 'Oligopoly structure and the incidence of cigarette excise taxes'. *Journal of Public Economics* **57**, 457–470.
- Becker, G. S. (1983), 'Theory of competition among pressure groups for political influence'. *Quarterly Journal of Economics* **98**, 371–400.
- Benson, B. L., D. W. Rasmussen, and B. D. Mast (1999), 'Deterring drunk driving fatalities: An economics of crime perspective'. *International Review of Law and Economics* 19, 205–225.
- Bismark, M. and R. Paterson (2006), 'No-fault compensation in New Zealand: Harmonizing injury compensation, provider accountability, and patient safety'. *Health Affairs* **25**(1), 278–283.
- Boulton, L. B. (1987), 'Tobacco under fire: Developments in judicial responses to cigarette smoking injuries'. *Catholic University Law Review* **36**, 643–667.
- Bourgeon, J.-M. and P. Picard (2007), 'Point-record driving license and road safety: An economic approach'. *Journal of Public Economics* **91**(1–2), 235–258.
- Bovbjerg, R. R. and F. A. Sloan (1998), 'No-fault for medical injury'. *University of Cincinnati Law Review* **67**, 53–123.
- Bovbjerg, R. R., F. A. Sloan, and J. F. Blumstein (1989), 'Valuing life and limb in tort: Scheduling pain and suffering'. *Northwestern University Law Review* **83**(4), 908–976.
- Bovbjerg, R. R., F. A. Sloan, A. Dor, and C. R. Hsieh (1991), 'Juries and justice: Are malpractice and other personal injuries created equal?'. Law and Contemporary Problems 54, 5–42.
- Boyer, M. and G. Dionne (1989), 'An empirical analysis of moral hazard and experience rating'. *Review of Economics and Statistics* **71**(1), 128–133.
- Brennan, T. A., L. L. Leape, N. M. Laird, L. Hebert, R. Localio, A. G. Lawters, J. P. Newhouse, P. C. Weiler, and H. H. Hiatt (1991), 'Incidence of adverse events and negligence in hospitalized patients'. *New England Journal of Medicine* **324**(8), 370–376.
- Brent, R. (2003), 'Bendectin and birth defects: Hopefully, the final chapter'. Birth Defects Research 67, 79–87.

- Breyer, S. (1982), *Regulation and Its Reform*. Cambridge, MA: Harvard University Press.
- Breyer, S. (1993), Breaking the Vicious Circle: Toward Effective Risk Regulation. Cambridge, MA: Harvard University Press.
- Brickman, L. (2003), 'Effective hourly rates of contingency-fee lawyers: Competing data and non-competitive fees'. Washington University Law Quarterly 81(3), 653–669.
- Brigham, J. (1998), Dying to Quit: Why we Smoke and How we Stop. Washington, DC: Joseph Henry Press.
- Brown, C. (1985), 'Deterrence in tort and no-fault: The New Zealand experience'. *California Law Review* **73**, 976–1002.
- Butler, R. J. and J. D. Worrall (1983), 'Workers' compensation: Benefit and injury claims rates in the seventies'. *The Review of Economics and Statistics* **65**(4), 580–589.
- Calabresi, G. (1970), The Cost of Accidents: A Legal and Economic Analysis. New Haven: Yale University Press.
- Calfee, J. E. (1986), 'The ghost of cigarette advertising past'. *Regulation* **10**(2), 35–46.
- Cantor, D. A. (1995), 'Striking a balance between product availability and product safety: Lessons from the vaccine act'. *American University Law Review* **44**(5), 1853–1902.
- Chaloupka, F. J., H. Saffer, and M. Grossman (1993), 'Alcoholpolicies and motor-vehicle fatalities'. *Journal of Legal Studies* **22**, 161–186.
- Cheney, F. W., K. Posner, R. A. Caplan, and R. J. Ward (1989), 'Standard of care and anesthesia liability'. *Journal of American Medical Association* **261**, 1599.
- Chiappori, P.-A. and B. Salanié (2000), 'Testing for asymmetric information in insurance markets'. *Journal of Political Economy* **108**(1), 56–78.
- Coase, R. (1963), 'The problem of social cost'. Journal of Law and  $Economics \ \mathbf{3}(1), 1-44.$
- Cohen, A. (2005), 'Asymmetric information and learning: Evidence from the automobile insurance market'. The Review of Economics and Statistics 87(2), 197–207.

- Cohen, A. and R. Dehejia (2004), 'The effect of automobile insurance and accident liability laws on traffic fatalities'. *Journal of Law and Economics* 47(2), 357–393.
- Cohen, E. D. and S. P. Korper (1976), 'The swedish no-fault patient compensation program: Provisions and preliminary findings'. *Insurance Law Journal* **637**, 70.
- Cole, C. R. and K. A. McCullough (2006), 'A reexamination of the corporate demand for reinsurance'. *Journal of Risk and Insurance* **73**(1), 169–192.
- Combs, B. and P. Slovic (1979), 'Newspaper coverage of causes of death'. *Journalism Quarterly* **56**, 837–849.
- Crawford, G. S. and M. Shum (2005), 'Uncertainty and learning in pharmaceutical demand'. *Econometrica* **73**(4), 1137–1173.
- Cummins, J. D., R. D. Phillips, and M. A. Weiss (2001), 'The incentive effects of no-fault automobile insurance'. *Journal of Law and Economics* 44(2), 427–464.
- Cutler, D., A. Epstein, R. Frank, R. Hartman, C. King, J. Newhouse, M. Rosenthal, and E. Vigdor (2000), 'How good a deal was the tobacco settlement?: Assessing payments to Massachusetts'. *Journal of Risk and Uncertainty* **21**(2–3), 235–261.
- Cutler, D., J. Gruber, R. Hartman, M. Landrum, J. Newhouse, and M. Rosenthal (2002), 'The economic impacts of the tobacco settlement'. Journal of Policy Analysis and Management 21(1), 1–19.
- Dagan, H. and J. J. White (2000), 'Governments, citizens, and injurious industries'. New York University Law Review 75(2), 354–428.
- Dahiya, S. and D. Yermack (2003), 'Litigation exposure, capital structure and shareholder value: The case of brooke group'. *Journal of Corporate Finance* 9, 271–294.
- Damiani, D. J. (2003), 'Proposals for reform in the evaluation of expert testimony in pharmaceutical mass tort cases'. *Albany Law Journal of Science and Technology* **13**(2), 517–554.
- Danzon, P. (1994), 'Alternative liability regimes for medical injuries: Evidence from simulation analysis'. The Journal of Risk and Insurance 61(2), 219–244.

- Danzon, P. and L. A. Lillard (1983), 'Settlement out of court: The disposition of medical malpractice claims'. *Journal of Legal Studies* 12, 345–377.
- Danzon, P. M. (1985), 'Liability and liability insurance for medical malpractice'. *Journal of Health Economics* **4**(4), 309–331.
- Danzon, P. M. and M. F. Furukawa (2006), 'Prices and availability of biopharmaceuticals: An international comparison'. *Health Affairs* **25**(5), 1353–1362.
- Davidson, D. K. (1996), Selling Sin: The Marketing of Socially Unacceptable Products. Westport, CT: Quorum Books.
- Derthick, M. A. (2002), Up In Smoke: From Legislation to Litigation in Tobacco Politics. Washington, DC: Congressional Quarterly Press.
- DeVille, K. A. (1990), Medical Malpractice in Nineteenth-Century America: Origins and Legacy. New York: New York University Press.
- Devlin, R. A. (1990), 'Some welfare implications of no-fault automobile insurance'. *International Review of Law and Economics* **10**(2), 193–205.
- Dewees, D., D. Duff, and M. Trebilcock (1996), Exploring the Domain of Accident Law: Taking the Facts Seriously. New York: Oxford University Press.
- DiMasi, J. A., R. W. Hansen, and H. G. Grabowski (2003), 'The price of innovation: New estimates of drug development costs'. *Journal of Health Economics* **22**(2), 151–185.
- Dionne, G. and P. St-Michel (1991), 'Workers' compensation and moral hazard'. The Review of Economics and Statistics 73(2), 236–244.
- Dionne, G. C., C. Gouriéroux, and C. Vanasse (2001), 'Testing for evidence of adverse selection in the automobile insurance market: A comment'. *Journal of Political Economy* **109**(2), 444–453.
- Division of Vaccine Injury Compensation (2006), Strategic Plan: Executive Summary. The U.S. Department of Health and Human Services, April 2006 [cited September 20 2006].
- Doll, R., R. Peto, J. Boreham, and I. Sutherland (2004), 'Mortality in relation to smoking: 50 years' observations on male british doctors'. The British Medical Journal 328(7455), 1519–1524.
- Dorfman, H. L., V. M. Quinn, and E. A. Brophy (2006), 'Presumption of innocence: FDA's authority to regulate the specifics of prescription

- drug labeling and the preemption debate'. The Food and Drug Law Journal 61, 585–622.
- Douglas, C. E., R. M. Davis, and J. K. Beasley (2006), 'Epidemiology of the third wave of tobacco litigation in the United States, 1994–2005'. Tobacco Control 15(4), iv9–iv16.
- Dranove, D. and A. Gron (2005), 'Has the malpractice crisis in Florida really affected access to care?'. Working paper.
- Dranove, D., D. Kessler, M. McClellan, and M. Satterthwaite (2003), 'Is more information better? The effects of "report cards" on health care providers'. *Journal of Political Economy* **111**(3), 555–588.
- Dubay, L., R. Kaestner, and T. Waidmann (1999). The Impact of Malpractice Fears on Cesarean Section Rates 18(4), 491.
- Eisenberg, D. (2001), 'Evaluating the effectiveness of a 0.08% BAC limit and other policies related to drunk driving'. Stanford: Institute for Economic Policy Research.
- Eisenberg, D. (2003), 'Evaluating the effectiveness of policies related to drunk driving'. *Journal of Policy Analysis and Management* **22**(2), 249–274.
- Espersson, C. (2000), 'The patient injury act: A comment by carl espersson'. Review of Reviewed Item. www.patientforsakring.se/digitalAssets/1387\_pat\_inj\_com.pdf.
- Espersson, C. (2005), The Swedish Patient Injury Act. [Transcript]. Transcript by Federal News Service, Washington, D.C. [cited September 22, 2006]. Available from http://cgood.org/assets/attachments/Transcript\_-October\_31st\_Event.pdf.
- Evans, G. (1998), 'Vaccine liability and safety revisited'. Archives of Pediatric and Adolescent Medicine 152, 7–10.
- Fallberg, L. H. and E. Borgenhammar (1997), 'The Swedish no fault patient insurance scheme'. *European Journal of Health Law* 4, 279–286.
- Farber, H. S. and M. J. White (1991), 'Medical malpractice: An empirical examination of the litigation process'. RAND Journal of Economics 22, 199–217.
- Farber, H. S. and M. J. White (1994), 'A comparison of formal and informal dispute resolution in medical malpractice'. *Journal of Legal Studies* 23, 777.

- Ference, A. A. (1998), 'Rushing to judgement on fen-phen and redux: Were the FDA, drug manufacturers, and doctors too quick to respond to Americans' infatuations with a cure-all diet pill for weight loss?'.

  Albany Law Journal of Science and Technology 9(1), 77–110.
- Finkelstein, A. (2004), 'Static and dynamic effects of health policy: Evidence from the vaccine industry'. The Quarterly Journal of Economics 119(2), 527.
- Fishback, P. V. and S. E. Kantor (1998), 'The adoption of workers' compensation in the United States, 1900–1930'. *Journal of Law and Economics* **41**(2), 305–341.
- Flood, C. M. (2000), 'New Zealand's no-fault accident compensation scheme: Paradise or panacea'. *Health Law Review* 8(3), 1–9.
- Freeman, A. D. and J. M. Freeman (1989), 'No-fault cerebral palsy insurance: An alternative to the obstetrical malpractice lottery'. *Journal of Health Politics, Policy and Law* 14(4), 707–718.
- Gandhi, T. K., A. Kachalia, E. J. Thomas, A. Louise Puopolo, C. Yoon, T. A. Brennan, and D. M. Studdert (2006), 'Missed and delayed diagnoses in the ambulatory setting: A study of closed malpractice claims'. *Annals of Internal Medicine* 145(7), 488–496.
- Garber, S. (1993), Product Liability and the Economics of Pharmaceuticals and Medical Devices. Santa Monica, CA: The RAND Corporation.
- Garner, M. and A. Brandt (2006), "The doctors' choice is America's choice": The physician in US cigarette advertisements, 1930–1953". *American Journal of Public Health* **96**(2), 222–232.
- Gaudry, M. (1987), The Effects on Road Safety of the Compulsory Insurance, Flat Premium Rating and No-Fault Features of the 1978 Quebec Automobile Act, Appendix to Report of the Inquiry into Motor Vehicle Accident Compensation in Ontario. Ontario, Canada: Queens's Printers.
- Gellhorn, W. (1988), 'Medical malpractice litigation (U.S.) Medical mishap compensation (N.Z.)'. Cornell Law Review 73(2), 170–212.
- Glantz, S. A., J. Slade, L. A. Bero, P. Hanauer, and D. E. Harnes (1996), *The Cigarette Papers*. Berkeley, CA: University of California Press.

- Goldberg, R. (1999), Causation and Risk in the Law of Torts: Scientific Evidence and Medicinal Product Liability. Portland, Oregon: Hart Publishing.
- Gottsegen, J. (1940), Tobacco: A Study of Its Consumption in the United States. New York: Pitman.
- Grabowski, H. G., W. Kip Viscusi, and W. N. Evans (1989), 'Price and availability tradeoffs of automobile insurance'. *Journal of Risk and Insurance* **56**(2), 275–299.
- Green, M. D. (1996), Bendectin and Birth Defects: The Challenges of Mass Toxic Substances Litigation. Philadelphia: University of Pennsylvania Press.
- Gruber, J. and B. Köszegi (2001), 'Is addiction "Rational"? Theory and evidence'. *The Quartely Journal of Economics* **116**(4), 1261–1303.
- Haltom, W. and M. W. McCann (2004), Distorting the Law: Politics, Media, and the Litigation Crisis. Chicago: University of Chicago Press.
- Harvard Medical Malpractice Study (1990), Patients, Doctors and Lawyers: Medical Injury, Malpractice Litigation and Patient Compensation in New York: The Report of the Harvard Medical Practice Study to the State of New York. Cambridge, Massachusetts.
- Hedén, P., B. Boné, D. K. Murphy, A. Slicton, and P. S. Walker (2006), 'Style 410 cohesive silicone breast implants: Safety and effectiveness at 5 to 9 years after implantation'. *Plastic and Reconstructive Surgery* **118**(6), 1281–1287.
- Heland, E. and A. Taborrok (2003), 'Race, poverty, and American tort awards'. *Journal of Legal Studies* **32**, 27–58.
- Hellinger, F. J. and W. E. Encinosa (2003), The Impact of State Laws Limiting Malpractice Awards on the Geographic Distribution of Physicians. U.S. Department of Health and Human Services.
- Hensler, D. R., M. E. Vaiana, J. S. Kakalik, and M. A. Peterson (1987), Trends in Tort Litigation: The Story Behind the Statistics. Santa Monica, CA: RAND Corporation.
- Hickson, G. B., E. W. Clayton, S. S. Entman, C. S. Miller, P. B. Githens, K. Whetten-Goldstein, and F. A. Sloan (1994), 'Obstetricians' prior malpractice experience and patients' satisfaction with care'. JAMA 272(20), 1583–1587.

- Hickson, G. B., E. W. Clayton, P. B. Githens, and F. A. Sloan (1992), 'Factors that prompted families to file medical malpractice claims following perinatal injuries'. *JAMA* **267**(10), 1359–1363.
- Hickson, G. B., C. F. Federspiel, J. W. Pichert, C. S. Miller, J. Gauld-Jaeger, and P. Bost (2002), 'Patient complaints and malpractice risk'. JAMA 287(22), 2951–2957.
- Hitzhusen, M. (2005), 'Crisis and reform: Is New Zealand's no-fault compensation system a reasonable alternative to the medical malpractice crisis in the United States?'. *Arizona Journal of International and Comparative Law* **22**, 649–689.
- Holden, C. (2002), 'Research on contraception still in the doldrums'. *Science* **296**(5576), 2172–2173.
- Horton, R. (2004), 'Vioxx, the implosion of merck, and aftershocks at the FDA'. The Lancet **364**(9450), 1995–1996.
- Institute of Medicine (2000), To Err is Human: Building a Safer Health System. Washington, DC: National Academic Press.
- Institute of Medicine (2004). http://books.nap.edu/catalog/10997.html. *Immunization Safety Review: Vaccines and Autism.* National Academy Press [cited http://books.nap.edu/catalog/10997.html].
- Jacobi, P. (2005), 'Pharmaceutical tort liability: A justifiable nemesis to drug innovation and access?'. *John Marshall Law Review* **38**, 987–1009.
- Jacobson, P. D. and K. E. Warner (1999), 'Litigation and public health policy making: The case of tobacco control'. *Journal of Health Poli*tics Policy and Law 24(4), 769–804.
- Jha, P., F. J. Chaloupka, M. Corrao, and B. Jacob (2006), 'Reducing the burden of smoking world-wide: Effectiveness of interventions and their coverage'. *Drug and Alcohol Review* **25**(6), 597–609.
- Johnson, E. J. and A. Tversky (1983), 'Affect, generalization, and the perception of risk'. *Journal of Personality and Social Psychology* **45**, 20–31.
- Joint Legislative Audit and Review Commission of the Virginia General, Assembly (2002), Review of the Virginia Birth-Related Neurological Injury Compensation Program.
- Kagan, R. A. and D. Vogel (1993), 'The politics of smoking regulation: Canada, France and the United States'. In: R. L. Rabin and S. D.

- Sugarman (eds.): Smoking Policy: Law, Politics and Culture. New York: Oxford University Press.
- Kakalik, J. S. and N. M. Pace (1986), Costs and Compensation Paid in Tort Litigation. Vol. R-3391-ICJ: The RAND Corporation.
- Kantor, S. E. and P. V. Fishback (1996), 'Precautionary saving, insurance, and the origins of worker's compensation'. The Journal of Political Economy 104(2), 419–442.
- Keisler, P. D. (2004), Statement before the subcommittee on commercial and administrative law committee on the judiciary on budget and resource needs of the justice department civil division for fiscal year 2005. United States House of Representatives. March 9, 2004, Available at http://www.house.gov/judiciary/keisler030904.htm accessed 12/21/2004.
- Kersh, R. (2006), 'Medical malpractice and the new politics of health care'. In: W. M. S. A. R. Kersh (ed.): *Medical Malpractice and the U.S. Health Care System*. New York: Cambridge University Press.
- Kessler, D. (2001), A Question of Intent: A Great American Battle with a Deadly Industry. New York, NY: Public Affairs.
- Kessler, D. and M. McClellan (1996), 'Do doctors practice defensive medicine?'. The Quarterly Journal of Economics 111(2), 353–390.
- Kessler, D. P. and M. McClellan (1997), 'The effects of malpractice pressure and liability reforms on physicians' perceptions of medical care'. Law and Contemporary Problems 60(1&2), 81–106.
- Kessler, D. P., W. M. Sage, and D. J. Becker (2005), 'Impact of malpractice reforms on the supply of physician services'. *Journal of the American Medical Association* **293**(21), 2618–2625.
- Khwaja, A., D. Silverman, and F. Sloan (2007a), Are Smokers Misinformed? Duke University.
- Khwaja, A., D. Silverman, and F. Sloan (2007b), 'Time preference, time discounting, and smoking decisions'. *Journal of Health Economics* **26**(5), 927–949.
- Khwaja, A., F. Sloan, and S. Chung (in press), 'The relationship between individual expectations and behaviors: Evidence on mortality expectations and smoking decisions'. *Journal of Risk and Uncertainty*.

- Khwaja, A., F. A. Sloan, and Y. Wang (2007c), Do Smokers Value Their Health and Longevity Less? Duke University.
- Klein, J. O. and C. M. Helms (2006), 'Strengthening the supply of routinely administered vaccines in the United States: Progress and problems–2005'. *Clinical Infectious Diseases* **42**, S145–S150.
- Kochanowski, P. S. and M. V. Young (1985), 'Deterrent aspects of no-fault automobile insurance: Some empirical findings'. *Journal of Risk and Insurance* **52**(2), 269–288.
- Laffont, J.-J. and J. Tirole (1994), A Theory of Incentives in Procurement and Regulation. Cambridge, MA: MIT Press.
- Landes, E. M. (1982), 'Insurance, liability, and accidents: A theoretical and empirical investigation of the effect of no-fault accidents'. Journal of Law and Economics 25, 49–65.
- Landes, W. and R. Posner (1987), The Economic Structure of Tort Law. Cambridge, Mass: Harvard University Press.
- Lemaire, J. (1985), Automobile Insurance: Actuarial Models. Boston: Kluwer-Nijhoff.
- Lemstra, M. and W. P. Olszynski (2005), 'The influence of motor vehicle legislation on injury claim incidence'. *Canadian Journal of Public Health* **96**(1), 65–68.
- Levitt, S. D. and J. Porter (2001), 'How Dangerous are Drinking Drivers?'. The Journal of Political Economy 109(6), 1198–1237.
- Liang, L., F. A. Sloan, and E. M. Stout (2004), 'Precaution, compensation, and threats of sanction: The case of alcohol servers'. *International Review of Law and Economics* 24, 49–70.
- Liao, Y.-P. and M. J. White (2002), 'No-fault for motor vehicles: An economic analysis'. *American Law and Economics Review* **4**(2), 258.
- Lichtenstein, S., P. Slovic, B. Fischhoff, M. Layman, and B. Combs (1978), 'Judged frequency of lethal events'. *Journal of Experimental Psychology: Human Learning and Memory* 4(6), 551–581.
- Lloyd-Puryear, M. A., L. K. Ball, and D. Benor (1998), 'Should the vaccine injury compensation program be expanded to cover adults?'. *Public Health Reports* **113**, 236–242.
- Localio, A. R., A. G. Lawthers, J. M. Bengtson, L. E. Hebert, S. L. Weaver, T. A. Brennan, and J. R. Landis (1993), 'Relationship

- between malpractice claims and cesarean delivery'. JAMA 269(3), 366–373.
- Loughran, D. S. (2001), The Effect of No-Fault Automobile Insurance on Driver Behavior and Automobile Accidents in the United States. RAND Institute for Civil Justice.
- Lowes, R. (2003), 'Malpractice: Do other countries hold the key?'. *Medical Economics* **80**(14), 58–60.
- Luft, H. S. (1980), 'The relation between surgical volume and mortality An exploration of causal factors and alternative models'. Medical Care 18(9), 940–959.
- Luft, H. S., J. P. Bunker, and A. C. Enthoven (1979), 'Should operations be regionalized Empirical relation between surgical volume and mortality'. New England Journal of Medicine 301(25), 1364–1369.
- Manning, R. L. (1994), 'Changing rules in tort law and the market for childhood vaccines'. *Journal of Law and Economics* **37**(1), 247–275.
- Manning, R. L. (1996), 'Is the insurance aspect of producer liability valued by consumerse? Liability changes and childhood vaccine consumption'. *Journal of Risk and Uncertainty* **13**(1), 37–51.
- Manning, R. L. (1997), 'Products liability and prescription drug prices in Canada and the United States'. *Journal of Law and Economics* **40**(1), 203–243.
- Manning, W. G., E. B. Keeler, J. P. Newhouse, E. M. Sloss, and J. Wasserman (1989), 'Taxes of sin: Do smokers and drinkers pay their way?'. *Journal of the American Medical Association* **26**(11), 1604–1609.
- Mascaro, M. L. (1995), 'Preconception tort liability: Recognizing a strict liability cause of action for des grandchildren'. *American Journal of Law and Medicine* **17**(4), 435–456.
- May, M. L. and D. B. Stengel (1990), 'Who sues their doctors?'. Law and Society Review 24, 105–120.
- McGinnis, J. M. and W. H. Foege (1993), 'Actual causes of death in the United States'. *Journal of American Medical Association* **270**(18), 2207–2212.
- Meier, K. J. (1988), The Political Economy of Regulation: The Case of Insurance. Albany, NY: SUNY Press.

- Mello, M. M. and T. A. Brennan (2002), 'Deterrence of medical errors: Theory and evidence for malpractice reform'. *Texas Law Review* **80**, 1595–1637.
- Mello, M. M., M. Rosenthal, and P. J. Neumann (2003a), 'Direct-to-consumer advertising and shared liability for pharmaceutical manufacturers'. *Journal of the American Medical Association* **289**(4), 477–481.
- Mello, M. M. and D. M. Studdert (2006), 'The medical malpractice system'. In: W. M. Sage and R. Kersh (eds.): *Medical Malpractice and the U.S. Health Care System*. New York: Cambridge University Press.
- Mello, M. M., D. M. Studdert, and T. A. Brennan (2003b), 'The new medical malpractice crisis'. *The New England Journal of Medicine* **348**(23), 2281–2284.
- Merriman, D. (1994), 'Do cigarette tax rates maximize revenue?'. *Economic Inquiry* **32**, 419–428.
- Meyer, B. D., W. Kip Viscusi, and D. L. Durbin (1995), 'Workers' compensation and injury duration: Evidence from a natural experiment'. The American Economic Review 85(3), 322–340.
- Miceli, T. J. (2004), *The Economic Approach to Law*. Stanford, CA: Stanford University Press.
- Mills, D. H., J. S. Boyden, and D. S. Rubsamen (1977), California Medical Association Medical Insurance Feasibility Study. San Francisco: Sutter Publications.
- Mollenkamp, C., A. Levy, J. Menn, and J. Rothfeder (1998), The People vs. Big Tobacco: How the States Took on the Cigarette Giants. Princeton, NJ: Bloomberg Press.
- Monsein, L. (1997), 'Primer on medical device regulation: Part I. History and background'. *Radiology* **205**, 1–9.
- Moore, M. J. and W. K. Viscusi (1990), Compensation Mechanisms for Job Risks, Wages, Workers' Compensation and Product Liability. Princeton, NJ: Princeton University Press.
- Nalebuff, B. (1987), 'Credible pretrial negotiation'. RAND Journal of Economics 18, 198–210.
- Nalebuff, B. and D. Scharfstein (1987), 'Testing in models of asymmetric information'. Review of Economics and Statistics 54, 265–277.

- National Center for Statistics and Analysis (2007a). Fatal Crashes and Percent Alcohol-Related U.S. Department of Transportation 2005 [cited 2007]. Available from http://www-fars.nhtsa.dot.gov/finalReport.cfm?stateid=0&year=2005&title=Crashes&title2=Alcohol.
- National Center for Statistics and Analysis (2007b). Fatality Analysis Reporting System. U.S. Department of Transportation 2005 [cited April 2 2007]. Available from http://www-fars.nhtsa.dot.gov/finalReport.cfm?stateid=0&year=2005&title=People &title2=All\_Victims.
- O'Connell, J. (1985), 'A "Neo No-Fault" contract in lieu of tort: Preaccident guarantees of post-accident settlement offers'. *California Law Review* **73**, 898–916.
- O'Connell, J., M. Horowitz, A. Abrahamse, and D. Kaiser (1995), 'The costs of consumer choice for auto insurance in states without no-fault insurance'. *Maryland Law Review* **54**, 281–351.
- O'Connell, J. and R. Joost (1986), 'Giving motorists a choice between fault and no-fault insurance'. *Virginia Law Review* **72**, 61–90.
- O'Donnell, M. A. (1985), 'Research on drinking locations of alcoholimpaired drivers: Implications for prevention policies'. *Journal of Public Health Policy* **6**(4), 510–525.
- Ogburn, P., T. Julian, D. Brooker, M. Joseph, J. Butler, and P. Williams et al. (1988), 'Perninatal medical negligence closed claims from the St. Paul Company, 1980–1982'. *Journal of Reproductive Medicine* 33, 608–611.
- Olsen, R. N. (1996), 'The reform of medical malpractice law: Historical perspectives'. *The American Journal of Economics and Sociology* **55**(3), 257–275.
- Ornstein, M., A. Einarson, and G. Koren (1995), 'Bendectin/Diclectin for morning sickness: A Canadian follow-up of an american tragedy'. *Reproductive Toxicology* **9**(1), 1–6.
- O'Steen, J. V. and V. O'Steen (2006), 'The FDA defense: Vioxx and the argument against federal preemption of state claims for injuries resulting from defective drugs'. *Arizona Law Review* 48, 67–95.
- Palmer, G. (1979), Compensation for Incapacity. Wellington, New Zealand: Oxford Press.

- Pauly, M. V. (2002), 'Is medical care different?'. In: W. Greenberg (ed.): Competition in the Health Care Sector: Past Present, and Future. Germantown, MD: Beard Books.
- Peeples, R., C. T. Harris, and T. B. Metzloff (2002), 'The process of managing medical malpractice cases: The role of standard of care'. Wake Forest Law Review 37, 877.
- Peltzman, S. (1976), 'Toward a more general theory of regulation'. National Bureau of Economic Research, Inc., NBER Technical Working Papers (0133).
- Persson, T. and G. Tabillini (2002), 'Political economics and public finance'. In: A. J. Auerbach and M. Feldstein (eds.): *Handbook of Public Economics*, Chapter 24. Amsterdam: Elsevier Science.
- Peters Jr, P. G. (2007), 'What we know about malpractice settlements'. *Iowa Law Review* **92**(5), 1783–1833.
- Polinsky, A. M. and S. Shavell (1984), 'The optimal use of fines and imprisonment'. *Journal of Public Economics* **24**, 88–99.
- Posner, E. (2003), 'Tobacco regulation or litigation?'. University of Chicago Law Review 70, 1141–1157.
- Quinlan, K. P., R. D. Brewer, P. Siegel, D. A. Sleet, A. H. Mokdad, R. A. Shults, and N. Flowers (2005), 'Alcohol-impaired driving among U.S. adults, 1993–2002'. *American Journal of Preventive Medicine* **28**(4), 346–350.
- Rabin, R. L. (1992), 'A sociolegal history of the tobacco tort litigation'. Stanford Law Review 44(4), 853–878.
- Reimann, M. (2003), 'Liability for defective products at the beginning of the twenty-first century: Emergence of a worldwide standard?'. The American Journal of Comparative Law 51, 751–838.
- Ringold, D. and J. Calfee (1989), 'The informational content of cigarette advertising: 1926–1986'. *Journal of Public Policy and Marketing* 8, 1–23.
- Room, R., T. Babor, and J. Rehm (2005), 'Alcohol and public health'. *The Lancet* **365**, 519–530.
- Rosenblatt, R. A. and A. Hurst (1989), 'An analysis of closed obstetric malpractice claims'. Obstetrics and Gynecology 74, 710–714.
- Rosenthal, M. M. (1988), Dealing with Medical Malpractice: The British and Swedish Experience. Durham, NC: Duke University Press.

- Rubenstein, S. and A. W. Mathews (2007), 'Vioxx successor faces FDA hurdles; Merck pushes replacement for disgraced painkiller, but safety issues linger'. *The Wall Street Journal* 4(April), D1 & D5.
- Ruhm, C. J. (1996), 'Alcohol policies and highway vehicle fatalities'. Journal of Health Economics 15(4), 435–454.
- Rundle, R. L. and A. W. Mathews (2006), 'Breast implants made of silicone win FDA backing'. *Wall Street Journal*. November 18–19, Front Page.
- Ruser, J. W. (1985), 'Workers' compensation insurance, experiencerating, and occupational injuries'. *The RAND Journal of Economics* 16(4), 487–503.
- Ruser, J. W. (1991), 'Workers' compensation and occupational injuries and illnesses'. *Journal of Labor Economics* **9**(4), 325–350.
- Saito, K. (2006), 'Testing for asymmetric information in the automobile insurance market under rate regulation'. *Journal of Risk and Insurance* **73**(2), 335–356.
- Sanders, J. (1998), Bendectin on Trial: A Study of Mass Tort Litigation. Ann Arbor: The University of Michigan Press.
- Schwartz, G. T. (2000), 'Auto no-fault and first-party insurance: Advantages and problems'. Southern California Law Review 73, 611–676.
- Schwartz, W. B. and D. N. Mendelson (1989), 'Physicians who have lost their malpractice insurance. Their demographic characteristics and the surplus-lines companies that insure them'. *JAMA* **262**(10), 1335–1341.
- Segal, S. J. (1999), 'Liability concerns in contraceptive research and development'. *International Journal of Gynecology and Obstetrics* **67**(Supplement 2), S141–S151.
- Shavell, S. (1980), 'Strict liability versus negligence'. *Journal of Legal Studies* **9**(1), 1–25.
- Shavell, S. (1982), 'On liability and insurance'. *Bell Journal of Economics* **13**(1), 120–132.
- Shavell, S. (1984), 'Liability for harm versus regulation of safety'. *The Journal of Legal Studies* **13**(2), 357–374.
- Shulman, S. R. and L. Lasagna (eds.) (1989), Trends in Product Liability Law and No-Fault Compensation for Drug-Induced Injuries.

- Boston: The Center for the Study of Drug Development, Tufts University.
- Shults, R. A., R. W. Elder, D. A. Sleet, J. L. Nichols, M. O. Alao, V. G. Carande-Kulis, S. Zaza, D. M. Sosin, R. S. Thompson, and The Task Force on Community Preventitive Services (2001), 'Review of evidence regarding interventions to reduce alcohol-impaired driving'. American Journal of Preventive Medicine 21(4S), 66–88.
- Sieg, H. (2000), 'Estimating a bargaining model with asymmetric information: Evidence from medical malpractice disputes'. *Journal of Political Economy* **108**(5), 1006–1021.
- Siegler, M., S. Toulmin, F. E. Zimring, and K. F. Schaffner (eds.) (1987), Medical Innovation and Bad Outcomes: Legal, Social, and Ethical Responses. Ann Arbor: Health Administration Press.
- Sipes, D. D. (1988), 'The emergence of civil liability for dispensing alcohol: A comparative study'. The Review of Litigation 8(1), 1–52.
- Sloan, F., C. Mathews, and J. Trogdon (2004a), 'Impacts of the master settlement agreement on the tobacco industry'. *Tobacco Control* 13(4), 356–361.
- Sloan, F. and J. Trogdon (2006), 'Cigarette taxes and the master settlement agreement'. *Economic Inquiry* **44**(4), 729–739.
- Sloan, F. A. (1990), 'Experience rating: Does it make sense for medical malpractice insurance?'. American Economic Review 80(2), 128–133.
- Sloan, F. A., R. R. Bovbjerg, and P. B. Githens (1991), Insuring Medical Malpractice. New York: Oxford University Press.
- Sloan, F. A. and L. M. Chepke (2008), Medical Malpractice. Cambridge, MA: MIT Publishers.
- Sloan, F. A., S. S. Entman, B. A. Reilly, C. A. Glass, G. B. Hickson, and
  H. H. Zhang (1997a), 'Tort liability and obstetricians' care levels'.
  International Review of Law and Economics 17(2), 245–260.
- Sloan, F. A. and P. B. Githens (1994), 'Drinking, driving, and the price of automobile insurance'. *Journal of Risk and Insurance* **61**(1), 33–58.
- Sloan, F. A., P. B. Githens, E. W. Clayton, G. B. Hickson, D. A. Gentile, and D. F. Partlett (1993), Suing for Medical Malpractice. Chicago: University of Chicago Press.

- Sloan, F. A. and C. R. Hsieh (1990), 'Variability in medical malpractice payments'. Law and Society Review 24, 601–650.
- Sloan, F. A. and C. R. Hsieh (1995), 'Injury, liability, and the decision to file a medical malpractice claim'. Law and Society Review 29(3), 413–435.
- Sloan, F. A., V. Kerry Smith, and D. H. Taylor Jr. (2003), *The Smoking Puzzle: Information, Risk Perception, and Choice*. Cambridge, Mass: Harvard University Press.
- Sloan, F. A., L. Liang, E. M. Stout, and K. Whetten-Goldstein (2000a), 'Liability, risk perceptions, and precautions at bars'. *The Journal of Law and Economics* **43**(2), 473–501.
- Sloan, F. A., P. M. Mergenhagen, W. B. Burfield, R. R. Bovbjerg, and M. Hassan (1989), 'Medical malpractice experience of physicians: Predictable or haphazard?'. *Journal of the American Medical Association* 262(23), 3291–3297.
- Sloan, F. A., J. Ostermann, C. J. Conover, D. H. Taylor Jr., and G. Picone (2004b), *The Price of Smoking*. Cambridge: MIT Press.
- Sloan, F. A., B. A. Reilly, and C. Schenzler (1994a), 'Effects of prices, civil and criminal sanctions, and law enforcement on alcohol-related mortality'. *Journal of Studies on Alcohol* **55**(4), 454–466.
- Sloan, F. A., B. A. Reilly, and C. Schenzler (1994b), 'Tort liability versus other approaches for deterring careless driving'. *International Review of Law and Economics* **14**(1), 53–71.
- Sloan, F. A., B. A. Reilly, and C. Schenzler (1995), 'Effects of tort liability and insurance on heavy drinking and drinking and driving'. *Journal of Law and Economics* **38**(1), 49–77.
- Sloan, F. A., E. M. Stout, K. Whetten-Goldstein, and L. Liang (2000b), Drinkers, Drivers, and Bartenders: Balancing Private Choices and Public Accountability. Chicago, IL: University of Chicago Press.
- Sloan, F. A., K. Whetten-Goldstein, S. S. Entman, E. D. Kulas, and E. M. Stout (1997b), 'The road from medical injury to claims resolution: How no-fault and tort differ'. *Law and Contemporary Problems* **60**, 35–70.
- Sloan, F. A., K. Whetten-Goldstein, E. Stout, S. Entman, and G. Hickson (1998), 'No fault system of compensation for obstetric injury: Winners and losers'. *Obstetrics and Gynecology* **91**, 437–443.

- Smith, A. (2006), 'Merck stock tumbles after vioxx verdict. Review of reviewed item'. *CNN Money*. http://money.cnn.com/2006/04/06/news/companies/merck\_outlook/.
- Smith, E. and R. Wright (1992), 'Why is automobile insurance in Philadelphia so damn expensive?'. The American Economic Review 82(4), 756–772.
- Spence, M. (1977), 'Consumer misperceptions, product failure and product liability'. *Review of Economic Studies* **64**, 561–572.
- Spurr, S. J. and S. Howze (2001), 'The effect of care quality on medical malpractice litigation'. Quarterly Review of Economics and Finance 41(4), 491–513.
- State of California (2006), 'A study of the effects of legislative reforms on California workers' compensation insurance rates'. San Francisco, CA: California Department of Industrial Relations, Division of Workers' Compensation.
- State of Florida (2003), Report of the Governor's Select Task Force on Healthcare Professional Liability Insurance. Florida Insurance Council.
- Stigler, G. J. (1971), 'Theory of economic regulation'. Bell Journal of Economics and Management Science 2, 3–21.
- Stout, E. M., F. A. Sloan, L. Liang, and H. H. Davies (2000), 'Reducing harmful alcohol-related behaviors: Effective regulatory methods'. Journal of Alcohol Studies 61(3), 402–412.
- Studdert, D. M. and T. A. Brennan (2001), 'No-fault compensation for medical injuries: The prospect for error prevention'. *JAMA* **286**(2), 217–223.
- Studdert, D. M., M. M. Mello, and T. A. Brennan (2004), 'Medical Malpractice'. The New England Journal of Medicine 350, 283–292.
- Studdert, D. M., E. J. Thomas, B. I. W. Zbar, and J. P. Newhouse et al. (1997), 'Can the United States afford a "no-fault" system of compensation for medical injury?'. Law and Contemporary Problems **60**(1–2), 1.
- Sturgis, R. W. (1995), Tort Cost Trends: An International Perspective.

  Tillinghast Towers Perrin.

- Sumner, D. (1981), 'A measurement of monopoly behavior: An application to the cigarette industry'. *Journal of Political Economy* **89**, 1010–1019.
- Sunstein, C. R., R. Hastie, J. W. Payne, D. A. Schkade, and W. Kip Viscusi (2002), *Punitive Damages: How Juries Decide*. Chicago, IL: The University of Chicago Press.
- Taragin, M. I., L. R. Willett, A. P. Wilczek, R. Trout, and J. L. Carson (1992), 'The influence of standard of care and severity of injury on the resolution of medical malpractice claims'. Annals of Internal Medicine 117(9), 780–784.
- Thomas, W. J. (2006), 'The vioxx story: Would it have ended differently in the European Union?'. American Journal of Law and Medicine 32, 365–380.
- Trogdon, J. G. and F. A. Sloan (2006), 'Cigarette taxes and the master settlement agreement'. *Economic Inquiry* **44**(4), 729–739.
- United States General Accounting Office (1993), Medical Malpractice: Medicare/Medicaid Beneficiaries Account for a Relatively Small Percentage of Malpractice Losses.
- United States Surgeon General (1964), Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service. U.S. Department of Health, Education, and Welfare.
- U.S. Congress Office of Technology Assessment (1994), *Defensive Medicine and Medical Malpractice*. OTA-H-602.
- U.S. Department of Health and Human Services (2006), 'Rules and Regulations'. Federal Register **71**(15), 3921–3997.
- U.S. Environmental Protection Agency (1997), Mercury Study Report to Congress: Volume 1 Executive Summary. Washington, DC.
- U.S. Food and Drug Administration (1972), 'Selected item from the FDA drug bulletin–November 1971: Diethylstilbestrol contraindicated in pregnancy'. *California Medicine* **116**(2), 85–86.
- U.S. Office of Technology Assessment (1993), Pharmaceutical R&D: Costs, Risks and Rewards: Congress of the United States.
- Vairo, G. (2004), 'Mass torts bankruptcies: The who, the why and the how'. American Bankruptcy Law Journal 78, 93–152.

- Vandebroek, M. (1993), 'Bonus-malus system on partial coverage to oppose moral hazard problems'. *Insurance: Mathematics and Economics* **13**(1), 1–5.
- Victor, R. B. (1985), 'Experience rating and workplace safety'. In: J. D. Worrall and D. Appel (eds.): Workers' Compensation Benefits Adequacy Equity and Efficiency. Ithaca, NY: ILR Press.
- Vidmar, N. (1995), Medical Malpractice and the American Jury. Ann Arbor: University of Michigan Press.
- Vidmar, N. J. (1998), 'The performance of the American civil jury: An empirical perspective'. *Arizona Law Review* **40**(3), 849–900.
- Vidmar, N. J. (2003), 'Juror discussions during civil trials'. *Arizona Law Review* **45**, 1–82.
- Vidmar, N. J. (2004), 'Experimental simulations and tort reform: Avoidance, error and overreaching in sunstein et al.'s punitive damages'. Emory Law Journal 53(1). forthcoming.
- Viscusi, W. K. (1989), 'The interaction between products liability and workers' compensation as ex post remedies for workplace injuries'. *Journal of Law, Economics, and Organization* **5**(1), 185–210.
- Viscusi, W. K. (1990), 'Do smokers underestimate risks?'. *Journal of Political Economy* **98**(6), 1253–1269.
- Viscusi, W. K. (1991), *Reforming Products Liability*. Cambridge, Massachusetts: Harvard University Press.
- Viscusi, W. K. (1993), 'The value of risks to life and health'. *Journal-of-Economic-Literature*. December 1993 **31**(4), 1912–1946.
- Viscusi, W. K. (2002), Smoke-Filled Rooms: A Postmortem on the Tobacco Deal. Chicago: The University of Chicago Press.
- Waxman, H. A. (2005), 'The lessons of vioxx-drug safety and sales'. The New England Journal of Medicine **352**(25), 2576–2578.
- Weiler, P. C. (1991), Medical Malpractice on Trial. Cambridge: Harvard University Press.
- Weiler, P. C., H. H. Hiatt, J. P. Newhouse, W. G. Johnson, T. Brennan, and L. L. Leape (1993), A Measure of Malpractice: Medical Injury, Malpractice Litigation, and Patient Compensation. Cambridge, Mass: Harvard University Press.

- Weinstein, R. A., J. D. Siegel, and T. A. Brennan (2005), 'Infection-control report cards—securing patient safety'. *New England Journal of Medicine* **353**(3), 225–227.
- Weiss, G. G. (2004), 'Malpractice: Can no-fault work?'. *Medical Economics* **81**(11), 66–71.
- Whetten-Goldstein, K., F. A. Sloan, E. M. Stout, and L. Liang (2000), 'Civil liability, criminal law, and other policies and alcohol-related motor vehicle fatalities in the United States: 1984–1995'. *Accident Analysis and Prevention* 32, 723–733.
- White, M. J. (2004), 'The "arms race" on American roads: The effect of sport utility vehicles and pickup trucks on traffic safety'. *Journal of Law and Economics* **XLVII**(2), 333–356.
- Wilson, J. Q. (1980), 'The politics of regulation'. In: J. Q. Wilson (ed.): *The Politics of Regulation*. New York: Basic.
- Witt, J. F. (2001), 'Toward a new history of American accident law: Classical tort law and the cooperative first-party insurance movement'. *Harvard Law Review* **114**(3), 690–841.
- Wood, S. M. (2003), 'The master settlement agreement as class action: An evaluative framework for settlements of publicly initiated litigation'. Virginia Law Review 89(3), 597–645.
- Young, D. J. and T. W. Likens (2000), 'Alcohol regulation and auto fatalities'. *International Review of Law and Economics* **20**, 107–126.
- Zador, P. and A. Lund (1986), 'Re-analyses of the effects of no-fault auto insurance on fatal crashes'. *Journal of Risk and Insurance* **53**(2), 226.
- Zimmer Jr., D. F. (1996), 'Avoiding litigation in a new age of IUDs'. Obstetrical and Gynecological Survey 51(12), 56s-60s.