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January 11, 2006

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#### VIA FEDERAL EXPRESS

District Clerk Michigan Court of Appeals Cadillac Place 3020 West Grand Boulevard Suite 14-300 Detroit, MI 48202-6020

Re: Court of Appeals No. 275917

Dear Sir or Madam:

Enclosed please find an original and five copies of a *Amici Curiae* Brief of Coalition for Litigation Justice, Inc., Motor and Equipment Manufacturers Association, American Chemistry Council, Property Casualty Insurers Association of America, Chamber of Commerce of the United States of America, National Association Of Manufacturers, American Insurance Association, and American Tort Reform Association in Support of Defendants-Appellants for filing in the above referenced case. Also enclosed is a copy of the proof of service.

Thank you for your attention to this matter.

Sincerely,

Michael Goecke

**Enclosures** 

### STATE OF MICHIGAN IN THE COURT OF APPEALS

(On Appeal from the Wayne Circuit Court)

PHILLIP R. CHAPIN,

Plaintiff-Appellee,

Court of Appeals No. 257917

and

Wayne Circuit No. 03-324775-NP

BERNIE MAE CHAPIN, Plaintiff, Hon. Robert J. Colombo, Jr.

v.

DAIMLER CHRYSLER CORPORATION, FORD MOTOR COMPANY, GENERAL MOTORS CORPORATION, and HONEYWELL INTERNATIONAL INC., f/k/a ALLIED SIGNAL CORP.,

Defendants-Appellants,

and

A & L, PARTS, INC., AII ACQUISITION CORP, AMCHEM PRODUCTS, INC., AMERICAN STANDARD, INC., BONDEX INTERNATIONAL, INC., BORG-WARNER CORPORATION, CARQUEST AUTO PARTS OF PINCKNEY MI, INC., CARRIER CORPORATION, DANA CORPORATION, DAP, INC., DURO DYNE CORPORATION, GEORGE FARR SERVICE, INC. & ALL EQUIPMENT COMPANY, GEORGIA PACIFIC CORPORATION, GOODRICH CORPORATION, HERCULES CHEMICAL COMPANY, INC., INDIANHEAD INDUSTRIES, INC., KELSEY HAYES COMPANY, MCCORD CORPORATION, METROPOLITAN LIFE INSURANCE COMPANY, PARKER-HANNIFIN CORP., PNEUMO ABEX CORPORATION, ROYAL INDUSTRIES, INC., STANDCO INDUSTRIES, INC., Defendants.

AMICI CURIAE BRIEF OF COALITION FOR LITIGATION JUSTICE, INC., MOTOR AND EQUIPMENT MANUFACTURERS ASSOCIATION, AMERICAN CHEMISTRY COUNCIL, PROPERTY CASUALTY INSURERS ASSOCIATION OF AMERICA, CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA, NATIONAL ASSOCIATION OF MANUFACTURERS, AMERICAN INSURANCE ASSOCIATION, AND AMERICAN TORT REFORM ASSOCIATION IN SUPPORT OF DEFENDANTS-APPELLANTS

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STATEMENT OF QUESTION INVOLVED

I. Expert testimony is not admissible unless the trial court, acting as a gatekeeper,

determines that the opinion and its basis are reliable. Here, Plaintiff's expert opined that

occupational exposure to automotive friction products causes mesothelioma. Did the trial court

err in admitting this testimony where the record showed it to be (1) contrary to all

epidemiological studies addressing the issue, (2) not subject to peer review publication, and

(3) otherwise the product of unsupported and unreliable assumptions.

Trial Court's Answer: No

Plaintiff-Appellee's Answer: No

Defendants-Appellants' Answer: Yes

Amici's Answer: Yes

**INTEREST OF AMICI CURIAE** 

Amici are organizations that represent Michigan companies that are frequently involved

in asbestos litigation as defendants, and their insurers. Amici are well suited to provide a broad

perspective to this Court and explain why this Court should require lower courts to fulfill their

important role of acting as gatekeepers to help ensure the reliability of expert evidence,

streamline litigation, and discourage specious claims.

The Coalition for Litigation Justice, Inc. ("Coalition") was formed by insurers as a

nonprofit association to address and improve the toxic tort litigation environment.

Coalition's mission is to encourage fair and prompt compensation to deserving current and future

toxic tort litigants by seeking to reduce or eliminate the abuses and inequities that exist under the

current civil justice system.<sup>1</sup> The Coalition files *amicus curiae* briefs in important cases before state appellate courts and the United States Supreme Court that may have a significant impact on the toxic tort litigation environment.

The Motor and Equipment Manufacturers is the national association representing manufacturers of all types of automotive parts, including friction products. Their division, the Original Equipment Manufacturers Association, represents the companies selling parts for use as original equipment on cars. Their division, Automotive Aftermarket Suppliers Association, represents the companies selling parts for use in the aftermarket. Their division, Heavy Duty Manufacturers Association, represents the companies selling parts for us on heavy-duty vehicles.

The American Chemistry Council ("ACC") represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$520 billion enterprise and a key element of the nation's economy. It is the nation's largest exporter, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies invest more in research and development than any other business sector.

The Coalition for Litigation Justice, Inc. includes the following: ACE-USA companies, Chubb & Son, a division of Federal Insurance Company; CNA service mark companies, Fireman's Fund Insurance Company, The Hartford Financial Services Group, Inc., General Reinsurance Corp., Liberty Mutual Insurance Group, Everest Reinsurance Company, and the Great American Insurance Company.

The Property Casualty Insurers Association of America ("PCI") is a trade group representing more than 1,000 property and casualty insurance companies. PCI members are domiciled in and transact business in all 50 states, plus the District of Columbia and Puerto Rico. Its member companies account for \$184 billion in direct written premiums. They account for 52% of all personal auto premiums written in the United States, and 39.6% of all homeowners' premiums, with personal lines writers of commercial and miscellaneous property/casualty lines. In addition to the diversified product lines they write, PCI members include all types of insurance companies, including stocks, mutuals, and companies that write on a non-admitted basis. The PCI membership is literally a cross-section of the United States property and casualty insurance industry.

The Chamber of Commerce of the United States of America ("Chamber") is the world's largest business federation. The Chamber represents an underlying membership of more than three million businesses and organizations of every size, in every business sector, and from every region of the country. An important function of the Chamber is to represent the interests of its members in court on issues of national concern to the business community. Accordingly, the Chamber has filed more than 1,000 *amicus curiae* briefs in state and federal court.

The National Association of Manufacturers ("NAM") is the nation's largest industrial trade association, representing small and large manufacturers in every industrial sector and in all 50 states. NAM's mission is to enhance the competitiveness of manufacturers and improve American living standards by shaping a legislative and regulatory environment conducive to U.S. economic growth and to increase understanding among policymakers, the media, and the general public about the importance of manufacturing to America's economic strength.

The American Insurance Association ("AIA"), founded in 1866 as the National Board of Fire Underwriters, is a national trade association representing major property and casualty insurers writing business across the country and around the world. AIA promotes the economic, legislative, and public standing of its members; it provides a forum for discussion of policy problems of common concern to its members and the insurance industry; and it keeps members informed of regulatory and legislative developments. AIA is headquartered in Washington, D.C., maintains six regional offices, and retains legislative counsel in every state. Among its other activities, AIA files *amicus curiae* briefs in cases before state and federal courts on issues of importance to the insurance industry.

Founded in 1986, the American Tort Reform Association ("ATRA") is a broad-based coalition of more than 300 businesses, corporations, municipalities, associations, and professional firms that have pooled their resources to promote reform of the civil justice system with the goal of ensuring fairness, balance, and predictability in civil litigation. For more than a decade, ATRA has filed *amicus curiae* briefs in cases before federal and state courts that have addressed important liability issues.

#### STATEMENT OF FACTS

Amici adopt Defendant-Appellant DaimlerChrysler Corporation's Statement of Facts.

#### INTRODUCTION AND SUMMARY OF THE ARGUMENT

Amici in this matter are organizations concerned with the current asbestos litigation crisis and its crippling effect on the court system and American businesses. A number of trial courts in key jurisdictions are treating asbestos cases as *sui generis*, a kind of "hands-off" litigation in which the usual rules of causation and scientific proof do not apply. The result is that a whole

host of defendants who have little or nothing to do with real asbestos exposures are now drawn into what is a many decades-long litigation crisis. These cases are based on speculative opinions by a handful of experts like Dr. Richard Lemen who testify that low-dose occupational exposures, such as automobile mechanic work, cause mesothelioma - even though epidemiological studies prove to the contrary. Unless and until trial judges take a serious look at the lack of science supporting these cases, courts will continue to be flooded with cases alleging that inconsequential low-dose exposures caused asbestos disease. Even more defendants will unnecessarily succumb to the financial pressure and bankruptcy already rampant in asbestos litigation.

The circuit court in this case, in allowing Dr. Lemen to testify, chose to disregard what this Court previously called the "credible evidence submitted by defendant regarding the reliability of plaintiff's proffered experts and evidence." *Chapin v. A&L Parts*, LC No. 03-324775-NP, Order, May 19, 2004. Instead, the court committed two fundamental scientific evidentiary errors, neither of which would likely have occurred in any tort context except asbestos litigation. First, the court rejected what scientific texts and courts elsewhere have repeatedly established as the primary and by far most probative source of causation evidence – epidemiology. More than seventeen published epidemiology studies have uniformly rejected the notion that automobile mechanic exposures cause mesothelioma. In a startling departure from accepted science, the circuit court decided that these occupation-specific epidemiology studies could not "trump" far less conclusive evidence like animal studies, case reports, and government warnings relied on by Dr. Lemen. Yet, epidemiology studies routinely trump such secondary

evidence in the scientific world <u>and</u> in non-asbestos litigation; they would have done so here if the circuit court had not applied a different standard to asbestos cases.

Second, the court accepted a reduced causation standard for asbestos cases – the unproven assertion by Dr. Lemen that virtually any occupational exposure to asbestos causes disease. Under the court's ruling, any exposures above the federal Occupational Safety & Health Administration's ("OSHA") regulatory standard of 0.1 fibers/cc is enough for a plaintiff expert to establish causation in the Michigan courts. Neither the court nor Dr. Lemen cited any study demonstrating that such an extremely low dose of chrysotile fibers actually causes mesothelioma. Nor did they cite any case law supporting the court's reliance on a conservative government safety standard as proof of medical causation. The two errors together effectively eliminate any possibility of a pre-trial science defense for very low-dose defendants, regardless of the minimal nature of exposure and strength of the studies demonstrating an absence of disease in those occupations.

Amici file this brief to alert this Court to both the scientific error in the circuit court's approach and the pernicious effect the ruling will have on asbestos litigation in Michigan. Opinions like Dr. Lemen's regarding automobile mechanics and mesothelioma are under scrutiny through Daubert/Frye hearings in at least three other states,<sup>2</sup> with more undoubtedly to come. Dr. Lemen's testimony has previously been excluded under a Texas Daubert analysis as

We are aware of pending motions in state courts in New York (*Nygaard*); in Pennsylvania (*Bahnemann*); and in Delaware (*In re Asbestos Litigation*). In addition, a New York court previously ordered a hearing in *DeMeyer v. Advantage Auto*, 797 NYS 2d 743, 748-51 (2005) when Plaintiffs' experts could not validate their science case against vehicle mechanic defendants. Plaintiffs dropped the litigation rather than present their science for scrutiny. Similar hearings under Texas' version of *Daubert* took place in 2003, resulting in the ruling attached as **Exh. A**.

insufficient to support causation in automobile mechanics. See Exh. A. Amici respectfully request that the Court look closely at the direction asbestos litigation has taken and the speculative expert testimony being used to support its expansion to defendants who are not responsible for asbestos disease. Dr. Lemen's views are emblematic and should be rejected as unscientific and unreliable.

#### **ARGUMENT**

### I. THE NEED TO APPLY SOUND SCIENCE IS OF HEIGHTENED IMPORTANCE IN ASBESTOS LITIGATION

### A. An Overview of the National Litigation Environment in Which the Subject Appeal Must be Considered

The United States Supreme Court has said that this country is in an "asbestos-litigation crisis," *Amchem Products, Inc v Windsor*, 521 US 591, 597; 117 S Ct 2231; 138 L Ed 2d 689 (1997), as a result of the "elephantine mass" of claims filed. *Ortiz v Fibreboard Corp*, 527 US 815, 821; 119 S Ct 2295; 144 L Ed 2d 715 (1999). Claims continue to pour in at an extraordinary rate. See Carroll *et al.*, *Asbestos Litigation* (Santa Monica: RAND Corp, 2005), pp 70-71 [hereinafter RAND Rep]. The bankruptcies of the major asbestos defendants have left plaintiffs' lawyers to cast an ever widening net for potential solvent defendants, even if they have little connection to asbestos. Thousands of defendants have been named in asbestos cases. It is against this background that the instant case must be considered.<sup>3</sup>

See generally Behrens, Some Proposals for Courts Interested in Helping Sick Claimants and Solving Serious Problems in Asbestos Litigation, 54 Baylor L Rev 331 (2002); Schwartz & Tedesco, The Law of Unintended Consequences in Asbestos Litigation: How Efforts to Streamline the Litigation Have Fueled More Claims, 71 Miss LJ 531 (2001); Rothstein, What Courts Can Do in the Face of the Never-Ending Asbestos Crisis, 71 Miss LJ 1 (2001).

When asbestos product liability lawsuits emerged almost thirty years ago, no one would have predicted that courts today would be facing an ever growing "asbestos-litigation crisis." *Amchem*, 521 US at 597. Instead of easing, "the crisis is worsening at a much more rapid pace than even the most pessimistic projections." Bell, *Asbestos Litigation and Judicial Leadership: The Courts' Duty to Help Solve the Asbestos Litigation Crisis*, 6:6 Briefly 2 (Washington: Nat'l Legal Center for the Pub Interest, 2002); see also RAND Rep, *supra* at 72 ("The number of claims filed annually has increased sharply in the past few years."). At least 300,000 asbestos claims are now pending. See S Rep 108-118 (2003). RAND has estimated that \$70 billion was spent in asbestos litigation through the end of 2002. See RAND Rep, *supra* at 92. The future costs of the current asbestos litigation system could total \$130 billion to \$195 billion. *Id.* at 106.

Asbestos has forced at least seventy-three employers into bankruptcy. See RAND Rep, supra at 109-10. The "process is accelerating," In re Collins, 233 F3d 809, 812 (CA 3, 2000), cert den sub nom Collins v Mac-Millan Bloedel, Inc, 532 US 1066; 121 S Ct 2216; 150 L Ed 2d 209 (2001), due to the "piling on" nature of asbestos liabilities. See In re Combustion Eng'g, Inc, 391 F3d 190, 201 (CA 3, 2005) ("For some time now, mounting asbestos liabilities have pushed otherwise viable companies into bankruptcy."); Edley, Jr. & Weiler, Asbestos: A Multi-Billion-Dollar Crisis, 30 Harv J on Legis 383, 392 (1993) (stating that each time a defendant declares bankruptcy, "mounting and cumulative" financial pressure is placed on the "remaining defendants, whose resources are limited."). For instance, RAND found: "Following 1976, the year of the first bankruptcy attributed to asbestos litigation, 19 bankruptcies were filed in the 1980s and 17 in the 1990s. Between 2000 and mid-2004, there were 36 bankruptcy filings, more than in either of the prior two decades." RAND Rep, supra at xxvii.

Lawyers are attempting to reach into the "deep pockets" of "peripheral defendants" to supplement product liability claims against "traditional defendants" (i.e., former asbestos product manufacturers) that have now mostly been forced into bankruptcy as a result of the avalanche of claims against them. See In re Joint E & S Dists Asbestos Litig, 129 BR 710, 751 (ED NY & SD NY, 1991) ("Overhanging this massive failure of the present system is the reality that there is not enough money available from traditional defendants to pay for current and future claims."), vacated, 982 F2d 721 (CA 2, 1992). As a result of these bankruptcies, "the net has spread from the asbestos makers to companies far removed from the scene of any putative wrongdoing." Editorial, Lawyers Torch the Economy, Wall St J, April 6, 2001, at A14; see also Congressional Budget Office, The Economics of U.S. Tort Liability: A Primer 8 (October 2003) (stating that asbestos suits have expanded "from the original manufacturers of asbestos-related products to include customers who may have used those products in their facilities."); Hantler et al., Is the Crisis in the Civil Justice System Real or Imagined?, 38 Loy LA L Rev 1121, 1151-52 (2005) (discussing spread of asbestos litigation to "peripheral defendants"). One well-known plaintiffs' attorney has remarked that the litigation has turned into the "endless search for a solvent 'Medical Monitoring and Asbestos Litigation' — A Discussion with Richard bystander." Scruggs and Victor Schwartz, 17:3 Mealey's Litig Rep: Asbestos 5 (March 1, 2002). The defendant in this appeal is an example.

In the early 1980s, approximately three hundred defendants had been named in asbestos actions. Kakalik *et al.*, *Variation in Asbestos Litigation Compensation and Expenses* (Santa Monica: RAND Corp, 1984), pp 5. Today, approximately 8,500 defendants have been drawn into the litigation. RAND Rep, *supra* at 79. Asbestos litigation has "spread well beyond the

asbestos-related manufacturing and installation industries where it first began to touch almost every form of economic activity that takes place in the United States." Id. at 81. Companies that never manufactured or sold asbestos-containing products are being dragged into the litigation. See In re Joint E & S Dists Asbestos Litig, 129 BR at 747-48 (stating that "[a] newer generation of peripheral defendants are becoming ensnarled in the litigation" as plaintiffs' lawyers seek "to expand the number of those with assets available to pay for asbestos injuries"—even though "[t]he extent of liability, possible defenses and value of the claims against these new defendants is unknown . . . . "). Well-known companies such as Gerber Products Co., Ford Motor Co., Campbell Soup Co., AT&T Corp., and 3M Co., the maker of Scotch® tape and Post-it® notes, among others, have become defendants. See Warren, Asbestos Suits Target Makers of Wine, Cars, Soups, Soaps, Wall St J, April 12, 2000, at B1. Some of these companies may have participated in the chain of distribution of the sale of an asbestos-containing product; others are premises liability defendants. See Editorial, Lawyers Torch the Economy, supra; Editorial, The Job-Eating Asbestos Blob, Wall St J, January 23, 2002, at A22. Other defendants are small businesses facing potentially devastating liability. See Warren, Plaintiffs Target Companies Whose Premises Contained Any Form of Deadly Material, Wall St J, January 27, 2003, at B1.

RAND has found that the rate of increase in claims from workers in nontraditional industries is such that there are now about as many of those claims filed annually as there are claims from workers in traditional industries. RAND Rep, *supra* at 76-77. "The growth in claims from workers in nontraditional industries is an example of how unpredictable asbestos litigation has become." *Id.* at 77. Nontraditional defendants now account for more than half of

asbestos expenditures. See *id.* at 94. Involvement in asbestos litigation can have devastating consequences for these defendants.

As described later, admission of the unreliable expert testimony sought by the plaintiffs in this action could exacerbate the spread of the litigation to even more defendants.

### B. Asbestos Litigation Has Detrimentally Affected the Michigan Economy

Asbestos litigation trends in Michigan reflect those occurring elsewhere in this country. Like other states, Michigan has witnessed a dramatic increase in asbestos filings. See, e.g., Detroit Businesses Ask for Relief from Burden of Asbestos Litigation, PR Newswire, June 6, 2005 (citing Richard E. Blouse, Jr., President and CEO of the Detroit Regional Chamber). For example, the number of pending cases in Wayne County jumped from "550 in 1999 to approximately 1,500 at the end of 2002." Memorandum of Law in Support of Petition to Establish a Court Rule of Administrative Order Creating a Statewide Inactive Docketing System, In Re Petition for Administrative Order or Court Rule Establishing Inactive Asbestos Docketing System, Admin File No 2003-47, at 2, 18 (filed July 1, 2003). Thousands of asbestos-related claims continue to be filed in Michigan each year, with 1,153 filed in Wayne County in 2004, according to former Governor John Engler. See Editorial, Engler's Right About Asbestos Liability Cases, Crain's Detroit Bus, May 16, 2005, at 8.

Moreover, some of the largest employers in Michigan are being targeted in the new wave of litigation. See, e.g., Truby, *Asbestos Suits Haunt Carmakers*, Detroit News, March 31, 2002, at A1. At one point, the "Big Three" automakers, General Motors, Ford, and DaimlerChrysler were subject to 3,500 new asbestos-related lawsuits per month. See PR Newswire, *supra*. As a

result, the Michigan workers and retirees who rely on those companies for their livelihood and retirement security risk losing their jobs and their savings.

Most notably, Southfield-based Federal Mogul, an auto parts company that peaked at 56,000 employees and \$6.6 billion in sales, became subject of the "solvent bystander" approach when it was forced to seek the protection of the bankruptcy courts after acquiring a British company in 1998 that previously had a connection with asbestos. See Editorial, Cleaning Up Asbestos Suits, Wash Times, September 24, 2003, at A20. By 2001, Federal Mogul was facing 365,000 lawsuits claiming hundreds of millions in damages because of asbestos. See Holland, Asbestos Liability Plan Splits Firms, Grand Rapids Press, January 11, 2005, at C2. The company's shares fell from \$65 per share in 1998 to 45 cents per share in October 2001. See Butters, Asbestos Suits Bankrupt Another: Federal-Mogul; Auto Supplier Says It Won't Cut Jobs, Shut Plants, Detroit Free Press, October 2, 2001. Federal Mogul, which has two thousand Michigan employees and is struggling to emerge from bankruptcy, recently announced that it would cut ten percent of its workforce and is considering closing twenty-five plants. See Roberson, Parts Maker Plans Job Cuts, Detroit Free Press, January 7, 2006. "[S]ome of the biggest corporations in Michigan are worried they could be next." Haglund, Asbestos Threat Hangs Over Business, Grand Rapids Press, December 4, 2002, at A12.

In addition, "[t]he big business of asbestos litigation is encroaching upon the livelihood of Michigan's small businesses," which typically includes "a staggering number of hardware stores, construction-related businesses, car repair shops, not to mention plumbers and various other trades." Kerrigan, Editorial, *Asbestos Suits Imperil Small Michigan Firms*, Detroit Free Press, November 3, 2002.

### C. The Critical Importance of Sound Science in Asbestos Cases

The root cause of the massive expansion of asbestos litigation lies with the courts. Struggling to deal with the flood of such claims, some courts valued efficiency over traditional legal requirements, such as the need to show actual injury and causation, and requiring plaintiffs' experts to back up their opinions with reliable data. See generally Schwartz & Lorber, *A Letter to the Nation's Trial Judges: How the Focus on Efficiency Is Hurting You and Innocent Victims in Asbestos Liability Cases*, 24 Am J of Trial Adv 247 (2000). Rather than clear the docket of asbestos claims, such shortcuts encouraged a further surge of lawsuits and mass settlement of claims regardless of the merits. See *id*.

This case presents the Court with the temptation to allow one such shortcut – by allowing a trial court to skirt its role as a "gatekeeper" and admit expert testimony that is contrary to established scientific methodologies. Michigan Rule of Evidence ("MRE") 702's requirement that the trial court ensure that each and every aspect of an expert witness's proffered testimony is reliable as a precondition to admissibility, *Gilbert v DaimlerChrysler Corp*, 470 Mich 749, 780 n 46, 781; 685 NW2d 391 (2004), particularly when viewed in the context and history of asbestos litigation, cautions against such an approach. Moreover, as this Court has recognized, "[c]areful vetting of all aspects of expert testimony is especially important when an expert provides testimony about causation." *Id.* at 782. Upholding MRE 702's standard of reliability in permitting expert witnesses to opine on causation on asbestos cases is critically important, as any lowering of the bar is likely to encourage meritless claims against employers with limited connection to asbestos. See generally Bernstein, *Keeping Junk Science Out of Asbestos* 

Litigation, 31 Pepp L Rev 11, 19-28 (2003) (discussing the importance of requiring expert testimony on causation to be reliable in asbestos cases).

This Court has long recognized the importance of keeping "junk science" out of the courtroom and cautioned that it is an abuse of discretion where a court, as it has here, abandons its gatekeeping obligation or performs the function inadequately. See id. at 780 (citing Kumho Tire Co Ltd v Carmichael, 526 US 137, 158-159; 119 S Ct 1167; 143 L Ed 2d 238 (1999) (Scalia, J., concurring)). There are sound public policy reasons for requiring trial courts to carefully evaluate expert testimony to ensure both its relevance and reliability. Expert testimony, whether presented by plaintiffs or defendants, can strongly influence juries. Expert witnesses are given extraordinary privileges in court. Unlike lay witnesses, "an expert is permitted wide latitude to offer opinions, including those that are not based on firsthand knowledge or observation." Daubert v Merrell Dow Pharms, Inc, 509 US 579, 592; 113 S Ct 2786, 125 L Ed 2d 469 (1993); see also MRE 701, 702. In addition, courts may permit expert witnesses to testify on the ultimate issue to be decided by the jury. See MRE 704. As the United States Supreme Court recognized in *Daubert*, "Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it." Daubert, supra at 595 (quoting Jack B. Weinstein, Rule 702 of the Federal Rules of Evidence Is Sound; It Should Not be Amended, 138 FRD 631, 632 (1991)).

Whether or not courts exclude unreliable expert testimony has a real impact on the outcome of litigation. See Rosenbaum, *Lessons from Litigation Over Silicone Breast Implants:*A Call for Activism by Scientists, 276 Sci 1524 (1997) (discussing actions of some federal judges to exclude expert testimony that was not scientifically sound in Bendectin and silicone breast

implant litigation). For that reason, bad science presented as fact by experts can have a dramatic effect on the availability of beneficial products and services.<sup>4</sup> It can also bankrupt employers, leading to loss of local jobs and damage to the state's economy. For example, silicone breast implant litigation forced Midland, Michigan-based Dow Corning to file Chapter 11 bankruptcy in 1995, despite the fact that epidemiology studies found no link between implants and autoimmune disorders, cancer or any other disease. See generally Angell, *Science on Trial: The Clash of Medical Evidence and the Law in the Breast Implant Case* (New York: W W Norton & Co, 1997) (authored by the executive editor of the *New England Journal of Medicine*). Even where there is no potentially broad harm to society, admitting unreliable expert testimony can unjustly harm a defendant where its product or conduct was not the cause of the plaintiff's injury.

There is a critical need today for state courts to reexamine the manner in which their asbestos dockets are being managed. The old system is broken and has lost all logical

For example, in early trials of cases alleging that the morning sickness drug Bendectin causes birth defects, courts generally allowed both sides to present their evidence and let the jury decide the issue. See, e.g., Mekdeci v Merrell Nat'l Lab, 711 F2d 1510 (CA 11, 1983) (upholding jury verdict). Despite overwhelming scientific evidence finding no link between the drug and birth defects, several juries in the mid-1980s, adrift in a sea of conflicting "expert" testimony, rendered multimillion dollar awards after hearing expert evidence to the contrary. See, e.g., Ealy v Richardson-Merrell, Inc, 897 F2d 1159 (CA DC) (reversing a \$95 million verdict), cert den, 498 US 950; 111 S Ct 370; 112 L Ed 2d 332 (1990); Richardson v Richardson-Merrell, Inc, 857 F2d 823 (CA DC, 1988) (affirming judgment for manufacturer notwithstanding a \$1.16 million verdict), cert den, 493 US 882; 110 S Ct 218; 107 L Ed 2d 171 (1989); see generally Sanders, From Science to Evidence: The Testimony on Causation in the Bendectin Cases, 46 Stan L Rev 1 (1993); Stewart, Regulatory Compliance Preclusion of Tort Liability: Limiting the Dual Track System, 88 Geo LJ 2167, 2171-72 (2000). These verdicts were ultimately reversed on appeal, but not before the manufacturer removed Bendectin from the market in 1983. depriving women of the only Food and Drug Administration-approved medication for morning sickness. See Culliton, Merrell Dow Stops Marketing Bendectin, 221 Sci 37 (1983).

justification in light of the abuse of the system by plaintiffs' attorneys and their paid experts. The science presented by Dr. Lemen, and the trial court's wholesale adoption of it, are exactly the kind of process that needs close examination and correction to help bring the asbestos litigation crisis under control.

### II. THE CIRCUIT COURT'S RULING DOES NOT REFLECT ACCEPTED SCIENTIFIC PRACTICE

The circuit court's ruling should be reversed because it turns commonly accepted scientific principles on their head. The court found the epidemiology to be both unpersuasive, largely because of supposed minor "problems" in their design, and also unnecessary and irrelevant to a causation analysis. Instead, the court found government pronouncements to be the more reliable basis for causation evidence in the courtroom. The court's standard is nicely summarized in the following holding:

It is *not really important to have an epidemiological study* to determine whether the risk of cancer is increased by asbestos exposure in every occupation. What is important to know is that the permissible exposure level and to make a determination whether in that work or occupation an employee is exposed to asbestos in excess of the permissible exposure level.

Daubert Hearing, Vol III, at 23-24 (emphasis added).

This holding, which establishes the trial court's now and future test for defendants whose only role is a low-dose exposure, fundamentally misstates two important scientific principles – the vital role of occupation-specific epidemiology, and the lack of relationship between a regulatory dose standard and actual exposure levels associated with causation. In no other litigation would a trial court be permitted to ignore occupation-specific epidemiology, and rely instead on a regulatory workplace exposure level as satisfying plaintiffs' burden of proving

causation. Dr. Lemen should not be permitted to testify in violation of these basic scientific principles.

### A. Epidemiology Trumps All Other Scientific Evidence in <u>Demonstrating Whether an Occupational Exposure Causes Disease</u>

To determine whether an exposure causes human disease, scientists rely chiefly on the field of epidemiology. Epidemiologists work in the gray area of causation where a disease occurs in the general population and thus cannot be linked exclusively to a group of exposed persons. This is true of mesothelioma, which is widely accepted as occurring "naturally," i.e., without asbestos exposure, in some percentage of cases. Epidemiology is particularly necessary where the underlying biological mechanisms of disease are not well understood, as is also the case for asbestos and mesothelioma, and there are thus no medical or biological "markers" that would prove causation. The only acceptable way to determine whether the exposure is causing the disease in those workers is to create a comparison group, or "control," and pose the question whether the exposed group is more likely to get the disease than the control group. The results are usually reported as an *odds ratio* or similar measure of the strength of association. The odds ratios for occupations like insulators, asbestos manufacturing workers, and shipyard workers are

See, e.g., Brickman, On the Theory Class's Theories of Asbestos Litigation: The Disconnect Between Scholarship and Reality, 31 Pepp L Rev 33, 44 n 19 (2003) (stating that approximately 20% of malignant mesotheliomas have been attributed to causes other than exposure to asbestos) (citing Carbone et al., The Pathogenesis of Mesothelioma, 29 Seminars in Oncology 2 (2002); Britton, The Epidemiology of Mesothelioma, 29 Seminars in Oncology 18 (2002)).

An "odds ratio" of 1.0 reflects no increase in risk in the exposed population, whereas odds ratios generally of 2.0 or higher are interpreted as showing a doubling of the risk over what would be expected in the general population.

usually very high, sometimes over 100, indicating a strong causal relationship between mesothelioma and workers in these jobs with high, lifetime exposures.<sup>7</sup>

Other forms of evidence often used to support causation in litigation, such as case reports (like the Australian Registry cases cited by the trial court) and animal studies, are considered vastly inferior and are not sufficient to override a consistent set of epidemiology studies. See Green, Expert Witnesses and the Sufficiency of Evidence in Toxic Substances Litigation: The Legacy of the Agent Orange and Bendectin Cases, 86 NW U L Rev 643, 657 (1992) ("There plainly is a hierarchy to these different indirect forms of toxic effect evidence. Epidemiology is at the top, and structural similarity, in vitro testing, and case reports are at the bottom.") (emphasis added).8

Scientific publications and treatises dealing with the intersection of law and science repeatedly emphasize the importance of epidemiology as the most important means of proving or disproving causation. Texts on scientific evidence in the courtroom emphasize the critical role of epidemiology:

For a good general discussion of the principles of epidemiology and its use in the courtroom, see Dr. Marcia Angell's book on the breast implant litigation, Science on Trial: The Clash of Medical Evidence and the Law in the Breast Implant, supra at pp 99-106; and Black, Expert Evidence: A Practitioner's Guide to Law, Science, and the FJC Manual (St Paul, Minn: West Group, 1997), p 77.

See also Norris v Baxter Healthcare Corp, 397 F3d 878, 884-85 (CA 10, 2005); Allen v Pennsylvania Eng'g Corp, 102 F3d 194, 197-98 (CA 5, 1996); Daubert v Merrell Dow Pharms, 43 F3d 1311, 1321-22 (CA 9, 1995) (all rejecting plaintiff reliance on case reports and animal evidence to establish causation), cert den, 516 US 869 (1995); Raynor v Merrell Pharms, 104 F3d 1371, 1374-75 (CA DC, 1997) (expert theories drawn from in vitro and animal studies had been disproven by established epidemiology); Reference Manual on Scientific Evidence, supra at p 347 n 39 ("[W]hen there is a substantial body of epidemiological evidence that addresses the causal issue, animal toxicology has much less probative value.").

- "[E]pidemiology is the *only generally accepted scientific discipline* that deals with the integrated use of statistics and biological/medical science to identify and establish the causes of human diseases." Black, *Epidemiologic Proof in Toxic Tort Litig.*, 52 Fordham L Rev 732, 736 (1984).
- "The *most desirable evidence is epidemiologic*, because it can best be generalized to support inferences about the effect of an agent in causing disease in humans." Green, *supra* at 645.
- "The only valid way to identify human carcinogens and establish medical causation is to observe differences in the incidence of cancer between humans exposed to toxic wastes and those who are not." Andrues, Proof of Cancer Causation in Toxic Waste Litigation: The Case of Determinacy Versus Indeterminacy, 61 S Cal L Rev 2075, 2088 (1988).
- "[T]he cohort study and case-control study are the *most informative* investigations used to test specific etiologic hypotheses and to confirm and quantify degrees of health risk related to causal exposures." Rom, ed, Environmental and Occupational Medicine (Philadelphia: Lippincott-Raven, 3d ed, 1998), p 44.
- "In the absence of an understanding of the biological and pathological mechanisms by which disease develops, *epidemiological evidence is the most valid type of scientific evidence of toxic causation.*" Bailey *et al.*, *Reference Guide on Epidemiology*, in *Reference Manual on Scientific Evidence* (Washington: Federal Judicial Center, 1<sup>st</sup> ed, 1994), p 26.

Many courts have also emphasized the importance of epidemiology, e.g.:

- "Without a controlled [epidemiology] study, there is no way to determine if CML is more common in people who are exposed to benzene than those who are not. . . . [I]n a case such as this [benzene toxic tort claim], the most conclusive type of evidence of causation is epidemiological evidence." Chambers v Exxon Corp, 81 F Supp 2d 661, 663-64 (CA 5, 2001).
- "[T]he most useful and conclusive type of evidence in a case such as this [ethylene oxide toxic tort claim] is epidemiological studies." Allen v Pennsylvania Eng'g Corp, 102 F3d 194, 197 (CA 5, 1996).
- "[T]he existence or non-existence of relevant epidemiology can be a *significant factor in proving general causation* in toxic tort cases." *Hall v* Baxter Healthcare Corp, 947 F Supp. 1387, 1412-13 (D Or 1996).

- "Epidemiological studies are the *primary generally accepted methodology for demonstrating a causal relation* between a chemical compound and a set of symptoms or a disease." *Conde v Velsicol Chem Corp*, 804 F Supp 972, 1025-26 (SD Ohio 1992).
- "We agree with the district court that *epidemiology is the best evidence of general causation* in a toxic tort case." *Norris v Baxter Healthcare Corp*, 397 F3d 878, 882 (CA 10, 2005) (citing to seventeen epidemiology studies discounting any link between breast implants and connective tissue disease).
- "The *most important evidence relied upon by scientists* to determine whether an agent (such as breast implants) cause [sic] disease is controlled epidemiologic studies." *In re Breast Implant Litig*, 11 F Supp 2d 1217, 1224 (D Colo 1998).
- "[I]n the face of controlled, population-based epidemiological studies which find otherwise, these case studies [of alleged breast implant injury] pale in comparison." Allison v McGhan Med Corp, 184 F3d 1300, 1316 (CA 11, 1999).

These authorities cannot be ignored. It is inconceivable that the circuit court could, without any citation, declare that epidemiology studies are "not really important."

#### B. Occupation-Specific Studies Are the Most Probative

This point is even more dramatic if taken to the next level – the need for epidemiology studies specific to the occupation at issue. Here, the circuit court seemed to believe that its gatekeeping analysis did not need to be informed by what the studies say about automobile mechanics and mesothelioma. Instead, the court seemed content to assume that if asbestos exposure causes disease in other occupations, it must do so in automobile mechanics as well. See Hearing, Vol. III, pp 21-24. Again, the court's opinion reflects a fundamental misunderstanding of how epidemiology works.

Epidemiologists must attempt to get as close as possible to an identifiable dose and exposure to the substance at issue to derive causation conclusions. The concept is known as

specificity, and the logic behind this approach is unimpeachable – critical differences in dose and type of exposure across occupations make it speculative to draw conclusions across occupations with very different exposure scenarios. Put simply, the risk of disease from any toxic occupational exposure varies widely based on the particular job and exposures. As only one example, epidemiologists did not simply jump to the conclusion that all benzene exposures cause leukemia just because early, high-dose exposures showed such an association; they continued to study moderate and lower dose exposures and drew separate conclusions from those studies. See Monson, *Occupational Epidemiology* (Boca Raton: CRC Press, 2d ed, 1990), pp 151-53.

Thus, contrary to the circuit court's opposite conclusion, the most reliable way to determine whether an exposure from a particular occupation is causing disease is to study *that* occupation or something very close to it. Time after time, epidemiologists have focused their work on specific occupational settings. Nowhere is there any support for the court's position that epidemiology studies of the occupation at issue are not important.

For asbestos, the distinction in occupations is critical. As noted above, a number of high dose occupations are known to be associated strongly with mesothelioma, and the risk varies greatly depending on the specific job. These associations were established through

Reviewing only the first chapter's references in McDonald's text, *Epidemiology of Work-Related Diseases* (London: BMJ Books, 2d ed, 2000), the vast majority of studies focus on particular worksites or exposures, e.g., smelter workers, wine growers, beryllium processing plant workers, chromium manufacturing, nickel refinery workers, and others. A leading text on occupational epidemiology, *Occupational Epidemiology* (Boca Raton: CRC Press, 2d ed, 1990), by Harvard School of Public Health's Richard Monson, contains 165 pages of discussion of specific jobs and occupations, their exposures, and which jobs are at risk of certain cancers and which are not – rubber workers and bladder cancer, coal miners and stomach cancer, meat workers and Hodgkin's disease, plumbers and lymphatic cancer, etc. (pp 105-265).

epidemiology studies of those occupations. <sup>10</sup> A number of other occupations – teachers, farmers, office workers, accountants, and automobile mechanics among them – have been investigated in regard to mesothelioma and shown to have no relationship with mesothelioma; all odds ratios were near or below 1.0. <sup>11</sup> The exposures achieved by an insulator from a lifetime of blowing free asbestos fiber, and that of an automobile mechanic, whose exposures, if any, to free chrysotile fibers are far more limited, are not comparable in any way. The only way to determine where automobile mechanics fall on this scale is to perform epidemiology studies of that field. It is totally inappropriate for the court (and Dr. Lemen) to simply assume that minor exposures in this occupation cause mesothelioma based on exposures in other occupations.

Thus, the court's first critical error was to write off the automobile mechanic-specific epidemiology in its entirety. This conclusion has no scientific foundation and is contrary to the way in which public health professionals determine which jobs are risky and which are not.

# C. The Circuit Court Erred in Permitting Dr. Lemen to Testify that Automobile Mechanic Exposures Cause Mesothelioma in the Face of Substantial and Uncontradicted Epidemiology to the Contrary

The occupation of automobile mechanic is one of the more heavily studied cohorts of workers regarding potential asbestos disease. All of the epidemiology studies on automobile mechanics and mesothelioma, most of them published in peer-reviewed journals, reach the same conclusion: there is no causal association between automobile mechanic work and mesothelioma. All seven of the case control studies addressing automobile mechanics found

See, e.g., insulator odds ratio of 77 in McDonald, *The Epidemiology of Mesothelioma in Historical Context*, 9 Eur Respir J 1932, Table IV (1996) (referencing Selikoff's 1979 study).

See, e.g., Teschke, Mesothelioma Surveillance to Locate Sources of Exposure to Asbestos, 88 Canadian J Pub Health 163, Table II (1997).

odds ratios <u>below 1.0</u>, meaning no causal association. In addition to the case control studies, there are an additional ten studies of either *cohort* design (comparing an exposed group to an unexposed group) or *proportional mortality* or "PMR" design (comparing mortality rates among occupations). All ten likewise found no indication of any association between automobile mechanics and mesothelioma. The brief of Appellant DaimlerChrysler reviews most of these studies in some detail, and we will not repeat that exercise here.<sup>12</sup>

DaimlerChrysler's brief did not mention two recent metaanalyses and one literature review of brake workers that should be included in this discussion. All three of these peer-reviewed articles confirmed no association. The literature review, by Harvard Medical School and School of Public Health researchers, looked at all available studies involving automobile mechanics and mesothelioma and concluded:

When examined in aggregate, the evidence did not support an increase in risk of either lung cancer or mesothelioma among male automobile mechanics occupationally exposed to asbestos from brake repair.

Laden, Lung Cancer and Mesothelioma Among Male Automobile Mechanics: A Review, 19 Reviews on Environmental Health 39, 39 (2004) (Exh. B). The two metaanalyses, by Wong (2000) and Goodman (2004), in reanalyzing the data in prior studies, found combined odds ratios of less than 1.0 (0.9 and 0.92/0.81 respectively), and both concluded there was no link between vehicle repair work and mesothelioma.<sup>13</sup>

The mechanic epidemiology studies are discussed thoroughly in the Laden and Goodman articles discussed below and attached as **Exhs. B and C**.

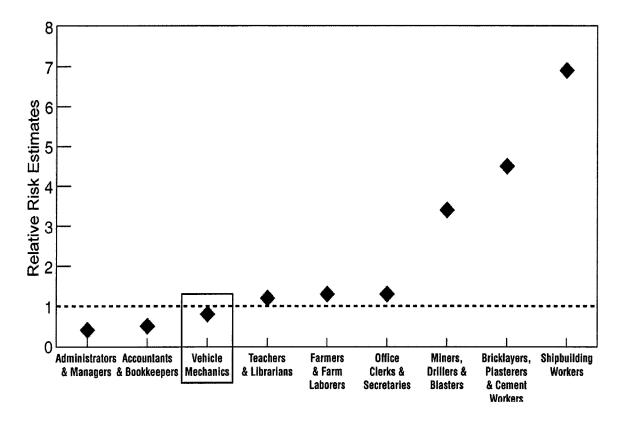
Goodman, Mesothelioma and Lung Cancer Among Motor Vehicle Mechanics: A Metaanalysis, 48 Ann Occup Hyg 309 (2004) (Exh. C); Wong, Malignant Mesothelioma and Asbestos Exposure Among Auto Mechanics: Appraisal of Scientific Evidence, 34 Reg Tox. & Pharmacology 170 (2001) (Exh. D).

Throughout the twenty-five years that epidemiologists have focused on automobile mechanics and mesothelioma, not a single published epidemiology study has found an association above 1.0 or identified a causal link between automobile mechanic work and mesothelioma.

The combination of seventeen epidemiology studies/reviews presents a remarkably consistent picture. Such consistency across repeated studies is one of the hallmarks of a strong set of epidemiology whose conclusions can be relied on. See Hoffman, *The Use of Epidemiologic Data in the Courts*, 120 Am J of Epidemiology 190, 191 (1984). At least one court has held that these automobile mechanic studies support a prima facie showing that plaintiffs' experts were not using a generally accepted methodology in attempting to contradict them with non-epidemiological, less probative materials. *DeMeyer*, 797 NYS 2d at 748-49.

The consistent showing of no increased risk for automobile mechanics becomes more obvious when that finding is compared to other occupations. On the one hand, the studies consistently show <u>increased</u> risk for occupations known to have high-dose amphibole exposures. The odds ratio for automobile mechanics, however, falls in the range of other occupations not known to have any serious asbestos exposure. The information developed by Teschke<sup>14</sup> in her study, presented here in chart form, shows the dramatic difference between three of these high-dose occupations and low dose occupations like automobile mechanic work:

See Teschke, Mesothelioma Surveillance to Locate Sources of Exposure to Asbestos, 88 Canadian J Pub Health 163, Table III ((1997); see also McDonald, Malignant Mesothelioma in North America, 46 Cancer 1650, 1653, Table 3 (1980); Agudo, Occupation and Risk of Malignant Pleural Mesothelioma: A Case-Control Study in Spain, 37 Am J Indus Med 159, 164, Table IV (2000).



These studies show that automobile mechanic risk is far below that of high-dose occupations; mechanic exposures are no more likely to cause mesothelioma than those of administrators, accountants, librarians, farmers, and office clerks.

The court dismisses these studies based on purported minor "problems" that Dr. Lemen identifies with each. The difficulty with such a quick dismissal is the uniform consistency of results across so many studies by so many different researchers. Perhaps one researcher's work was flawed enough to miss a possible connection. Not so with many different researchers in different countries over twenty-five years and seventeen studies.<sup>15</sup> There is no such thing as a

In addition, if the studies were indeed fatally flawed, they would likewise miss the association between mesothelioma and known sources of that disease like insulator and shipyard work. This is called a *positive control* and is one important way of verifying the reliability of a study design. As illustrated by the examples in the Teschke chart above, (Footnote continued on next page)

perfect epidemiology study, yet we rely on the message of these studies all the time – smoking and lung cancer, high blood pressure and heart disease, alcohol and fetal alcohol syndrome, and many similar links are based on epidemiology studies with "flaws" like those put forth by Dr. Lemen. The court's and Dr. Lemen's dismissal of these studies is akin to finding warts on an elephant.

Dr. Lemen's testimony in this case is in the weakest possible position as to epidemiology:

(1) he has <u>no</u> positive epidemiological studies to support his opinion, as he readily admits, <u>and</u>

(2) his opinion is directly contradicted by a large and consistent body of epidemiological studies showing no causation. Where a consistent, significant, and clear set of epidemiology exists, experts are not permitted to ignore it and speculate from other evidence in contradiction of the epidemiological conclusion. As the Tenth Circuit Court of Appeals stated:

This is not a case where there is no epidemiology. It is a case where the body of epidemiology largely finds no association between silicone breast implants and immune system diseases. . . .

We are unable to find a single case in which a differential diagnosis that is flatly contrary to all of the available epidemiological evidence is both admissible and sufficient to defeat a defendant's motion for summary judgment.

*Norris*, *supra* at 885-86 (emphasis added). This is the conclusion reached by every court, to our knowledge, in regard to an expert's attempt to contradict a consistent set of epidemiology. <sup>16</sup>

the studies involving mechanics found these links and were thus reasonably well designed.

See, e.g., Norris, supra at 885-86; Allen, supra at 197 (numerous reputable epidemiology studies contradicted plaintiffs' theory); Daubert v Merrell Dow Pharms, 43 F3d 1311, 1314 (CA 9, 1995) (published studies showed that Bendectin did not cause birth defects); Allison, supra at 1316 (plaintiffs' "proffered conclusions . . . were out of sync with the conclusions in the overwhelming majority of the epidemiological studies presented to the court"); Richardson v Richardson-Merrell, supra at 826 (plaintiffs' theory was (Footnote continued on next page)

It is not surprising, based on this scientific record, that the Texas trial judge, under a *Daubert* analysis, found Dr. Lemen's vague opinions regarding the automobile mechanic epidemiology to be wholly unacceptable:

Dr. Lemen candidly admitted that there is not an epidemiological cohort study that says that workers who work around friction products have a relative risk of two or greater to develop asbestos disease. He further testified that the epidemiological studies are equivocal as to causation of asbestos disease in those workers. . . . [T]he testimony of Doctor Lemen does not establish a causation link, and the motion of Daimler Chrysler as to epidemiological testimony is granted. (Exh. A at 5; citations omitted)

The result under Michigan's *Daubert* standard should be the same.

## D. The Court Erred in Allowing Dr. Lemen to Rely on Government Warnings and Regulatory Standards to Prove Causation

Rather than deal with the contrary automobile mechanic epidemiology, Dr. Lemen relied on an array of government warnings about brake work, mostly from the 1970s and 1980s (before the epidemiology studies were even performed), to support his view that vehicle repairs are a source of mesothelioma. The court adopted this approach wholesale by substituting government pronouncements and regulatory standards for real causation evidence as reflected in the automobile mechanic epidemiology.

The court's acceptance of Dr. Lemen's approach reflects a gross misunderstanding of how government agencies go about their job of protecting the public. These agencies use a very different standard than the courtroom standard of causation. Their determinations have no

<sup>&</sup>quot;undermined by an overwhelming array of contrary opinion published in the scientific literature and presented by the defense"); *Chambers, supra* at 665 (causation claim contradicted by "a number of scientifically performed studies which demonstrate no association" between benzene and CML).

bearing on courtroom causation at all. The task of an agency like OSHA, NIOSH, or EPA is to define and/or enforce exposure limitations for hazardous substances that the agencies believe will adequately protect the public from harm. To do this, the agencies often have to work without adequate evidence, and they will take the conservative approach of issuing warnings and setting standards to avoid the <u>potential</u> of harm well below any known exposure level associated with actual injury. They do not set regulatory limits at the dose of <u>known causation</u>, and they do not rely on proof of causation to set these levels. As explained by the Tenth Circuit Court of Appeals in *Mitchell v Gencorp, Inc*:

The methodology employed by a government agency "results from the preventive perspective that the agencies adopt in order to reduce public exposure to harmful substances. The agencies' threshold of proof is reasonably lower than that appropriate in tort law, which traditionally makes more particularized inquiries into cause and effect and requires a plaintiff to prove it is more likely than not that another individual has caused him or her harm.

165 F3d 778, 783 n 3 (CA 10, 1999) (quoting *Allen, supra* at 198). 17

OSHA, for instance, established in 1994 an exposure limit for an eight hour day of 0.1 asbestos fibers per cc of filter area (expressed as "f/cc"). It did so, however, not based on any evidence that exposures at this level had actually caused any asbestos disease. In fact, neither OSHA nor anyone else (including Dr. Lemen) has any evidence that exposures anywhere near

See also Sprankle v Bower Ammonia & Chem Co, 824 F2d 409, 416 (CA 5, 1987) (in limine order properly excluded OSHA regulations based on danger that jury might place undue emphasis on them); Glastetter v Novartis Pharm Corp, 252 F3d 986, 991 (CA 8, 2001) (excluding FDA drug-recall decision as "unreliable proof of medical causation" and not relevant to causation because FDA will remove drugs from marketplace upon a lesser showing of harm); Siharath v Sandoz Pharm Corp, 131 F Supp 2d 1347, 1366 (ND Ga 2001) (excluding FDA statement regarding risks of prescription drug as not relevant to causation testimony because agency applied lower standard of proof), aff'd, 295 F3d 1194 (CA 11, 2002); Gehl By Reed v Soo Line RR Co, 967 F2d 1204, 1208 (CA 8, 1992) (excluding nonprobative government proclamations because they tend to sway the jury falsely by their "aura of special reliability and trustworthiness").

0.1 f/cc have ever caused a case of mesothelioma, particularly when it comes to chrysotile asbestos, which is at issue here. OSHA works off a theoretical *linear threshold model* to estimate deaths at lower levels, but those estimates are only theoretical, not actual. The only epidemiology studies even suggesting that chrysotile exposures actually caused human mesotheliomas are high-dose jobs like Canadian miners and textile workers. It is thus entirely improper for the court and Dr. Lemen to substitute OSHA's regulatory standard for evidence of an actual chrysotile exposure level associated with human mesothelioma.

The underpinning to the circuit court's improper approach seems to be its assumption that these agencies relied on unspecified epidemiology studies proving that very low dose exposures to chrysotile fibers cause mesothelioma. See Hearing, Vol. III, at 32, 34. Yet neither the court nor Dr. Lemen cite any such studies or any government reference to such studies.<sup>19</sup> The automobile mechanic studies also clearly contradict this point, since vehicle mechanics have worked around very low doses of chrysotile asbestos their entire careers yet have no increased risk of mesothelioma. The court's statement is simply untrue.

There is no accepted scientific methodology permitting an expert to conclude that exposure at or above the asbestos regulatory standard is sufficient in and of itself to cause mesothelioma. Through well-established criteria, scientists look first to epidemiology, and if the

McDonald in his text *Epidemiology of Work-Related Diseases*, *supra*, notes: "It is hard to escape the conclusion from these studies that long amphibole fibers . . . are the major cause of mesothelioma and that some or all of the few cases in chrysotile workers may be due to fibrous tremolite." (p 101) The "few cases" referenced derived mostly from mining and textile plant studies.

The EPA's Gold Book's statement that mechanics, their wives, and children have all gotten mesothelioma from their work is taken from case reports, an unreliable source for causation determinations, and from a British television program. See Appellant DaimlerChrysler's brief at p 28.

epidemiology sufficiently answers the question (as here), they look no further. The government's standard has no bearing on whether a low dose exposure actually caused someone's disease.

# E. The Effect of the Circuit Court's Rulings Is to Eliminate Any Pre-Trial Science Defense Regardless of the Strength of the Science Against Causation

The court's newly-articulated standard for low-dose asbestos cases will support a wave of unjustified new lawsuits that cannot be eliminated short of trial. The court has stated that it is willing to accept any expert's causation testimony that at some point in time, the plaintiffs' exposures exceeded OSHA's 0.1 f/cc limit or perhaps even OSHA's short-term limits for very short exposures. This is an extremely low bar for plaintiffs that has no relationship to an actual dose that causes disease. OSHA's 0.1 f/cc standard was only established in 1994, as part of a gradual reduction in regulatory limits since 1972 when the first standard (5 f/cc) was issued. Thus, until 1994, companies were complying with higher regulatory limits, and it would not be unexpected to find exposures in those years that were entirely legal and proper, and not a source of disease in any published study, yet still above today's OSHA standard and the court's standard for causation as well. It would be difficult for the court to set the plaintiffs' bar any lower.

Amici are greatly concerned regarding the impact of this ruling. Any cases involving any historic exposure at or above today's OSHA standard will be doomed to go to trial, no matter how few times those exposures occurred and how strong the epidemiology demonstrates an absence of mesothelioma in that occupation. If seventeen studies are not enough, the court clearly will not accept any amount of epidemiology to the contrary. It thus becomes impossible for defendants to obtain any relief from the threat of trial, even though there is no credible epidemiological evidence supporting causation and significant evidence to the contrary.

Amici respectfully suggest that this is a situation where the circuit court has abandoned its gatekeeper role. Amici are sympathetic to the difficulty circuit judges like Judge Colombo have in dealing with the enormous demands of the asbestos docket. Amici suggest, however, that the circuit court's abdication of its role will only make matters worse by inviting frivolous litigation for the indefinite future. This is a timely opportunity for the appellate court to establish a responsible system, based on established scientific principles and proof of causation, as a scientifically-justified management tool for asbestos litigation. If the causation science is not there, the defendant should not be hauled to trial. The docket will decrease accordingly if plaintiffs' experts are held accountable for their testimony. The ruling should be reversed and Dr. Lemen's testimony excluded.

#### CONCLUSION

For these reasons, *Amici* ask this Court to reverse the circuit court's May 28, 2004 order denying "Defendant's Motion in Limine to Preclude Plaintiffs From Introducing Any Evidence Regarding a Causal Connection Between Automotive Products and an Increased Risk for Developing Mesothelioma in Vehicle Mechanics," order that Dr. Lemen's testimony must be excluded at trial, and remand the case for further proceedings consistent with that decision.

### Respectfully submitted,

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Of Counsel

Dated: January 11, 2006

### **STATE OF MICHIGAN** IN THE COURT OF APPEALS

(On Appeal from the Wayne Circuit Court)

PHILLIP R. CHAPIN,

Plaintiff-Appellee,

and

Court of Appeals No. 257917

BERNIE MAE CHAPIN,

Wayne Circuit No. 03-324775-NP Hon. Robert J. Colombo, Jr.

Plaintiff, v.

DAIMLER CHRYSLER CORPORATION, FORD MOTOR COMPANY, GENERAL MOTORS CORPORATION, and HONEYWELL INTERNATIONAL INC., f/k/a ALLIED SIGNAL CORP.,

Defendants-Appellants,

and

A & L, PARTS, INC., AII ACQUISITION CORP, AMCHEM PRODUCTS, INC., AMERICAN STANDARD, INC., BONDEX INTERNATIONAL, INC., BORG-WARNER CORPORATION, CARQUEST AUTO PARTS OF PINCKNEY MI, INC., CARRIER CORPORATION, DANA CORPORATION, DAP, INC., DURO DYNE CORPORATION, GEORGE FARR SERVICE, INC. & ALL EQUIPMENT COMPANY, GEORGIA PACIFIC CORPORATION, GOODRICH CORPORATION, HERCULES CHEMICAL COMPANY, INC., INDIANHEAD INDUSTRIES, INC., KELSEY HAYES COMPANY, MCCORD CORPORATION, METROPOLITAN LIFE INSURANCE COMPANY, PARKER-HANNIFIN CORP., PNEUMO ABEX CORPORATION, ROYAL INDUSTRIES, INC., STANDCO INDUSTRIES, INC., Defendants.

#### PROOF OF SERVICE OF AMICI CURIAE

WASHINGTON, D.C.

) ss.

I, Michael Goecke, being first duly sworn, deposes and says that on January --, 2006, I sent an original and 4 copies of the Amici Curiae Brief of the Coalition for Litigation Justice, Motor and Equipment Manufacturers Association, American Chemistry Council, Property Casualty Insurers Association of America, Chamber of Commerce of the United States of America, National Association of Manufacturers, American Insurance Association, and American Tort Reform Association in support of Defendants-Appellants by overnight mail for filing addressed to:

> District Clerk MICHIGAN COURT OF APPEALS Cadillac Place 3020 West Grand Boulevard, Suite 14-300 Detroit, MI 48202-6020 (313) 972-5678

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Subscribed and sworn to before me this 11<sup>th</sup> day of January, 2006.

lotary Public

Danté Williams

Notary Public, District of Columbia My Commission Expires 2-14-2009