

1998

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Recommended Citation

Patrick J. Norton, *What Happens when Air Bags Kill: Automobile Manufacturers' Liability for Injuries Caused by Air Bags*, 48 Case W. Res. L. Rev. 659 (1998)

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WHAT HAPPENS WHEN AIR BAGS KILL: AUTOMOBILE MANUFACTURERS' LIABILITY FOR INJURIES CAUSED BY AIR BAGS

INTRODUCTION

On a Sunday morning in late September, Pamela and David Gable get into their 1994 Dodge Intrepid to go to church.¹ The road is wet from an early morning rain.² As she attempts to negotiate a turn in the road, Mrs. Gable loses control of the vehicle and it crashes into the guardrail and stops.³ The vehicle's driver and passenger-side air bags deploy upon impact at a rate of up to 211 miles per hour,⁴ and in less than 1/30th of a second both Pamela's and David's lives are forever changed. Mr. Gable, a thirty-five year old father of one, suffers a broken neck in the relatively minor traffic accident, resulting in total paralysis.⁵

Unfortunately, the tragedy of air bag induced injury and death has become a recurring event. One-year-old Alexandra Greer was decapitated when the air bag in her mother's car deployed following a low speed parking lot accident.⁶ Frances Ambrose, age 5, was wearing both her lap and shoulder belts when an air bag killed

¹ See *Gable v. Chrysler Corp.*, No. 322748 (Ohio C.P. Cuyahoga County filed Jan. 13, 1997) (on file with author).

² See *id.*

³ See *id.*

⁴ See *id.*; see also NATIONAL HIGHWAY TRAFFIC SAFETY COMM'N, U.S. DEP'T OF TRANSP., AIR BAG DEPLOYMENT CHARACTERISTICS 31 (1992) (noting the peak and average deployment velocities of different types of air bags).

⁵ See *Gable*, No. 322748.

⁶ See Bob Fick, *Ghoulis Accident Focuses Attention On Air Bags: Federal Expert Investigate 1-Year Old's Decapitation*, PITT. POST-GAZETTE, Nov. 28, 1996, at A20 (quoting the police as stating that "the air bag's impact was so strong that the child's head was forced through the car's passenger-side window, decapitating her and throwing her head out onto the parking lot"); see also Paul Beebe, *Baby Wasn't Strapped In, Agency Says of Accident: Ada County's Coroner Reached Similar Findings*, THE IDAHO STATESMEN, May 9, 1997, at 1A.

her following a minor traffic accident in 1996.⁷ These are but two examples of the awesome force and deadly power that lie in wait behind the dashboard in nearly all new vehicles today.

As of October 15, 1997, "air bags have killed at least 85 passengers and drivers during low-speed crashes in which occupants would have survived if the air bag had not deployed. . . . 47 of those killed were children, and 14 of the adults were women who were 62 inches tall or shorter."⁸ These figures do not include people like Mr. Gable who have suffered serious injuries, such as quadriplegia.⁹ Even more disturbing than the number of injuries that have already occurred, however, is the likelihood that these figures will increase dramatically as air bags are installed in more vehicles. This Note will focus on the potential issues raised by these cases and will suggest that in certain circumstances it would be proper to hold the auto industry financially responsible for the injuries that are caused by these "safety" devices.¹⁰

Part I of this Note will look briefly into the history of the development of air bags in the United States. It will explain the initial enactment of the National Traffic and Motor Vehicle Safety Act of 1966 ("Safety Act"),¹¹ and the subsequent history of the safety standards that have been promulgated under it. In particular, this Note will develop the convoluted history of Federal Motor Vehicle Safety Standard No. 208 ("FMVSS 208"),¹² and discuss its role in the current air bag controversy.

Part II will discuss federal preemption, which is of major importance to any products liability lawsuit involving air bags. It will analyze the line of decisions in the "no air bag" or "failure to install" cases, to see what impact they might have on the types of cases envisioned in this paper. This Note will then assess the current status of federal preemption following the United States Su-

⁷ See *Girl Killed By Air Bag Was Properly Belted: Finding Is A First For U.S. Agency, Which Is Proposing New Warning Labels For Vehicles*, L.A. TIMES, Oct. 24, 1996, at D2.

⁸ *Air Bags: Parents' Group Opposes Amendment to End Required Protection of Unbelted Occupants*, 25 Prod. Safety & Liab. Rep. (BNA) 1008 (Oct. 24, 1997).

⁹ See *Gable*, No. 322748.

¹⁰ As will be discussed later, this Note does not suggest that the automotive industry ought to be the insurer of its products, or that it has a duty to produce a vehicle that will be safe in every collision.

¹¹ 49 U.S.C. §§ 30101-30169 (1994 & Supp. I 1995).

¹² 49 C.F.R. § 571.208 (1996).

preme Court decisions in *Cipollone v. Liggett Group, Inc.*,¹³ and *Freightliner Corp. v. Myrick*,¹⁴ and explain why defective air bag claims should not be preempted.

In Part III the doctrine of "crashworthiness,"¹⁵ which is involved in automobile defect litigation, will be addressed. After discussing the origins of the doctrine in the seminal case *Larsen v. General Motors Corp.*,¹⁶ its importance in defective air bag litigation will be analyzed. Several potential products liability causes of action against the auto manufacturers will be evaluated. In particular, the different theories of strict liability, negligence, and failure to warn (at least not adequately) will be discussed. Perhaps most importantly, this Note will evaluate the two opposing tests involved in products liability design defects cases: "the consumer expectation test"¹⁷ and "the risk/benefit test."¹⁸

In conclusion, this Note focuses on the potential liability of auto manufacturers for injuries caused by the explosive force at which the current generation of air bags deploy. It hopes to explain why, in certain circumstances, it is wholly appropriate for the automotive industry to be liable for injuries that they knew were going to occur. This principle in American jurisprudence traces back to *MacPherson v. Buick Motor Co.*,¹⁹ in which Judge Cardozo said that the "presence of a known danger, attendant upon a known use, makes vigilance a duty."²⁰ While Cardozo was speaking of manufacturing defects at the time, there is no reason to distinguish between manufacturing and design defects in this situation.

¹³. 505 U.S. 504 (1992).

¹⁴. 514 U.S. 280 (1995). *Freightliner* is of particular importance because in addition to being the most recent Supreme Court decision on this issue, it deals with preemption of a Federal Motor Vehicle Safety Standard (FMVSS 121, concerning anti-lock brakes). *See id.*

¹⁵. *See* R. Ben Hogan III, *The Crashworthiness Doctrine*, 18 AM. J. TRIAL ADVOC. 37 (1994).

¹⁶. 391 F.2d 495 (8th Cir. 1968).

¹⁷. *See* RESTATEMENT (SECOND) OF TORTS § 402A (1965) (formulating the consumer expectation test).

¹⁸. *See* John W. Wade, *On the Nature of Strict Tort Liability for Products*, 44 MISS. L.J. 825, 837-38 (1973) (discussing the factors to be considered in applying such a standard).

¹⁹. 111 N.E. 1050 (N.Y. 1916).

²⁰. *Id.* at 1053.

I. BACKGROUND

In 1966, Congress passed the National Traffic and Motor Vehicle Safety Act,²¹ which grants the Secretary of Transportation the authority to establish appropriate Federal Motor Vehicle Safety Standards.²² The Act defines a safety standard as "a minimum standard for motor vehicle, or motor vehicle equipment performance."²³ The Secretary of Transportation has delegated its authority to the Administrator of the National Highway Traffic Safety Administration ("NHTSA").²⁴ Pursuant to this authority, NHTSA has been issuing safety standards pertinent to this Note's analysis since 1967.²⁵

FMVSS 208, one of the original safety standards issued by NHTSA, initially required manual lap belts in all vehicles.²⁶ On November 3, 1970, NHTSA published a final rule requiring the use of passive restraints, such as air bags.²⁷ Due to considerable resistance from members of the automotive community, including the carmakers, NHTSA postponed the effective date of the rule.²⁸ Continued resistance led to a number of delays and postponements until Secretary of Transportation William Coleman decided to suspend the passive restraint requirement indefinitely in December 1976.²⁹ This suspension proved to be short-lived. In January 1977, Joan Claybrook, the new administrator of NHTSA under President Carter, promptly issued a new mandatory passive restraint standard

²¹ 49 U.S.C. §§ 30101-30169 (1994 & Supp. I 1995).

²² See *id.* § 30101.

²³ *Id.* § 30102(a)(9).

²⁴ See 49 C.F.R. § 1.50(a) (1997); see also *Frieghtliner Corp. v. Myrick*, 514 U.S. 280, 284 (1995) (noting the delegation of authority).

²⁵ NHTSA's Initial Federal Motor Vehicle Safety Standards were issued in 1967. See Initial Federal Motor Vehicle Safety Standards, 32 Fed. Reg. 2408 (1967). For a thorough analysis of the history of FMVSS 208 see Kurt B. Chadwell, Comment, *Automobile Passive Restraint Claims Post Cippolone: An End to the Federal Preemption Defense*, 46 BAYLOR L. REV. 141, 143-51 (1994).

²⁶ See Initial Federal Motor Vehicle Safety Standards, 32 Fed. Reg. at 2415, cited in Chadwell, *supra* note 25, at 144.

²⁷ See Motor Vehicle Safety Standards, Occupant Crash Protection in Passenger Cars, Multipurpose Passenger Vehicles, Trucks, and Buses, 35 Fed. Reg. 16,927, 16,929 (1970).

²⁸ See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 36 Fed. Reg. 4600 (1970), cited in Chadwell, *supra* note 25, at 145-46; see also *Chrysler Corp. v. Department of Transp.*, 472 F.2d 659 (6th Cir. 1972) (discussing the delay of the rule's effectiveness).

²⁹ See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 42 Fed. Reg. 5071, 5071 (1977) (incorporating the Secretary's decision into the Federal Register by reference), cited in Chadwell, *supra* note 25, at 146-47.

called Modified Standard 208.³⁰

FMVSS 208 was again thrown into turmoil in 1981 when President Reagan's Secretary of Transportation, Drew Lewis, delayed³¹ and then rescinded the passive restraint standard.³² This rescission was promptly held to be "arbitrary and capricious" by the Supreme Court because it failed to consider alternatives to rescission, such as compliance by means of air bags or nondetachable automatic seat belts.³³ It also failed to explain why those alternatives were not adopted.³⁴ On July 17, 1984, Claybrook's rule, which called for a phase-in of automatic protection beginning in the 1987 model year, was reinstated.³⁵

This did not end the battle completely, however, as the compliance date was repeatedly delayed by the automotive industry. NHTSA attempted to end the controversy in 1993, when they once again amended FMVSS 208.³⁶ The amended standard repealed the phase-in period and set a mandatory compliance date of September 1, 1997 for all passenger cars.³⁷

Before this date, the standard allowed the automakers to comply by installing one of two passive restraint features: an air bag, or an automatic seat belt system with a warning light that signaled when the belt was disengaged.³⁸ While the standard does make

³⁰ See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 42 Fed. Reg. 34,299, 34,304 (1977). The new rule phased in passive restraints gradually until all cars were covered by model year 1984. See *id.* It also gave manufacturers the option to choose between air bags and automatic belts. See *id.*

³¹ See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 46 Fed. Reg. 21,172, 21,177 (1981), cited in Chadwell, *supra* note 25, at 147-48.

³² See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 46 Fed. Reg. 53,419, 53,427 (1981), cited in Chadwell, *supra* note 25, at 148.

³³ See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 46 (1983) ("[W]e hold that the agency failed to present an adequate basis and explanation for rescinding the passive restraint requirement and that the agency must either consider the matter further or adhere to or amend Standard 208 along lines which its analysis supports.").

³⁴ See *id.* at 57.

³⁵ See Federal Motor Vehicle Safety Standard, Occupant Crash Protection, 49 Fed. Reg. 28,962, 29,009-10 (1984).

³⁶ See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 58 Fed. Reg. 46,551, 46,563 (1993).

³⁷ See *id.*; see also Cynthia M. Certo, Comment, *1993 Changes to Safety Standard 208: Deploying an (Air) Bag Full of Product Liability Claims?*, 67 TEMP. L. REV. 673, 680 (1994) (discussing the repeal of the phase-in period). All passenger cars produced after September 1, 1997 are required to have both driver and passenger-side air bags. See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 58 Fed. Reg. at 46,553.

³⁸ See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 58 Fed.

passive restraint systems (air bags) mandatory as of the 1998 model year, it does not specify how the air bag should operate, the speed at which it should deploy, or the design, placement, or engineering involved in the air bag itself.³⁹ The standard is a minimum federal performance standard, which merely ensures that each air bag system meets "specified injury criteria, as measured on a test dummy, when tested in a 30 miles per hour barrier crash test."⁴⁰ This will be extremely important to understand when assessing individual claims against the auto manufacturers. Mere compliance with a federal minimum standard is not an automatic bar to recovery, and can often be a poor defense.⁴¹ In spite of this, the standard's mere existence will almost certainly lead the automotive industry to claim that all air bag claims are preempted.

II. THE FEDERAL PREEMPTION QUESTION

One of the most controversial and passionate battlegrounds in the field of automobile products liability over the past twenty years has concerned the issue of federal preemption.⁴² For organizational

Reg. at 46,553, cited in Chadwell, *supra* note 25, at 149-50.

³⁹ In response to comments by General Motors Corp., NHTSA gave the automobile industry flexibility; NHTSA completely removed air bag specifications from its definition of an "inflatable passive restraint system." See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 58 Fed. Reg. at 46,562.

⁴⁰ *Id.* at 46,553.

⁴¹ For cases that have found that compliance with a federal minimum safety standard does not exempt a manufacturer from common law strict liability, see *Shipp v. General Motors Corp.*, 750 F.2d 418 (5th Cir. 1985) (stating that while General Motors' compliance with a federal safety standard regarding roof strength was "persuasive and contradictory to plaintiff's proof," it "[o]f course . . . does not exempt or immunize a manufacturer from common law strict liability"); *Sours v. General Motors Corp.*, 717 F.2d 1511, 1516-17 (6th Cir. 1983) ("GM also challenges the jury verdict with what strikes us as a notably ill-conceived argument that the F-37 roof complied with certain federal safety standards and thus as a matter of law could not have been defective or negligently designed. We disagree."); *Chrysler Corp. v. Department of Transportation*, 472 F.2d 659, 670 n.13 (6th Cir. 1972) ("[C]ompliance with Federal Standards is not a defense to a products liability action. . . .").

⁴² *Freightliner Corp. v. Myrick*, 514 U.S. 280 (1995), *Cipollone v. Liggett Group, Inc.*, 505 U.S. 504 (1992), and *Taylor v. General Motors Corp.*, 875 F.2d 816 (11th Cir. 1989) are particularly instructive on the issue of federal preemption and are discussed further in this section. Elaboration on this point is found in *Wood v. General Motors Corp.*, 865 F.2d 395 (1st Cir. 1988) (holding that while plaintiff's claim that her Chevrolet Blazer was defective because it lacked air bags was not expressly preempted, it was impliedly preempted). See also Gregory L. Taddonio, *Revisiting Myrick v. Freightliner: Applying the Brakes on Restrictive Preemption Analysis*, 14 J.L. & COM. 257 (1995) (discussing preemption); Chadwell, *supra* note 25; Keith C. Miller, Comment, *Deflating the Airbag Pre-emption Controversy*, 37 EMORY L.J. 897 (1988) (examining the passive

reasons, this Note will begin by giving a general overview of the doctrine of federal preemption. It will then discuss the case law concerning the preemption of "failure to install" air bag cases, and the potential effect of United States Supreme Court decisions in *Cipollone v. Liggett Group, Inc.*,⁴³ and *Freightliner Corp. v. Myrick*.⁴⁴ Finally, it will explain why air bag claims based on defective design cannot and should not be preempted.

A. *The Concept of Federal Preemption*

The Supremacy Clause of the United States Constitution declares that the laws of the United States "shall be the supreme Law of the Land."⁴⁵ It is fairly well established that the federal law may preempt a state law in three ways.

First, Congress may include express preemption language in the statute itself. Second, if express preemption is absent, Congress may nonetheless imply preemption by evidencing an intent to 'occupy a given field' thereby precluding any state law within that field. . . . Third, where Congress has not entirely superseded the state regulation in a specific area, state law is still preempted to the extent it actually conflicts with federal law.⁴⁶

Put simply, the three types of preemption are: (1) express, (2) occupation of the field, and (3) conflict. Both the second and third types of preemption are "implied."⁴⁷

B. *Federal Preemption and "Failure to Install" Cases*

As previously discussed, FMVSS 208 was promulgated under the National Traffic and Motor Vehicle Safety Act of 1966.⁴⁸ The Safety Act has two statutory provisions of particular importance to

restraint preemption controversy); Beverly L. Jacklin, Annotation, *Federal Preemption of State Common-Law Product Liability Claims Pertaining to Motor Vehicles*, 97 A.L.R. FED. 853 (1990) (collecting federal and state cases that discuss preemption of state common law products liability claims).

⁴³ 505 U.S. 504 (1992).

⁴⁴ 514 U.S. 280 (1995).

⁴⁵ U.S. CONST. art. VI, cl. 2.

⁴⁶ Jacklin, *supra* note 42, § 2(a).

⁴⁷ See Chadwell, *supra* note 25, at 151.

⁴⁸ 49 U.S.C. §§ 30101-30169 (1994 & Supp. I 1995).

this discussion. The "preemption clause" provides, in pertinent part:

When a motor vehicle safety standard is in effect under this chapter, a State . . . may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle or motor vehicle equipment only if the standard is identical to the standard prescribed under this chapter. However, . . . a State, or a political subdivision of a State may prescribe a standard for a motor vehicle or motor vehicle equipment obtained for its own use that imposes a higher performance requirement than that required by the otherwise applicable standard under this chapter.⁴⁹

The Act also contains a "savings clause" which reads, in pertinent part, "compliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law."⁵⁰

The effect of these two clauses on "failure to install" air bag claims has been the topic of heated debate between injured plaintiffs, consumer advocates, and the automotive industry.⁵¹ Examining this debate is useful in determining what principles are guiding the courts in their decision-making process. These cases have been included in this discussion because they illustrate precisely why a claim based on the defective design of an air bag system should not and will not be preempted.

In a typical "failure to install" air bag case, the plaintiff asserts that the vehicle is defectively designed because it does not have an air bag system in the car.⁵² The auto manufacturer immediately

^{49.} *Id.* § 30103(b) (1994).

^{50.} *Id.* § 30103(e) (1994).

^{51.} See *Kitts v. General Motors Corp.*, 875 F.2d 787 (10th Cir. 1989) (addressing the preemption of a state common law products liability claim); *Gills v. Ford Motor Co.*, 829 F. Supp. 894 (W.D. Ky. 1993) (finding that a products liability claim was impliedly preempted); *Kelly v. General Motors Corp.*, 705 F. Supp. 303 (W.D. La. 1988) (finding implied preemption); *Schick v. Chrysler Corp.*, 675 F. Supp. 1183 (N.D.S.D. 1987) (holding claim preempted); *Cox v. Baltimore County*, 646 F. Supp. 761 (D.C. Md. 1986) (finding that a common law claim based on failure to install an air bag in a vehicle was expressly preempted); Christine M. Condon, Annotation, *Products Liability: Defective Motor Vehicle Air Bags Systems*, 39 A.L.R. 5TH 267 (1996) (collecting cases that consider whether and to what extent liability may be imposed based on air bag system defectiveness).

^{52.} See *Wood v. General Motors Corp.*, 865 F.2d 395, 396 (1st Cir. 1988) (alleging defective design on the basis of no air bags).

asserts that the claim is expressly preempted by federal law⁵³ because FMVSS 208 clearly permits cars that are made before September 1, 1997 to be sold without air bags.⁵⁴ Any claim based on the theory that the vehicle was defective for lack of an air bag is in conflict with the standard and is preempted.⁵⁵

While this approach has not been entirely unsuccessful, the automakers have had a greater level of success on their claim of implied preemption.⁵⁶ Some courts have held that failure to install claims are impliedly preempted because to hold otherwise would frustrate the purpose of the Safety Act by, in effect, allowing the court to impose a higher safety standard than the federal law.⁵⁷ Other courts have found these claims to have been impliedly preempted for somewhat different reasons.⁵⁸ The Eleventh Circuit held that the plaintiff's common law claims were preempted because they would have the effect of negating the three options given to automakers under FMVSS 208.⁵⁹ Similarly, the Third Circuit held these claims to be preempted because imposing liability for not installing an air bag would create an "actual, clear conflict" with the choices provided for in FMVSS 208.⁶⁰

C. *The Cipollone Decision*

Although the Supreme Court has never explicitly addressed the preemption issue with respect to air bags, it has, on two recent occasions, attempted to clarify the factors that courts should consider when deciding whether or not a specific claim has been pre-

^{53.} See *id.*

^{54.} See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 58 Fed. Reg. 46,551, 46,563 (1993); *supra* note 37 and accompanying text.

^{55.} See *Wood*, 865 F.2d at 401 ("[A]lleging that the absence of an air bag rendered the vehicle's design faulty, would, if upheld, clearly 'stand as an obstacle' to the regulatory scheme of the Safety Act."); see also *Certo*, *supra* note 37, at 687 (discussing the *Wood* opinion).

^{56.} See *Certo*, *supra* note 37, at 687-88 (discussing the leading air bag preemption cases, particularly the decisions focusing on implied preemption).

^{57.} See *Kitts v. General Motors Corp.*, 875 F.2d 787 (10th Cir. 1989) (holding the plaintiff's claim impliedly preempted); *Wood*, 865 F.2d at 402 ("We are convinced that Congress's purposes, as revealed in the Safety Act and in the legislative history, plainly imply a preemptive intent.")

^{58.} See *Pokorny v. Ford Motor Co.*, 902 F.2d 1116 (3d Cir. 1990) (holding that failure to install claims are impliedly preempted); *Taylor v. General Motors Corp.*, 875 F.2d 816 (11th Cir. 1989) (holding impliedly preempted a defective design claim based on the absence of air bags).

^{59.} See *Taylor*, 875 F.2d at 827.

^{60.} See *Pokorny*, 902 F.2d at 1123.

empted. In *Cipollone v. Liggett Group, Inc.*,⁶¹ the Court stated: "When Congress has considered the issue of preemption and has included in the enacted legislation a provision explicitly addressing that issue, and when that provision provides a 'reliable indicium of congressional intent with respect to state authority,' 'there is no need to infer congressional intent to preempt state laws.'"⁶² Justice Stevens, speaking for the majority, went on to say that "Congress' enactment of a provision defining the preemptive reach of a statute implies that matters beyond that reach are preempted."⁶³ When looking at the provisions of the statute, the Court must construe them "in light of the presumption *against the preemption of state police power regulations*."⁶⁴

This decision, coupled with the explicit "savings clause" provision in the Safety Act,⁶⁵ seemed to indicate that preemption would no longer serve as a monumental barrier to recovery in air bag cases. Some commentators, most notably consumer advocate Ralph Nader, expressed the opinion, or at least the hope, that this decision would end the federal preemption defense in air bag cases.⁶⁶ This was not the case, however, as the decisions that followed produced inconsistent outcomes.⁶⁷

D. The Freightliner Decision

In *Freightliner Corp. v. Myrick*,⁶⁸ the Supreme Court revisited the federal preemption doctrine. *Freightliner* involved state com-

⁶¹. 505 U.S. 504 (1994).

⁶². *Id.* at 517 (citation omitted) (quoting, in order, *Malone v. White Motor Corp.*, 435 U.S. 497, 505 (1978); *California Fed. Sav. & Loan Ass'n v. Guerra*, 479 U.S. 272, 282 (1987) (Marshall, J.)).

⁶³. *Id.*

⁶⁴. *Id.* at 518 (emphasis added). The Court thus generally favors narrow construction of preemption provisions when Congress has not seen fit to expressly state the scope of preemption.

⁶⁵. See 49 U.S.C. § 30103(e) (1994); *supra* note 50 and accompanying text.

⁶⁶. See Ralph Nader & Joseph A. Page, *Automobile-Design Liability and Compliance with Federal Standards*, 64 GEO. WASH. L. REV. 415, 449 (1996) (discussing the rationale for ending the preemption defense); see also Chadwell, *supra* note 25, at 142 ("Cipollone appears to have sounded a death knell for the implied preemption defense in no-airbag cases.").

⁶⁷. Compare *Marrs v. Ford Motor Co.*, 852 S.W.2d 570 (Tex. App. 1993) (finding that the Safety Act did not expressly preempt plaintiff's cause of action), with *Boyle v. Chrysler Corp.*, 501 N.W.2d 865 (Wis. Ct. App. 1993) (holding that plaintiff's claim was expressly preempted). See Nader & Page, *supra* note 66, at 449-50 for discussion of these cases and others that have been decided post-*Cipollone*.

⁶⁸. 514 U.S. 280 (1995).

mon law design defect claims against truck and trailer manufacturers who did not equip their vehicles with anti-lock brakes ("ABS").⁶⁹ The Court directly addressed the contention that implied preemption cannot exist when Congress has included an express preemption clause, finding it to be "without merit."⁷⁰ Justice Thomas, speaking for the Court, said that the "fact that an express definition of the preemptive reach of a statute 'implies'—i.e. supports a reasonable inference—that Congress did not intend to preempt other matters does not mean that the express clause entirely forecloses any possibility of implied preemption."⁷¹ Justice Thomas went on to say that "*Cipollone* supports an inference that an express preemption clause forecloses implied preemption; it does not establish a rule."⁷²

E. Defective Design Litigation

While *Freightliner* appears to have dashed the hopes of those who would like to pursue the failure to install claims, it is clearly not determinative of the future of defective manufacture or defective design claims involving air bags. The fact that air bags will soon be mandatory in all new vehicles,⁷³ coupled with the fact that they can cause serious injuries, particularly to the young, old, and small of stature,⁷⁴ makes it likely that defective manufacture and design litigation will be the next, and potentially much more important battle in the field of automobile products liability.

One case of note on the defective design issue is *Perry v. Mercedes Benz of North America Inc.*,⁷⁵ in which the Fifth Circuit held that the federal law did not preempt a claim based on an alleged design defect which caused an air bag to not inflate upon

⁶⁹ See *id.* at 280.

⁷⁰ See *id.* at 287.

⁷¹ *Id.* at 288.

⁷² *Id.* at 289. The Court held that in this case the common law tort claims were not preempted. See *id.* The majority reasoned that there could not be any conflict in this situation because the pertinent safety standard had been suspended and, as such, did not regulate the use of ABS devices at all. See *id.*

⁷³ See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 58 Fed. Reg. 46,551, 46,563 (1993); *supra* note 37 and accompanying text.

⁷⁴ See NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN., EFFECTIVENESS OF OCCUPANT PROTECTION SYSTEMS AND THEIR USE 2-3 (1996) [hereinafter NHTSA, EFFECTIVENESS] (providing statistics for various "occupant protection systems" for the years 1987-1995, and noting that the probability of injury for these classes of people is increased if such systems are not installed).

⁷⁵ 957 F.2d 1257 (5th Cir. 1992).

impact.⁷⁶ After initially determining that Perry's defective design claim was not expressly preempted,⁷⁷ the court went on to decide the issue of implied preemption.⁷⁸

The court indicated there were two primary questions it would need to answer to resolve the issue.⁷⁹ The first question concerned whether the "imposition of state-law tort liability for the defective design of an air bag system [would] *conflict* with the federal law."⁸⁰ The court felt that it was obvious that there would be no conflict because the standard only required compliance with minimum performance standards, and "the manufacturer c[ould] still comply with both the federal standard and the state tort standard."⁸¹ The second question concerned whether state tort liability would conflict with the federal law by standing "as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."⁸² The court concluded that there most certainly would not be a conflict.⁸³ The court arrived at this conclusion by reading the savings clause of the Safety Act.⁸⁴ While this decision is not the last word on the issue, some commentators have read it as a signal that states may impose higher standards for safety than those presently required by the federal government.⁸⁵

^{76.} See *id.* at 1259.

^{77.} See *id.* at 1264.

^{78.} See *id.*

^{79.} See *id.*

^{80.} *Id.*

^{81.} *Id.*

^{82.} *Id.* (quoting *California Fed. Sav. & Loan Ass'n v. Guerra*, 479 U.S. 272, 281 (1987)). Some courts, using this form of analysis, found the failure to install claims to be preempted; they felt that imposing state tort liability would frustrate and interfere with "Congress's chosen method as well as . . . the ultimate goal of the statute." *Id.* (alteration in original) (emphasis removed from original) (quoting *Wood v. General Motors Corp.*, 865 F.2d 395, 408 (1990)).

^{83.} See *id.*

^{84.} See *id.* The court reviewed the legislative history of the statute and found it was helpful and supportive of their finding on this issue, although not entirely necessary in their decision. See *id.* The history of the statute is not cited by the court because "the Savings Clause itself unambiguously reveals Congress' intent to preserve common law liability." *Id.* Recall that the savings clause states that "compliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law." 49 U.S.C. § 30103(e) (1994).

^{85.} See J.B. Block, *Perry v. Mercedes Benz of North America Inc.: The National Traffic and Motor Vehicle Safety Act Meets the Unreasonably Dangerous Standard*, 67 TUL. L. REV. 850, 858-59 (1993) (discussing the effect of the decision on the states); Certo, *supra* note 37, at 691 ("The Perry case has been interpreted as a 'thumbs-up' for states that wish to impose higher standards of safety than those presently required by the federal government.").

Further, several other courts, using similar analyses, have reached the same conclusion that state common law claims based on design defects in air bags are not preempted by the Safety Act.⁸⁶ The courts reason that: (1) state tort claims have not been expressly preempted by the clear language of the statute; (2) state tort claims have not been impliedly preempted in that the statute takes up the entire field; and (3) because a finding of liability under state tort law would not necessarily conflict with the federal law, state tort claims have not been impliedly preempted.⁸⁷ The following passage states the rationale behind this theory quite succinctly:

It is apparent that the National Traffic Safety Act is intended to be supplementary of and in addition to the common law of negligence and product liability. The common law is not sterile or rigid and serves the best interests of society by adapting standards of conduct and responsibility that fairly meet the emerging and developing needs of our time. . . . The Act is . . . not an exemption from common law liability.⁸⁸

⁸⁶ See *Collazo-Santiago v. Toyota Motor Corp.*, 957 F. Supp. 349 (D.P.R. 1997), and *Doyle v. Volkswagenwerk Aktiengesellschaft*, 481 S.E.2d 518 (Ga. 1997), for examples of cases in which state claims were held not to be preempted.

⁸⁷ See *supra* notes 46-47 and accompanying text. For example, assume that an air bag system that complied with the federal standards caused a serious injury or death following a low speed collision. Assume further that this particular air bag deployed at a rate of 200 MPH. If it could be determined that the air bag could have met the injury requirements and thus complied with the standard by deploying at a slower and safer rate, one that would not have caused the injury or death, a finding of liability would not be inconsistent with the standard. Both could be met.

Another example may illustrate this principle more clearly. Assume that the safety standard does not establish a minimum collision speed at which the air bag must deploy. Assume also that the air bag system in the vehicle complies with the safety standard, but is designed so that it will deploy in collisions of five miles per hour and above. If serious injury or death was caused by the air bag being deployed during such a low speed crash, a finding of liability would not be inconsistent with the standard, because the air bag did not have to deploy at all in this situation.

⁸⁸ *Larsen v. General Motors Corp.*, 391 F.2d 495, 506 (8th Cir. 1968). Some might question the use of this passage because the case was decided soon after the statute's enactment, and did not seriously address the issue of preemption. However, the case is not being cited for its precedential value; it is being cited for the correctness of its thinking.

III. CRASHWORTHINESS, DESIGN DEFECTS, AND SECTION 402A

Establishing that a claim is not preempted is not the end of the battle, it merely allows the fight to begin. Before entering this battle, however, the skillful practitioner must determine the correct theoretical and legal foundations upon which a claim can be made.⁸⁹ As previously stated, the origins of modern products liability and crashworthiness can be found in *MacPherson v. Buick Motor Co.*⁹⁰ In a case involving an allegedly defective wheel on an automobile, Cardozo stated the new rule of manufacturer liability in negligence:

If the nature of a thing is such that it is reasonably certain to place life and limb in peril when negligently made, it is then a thing of danger. Its nature gives warning of the consequences to be expected. If to the element of danger there is added knowledge that the thing will be used by persons . . . without new tests, then, irrespective of contract, the manufacturer of this thing of danger is under a duty to make it carefully.⁹¹

When the "crashworthiness" or "second collision" doctrine was introduced in *Larsen v. General Motors Corp.*,⁹² this duty was greatly expanded. In *Larsen*, the plaintiff did not allege that a defect in the vehicle caused the accident.⁹³ Rather, he asserted that his injuries were made worse because of an allegedly defective

⁸⁹ Many states have enacted products liability statutes which may dictate how, or if, a claim may be made. In Ohio, for example, Ohio Revised Code sections 2307.71 through 2307.801 comprise the substantive law governing the area of products liability. See OHIO REV. CODE ANN. §§ 2307.71-2307.801 (Anderson 1997). There has also been a tremendous movement recently to enact so-called "tort reform" statutes in many states, which may have a significant impact on these types of cases. In Ohio, for example, the "consumer expectation" test has been legislatively repealed in design defect cases. See *id.* § 2307.75. The defective air bag cases illustrate some of the reasons why this rigid, ill-conceived rule is a travesty. It is an unfortunate fact that ordinary citizens, who are all potential future plaintiffs, do not have the lobbying force of groups such as the insurance industry. However, the wisdom and prudence of the "tort reform" statutes in Ohio or elsewhere are not the subject of this Note. The statutes have been mentioned because they have been enacted and must be taken into consideration at every stage of preparation when evaluating and litigating a defective air bag case.

⁹⁰ 111 N.E. 1050 (N.Y. 1916); see *supra* notes 19-20 and accompanying text.

⁹¹ *Id.* at 1053.

⁹² 391 F.2d 495 (8th Cir. 1968).

⁹³ See *id.* at 497-98. It was not disputed that the defect did not cause the accident to occur. See *id.*

design.⁹⁴ General Motors responded that they had "no duty whatsoever to design and manufacture a vehicle . . . which is otherwise 'safe' or 'safer' to occupy during collision impacts."⁹⁵ The district court accepted this reasoning and granted General Motors' motion for summary judgment.⁹⁶

The appellate court found that this exceedingly narrow analysis missed the point entirely. The court stated the general rule had been that the "manufacturer's duty of design and construction extends to producing a product that is reasonably fit for its intended use and free of hidden defects that could render it unsafe for such use."⁹⁷ For the court of appeals, the decision turned on the interpretation of intended use.⁹⁸ The court's interpretation concluded with the fact that:

While automobiles are not made for the purpose of colliding with each other, a frequent and inevitable contingency of normal automobile use will result in collisions and injury producing impacts. *No rational basis exists for limiting recovery to situations where the defect in design or manufacture was the causative factor of the accident, as the accident and the resulting injury, usually caused by the so-called 'second collision' of the passenger with the interior part of the automobile, are all foreseeable.*⁹⁹

This holding marked the advent of the doctrine of crashworthiness, which is now widely accepted in nearly every state, although it varies in form from jurisdiction to jurisdiction.¹⁰⁰ Simply stated, crashworthiness refers to the manufacturer's duty to eliminate known hazards, risks, and dangers that occur

⁹⁴ See *id.* at 497. The plaintiff's claim was essentially that upon impact, as a result of a defective design, the steering mechanism of the car was propelled into his head, causing serious injuries. See *id.*

⁹⁵ *Id.*

⁹⁶ See *id.* The district court stated that General Motors had a duty "to design an automobile which is reasonably safe when driven and which contains no latent or hidden defects which could cause an accident and subsequent injury." *Id.* at 464 (emphasis added).

⁹⁷ *Id.* at 501.

⁹⁸ See *id.*

⁹⁹ *Id.* at 502 (emphasis added). This focus on the second impact is critical in air bag cases, particularly where the injury occurred in a low speed impact. This Note does not suggest that the auto manufacturers should be liable for injuries sustained in high speed crashes, where the collision is such that the air bag cannot be said to be the cause of the injury.

¹⁰⁰ See Hogan, *supra* note 15.

during foreseeable uses of its products.¹⁰¹

In cases where impact with an air bag was the cause of the injury, there are several theories under which to proceed. The most notable are negligence, failure to warn, breach of warranty (express or implied), and strict liability in tort.¹⁰² In practice, pleading some or all of these alternate theories can be a very effective strategy, and the successful practitioner will be aware of the advantages and disadvantages that accompany each.¹⁰³ In the interest of simplicity, this Note will focus primarily on strict liability in tort and failure to warn as the essential theories of recovery.¹⁰⁴ These theories will be discussed separately although there is a considerable amount of overlap between them. Note that although they will not be explicitly discussed, negligence principles will never be far beneath the surface.

A. *Strict Liability in Tort*

The basis for strict liability in tort can be found in section 402A of the Restatement (Second) of Torts,¹⁰⁵ which states that

^{101.} See *id.* at 41. In the context of air bag cases, the foreseeable uses obviously include their deployment during crashes. Other foreseeable circumstances include the fact that children and small adults may sit in the front passenger seat. It is also foreseeable that many individuals may not be properly restrained or may be out of position upon impact. Therefore, manufacturers have a duty to eliminate, or limit as much as practicable, the dangers involved in these situations.

^{102.} See *id.*; see also David W. Leebron, *An Introduction To Products Liability: Origins, Issues and Trends*, 1990 ANN. SURV. AM. L. 395, 400 (discussing the different possible causes of action).

^{103.} See Leebron, *supra* note 102, at 400. For example, a negligence theory may be pursued on the basis of a belief that a jury finding of the defendant's "fault" will increase the awarded damages. See *id.*

^{104.} Strict liability would seem to be the most favorable theory upon which to base a claim. In application, however, it is often no different from negligence. "While the negligence and strict liability theories may use different catch phrases, and look at the problem from a different angle (negligence focuses on the manufacturer's actions, while strict liability focuses on the product itself), in the end the standards for liability are really the same." Timothy Wilton & Richard P. Campbell, *Effect of Federal Safety Regulations on Crashworthiness Litigation*, 22 TORT & INS. L.J. 554, 555 (1987).

^{105.} See RESTATEMENT (SECOND) OF TORTS § 402A (1965). The American Law Institute ("ALI") is currently in the process of drafting the Restatement (Third) of Torts: Products Liability. The central focus of this effort is to alter section 402A. See RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY Foreword (Tentative Draft No. 1, 1994). One of the major issues involved in this debate concerns the proper application of the "consumer expectation" and "risk-benefit" tests, which will be discussed later in this Note. See *infra* Part III C. Many of the positions in this Note differ strongly from the announced positions of the Restatement (Third). These differences, and the reasons for them, will be discussed more fully later in the text. For a more extensive commentary on the Restate-

"[o]ne who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused."¹⁰⁶ Liability is not actually strict, however, because it is not to be imposed for every injury but only for an injury that is the result of a "defective condition unreasonably dangerous."¹⁰⁷

Although courts and commentators have struggled to accurately define these terms, it is helpful to initially look to the Official Comments for guidance. Two of these comments in particular seem to have special relevance in determining what is meant by "defective condition unreasonably dangerous." Comment g explains that a product is in a defective condition when it is in a condition "not contemplated by the ultimate consumer, which will be unreasonably dangerous to him."¹⁰⁸ Comment i states that in order for a product to be unreasonably dangerous, it must be "dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics."¹⁰⁹ In tandem, these two comments form the basis of what is called the "consumer expectation test." Under this test, a product is said to be defective if it fails to perform in a manner that is consistent with the reasonable expectations of the ordinary consumer.

Over the years, courts have separated claims involving defective products into three distinct categories of defectiveness: manufacturing defects, design defects, and defectiveness because of a failure to warn.¹¹⁰ As a practical matter, manufacturing defects have posed relatively few problems to courts and are of little consequence to cases of the sort contemplated in this Note.¹¹¹

ment (Third), see generally *A Symposium on the ALI's Proposed Restatement (Third) of Torts: Products Liability*, 61 TENN. L. REV. 1043 (1994), Symposium, *The Revision of Section 402A of the Restatement (Second) of Torts: Occasion for Reform of Products Liability Law?*, 10 TOURO L. REV. 1 (1993).

¹⁰⁶ RESTATEMENT (SECOND) OF TORTS § 402A(1) (1965).

¹⁰⁷ *Id.*; see Michael D. Green, *The Schizophrenia of Risk-Benefit Analysis in Design Defect Litigation*, 48 VAND. L. REV. 609, 611 (1995) ("Of course, 'strict liability' was something of a misnomer. Liability was not to be imposed for all harm caused by a product—only for harm that was the result of a defective condition unreasonably dangerous.").

¹⁰⁸ RESTATEMENT (SECOND) OF TORTS § 402A cmt. g (1965).

¹⁰⁹ *Id.* § 402A cmt. i. One of the primary purposes of this comment was to avoid the application of section 402A to such products as whiskey, tobacco, and other food or drug products that obviously involve certain risks. See *id.*

¹¹⁰ See Leebron, *supra* note 102, at 401.

¹¹¹ For example, an air bag deployed for some unknown reason during the normal

Design defects, on the other hand, have been far more controversial and complex.¹¹² In the area of design defects, many courts and commentators have found it difficult to distinguish strict liability from negligence.¹¹³ The proper test to apply in design defect cases has become one of the most controversial issues in products liability. On one side of the battle is the "consumer expectations" test with its foundations in section 402A. On the other is what is often called the "risk-benefit" test, which has its origins in a law review article by Dean John Wade.¹¹⁴

B. The Risk-Benefit Test

Dean Wade argues that the consumer expectation test is inappropriate for determining design defect cases because consumers in many design situations lack any real or informed expectation.¹¹⁵ The preferable test, he argues, is the risk-benefit test.¹¹⁶ The risk-benefit test, as it has been applied in many design defect cases, practically eliminates strict liability and replaces it with a negligence standard. Simply put, the test asks "whether the magnitude of the risk created by the dangerous condition of the product [is] outweighed by the social utility attained by putting it out in this fashion."¹¹⁷ Application requires a balancing of the risks against the benefits; when the risks of a given design outweigh its benefits, the design is unreasonable and liability should be imposed.¹¹⁸ Wade suggested seven factors to consider when balancing the risks and benefits:¹¹⁹

course of driving and injuries resulted, there would be little trouble establishing liability. In this situation, the air bag would have failed to meet the manufacturer's own standard and would therefore be clearly defective. However, if there were a number of component part manufacturers, the plaintiff may still have to establish which part was defective.

¹¹² See Leebron, *supra* note 102, at 403; see also David G. Owen, *Defectiveness Restated: Exploding the "Strict" Products Liability Myth*, 1996 U. ILL. L. REV. 743 (discussing the Third Restatement's complicated definitions of design defectiveness and proposing straightforward liability tests for resolving these disputes).

¹¹³ See Leebron, *supra* note 102, at 403; see also Sheila L. Birnbaum, *Unmasking the Test for Design Defect: From Negligence [to Warranty] to Strict Liability to Negligence*, 33 VAND. L. REV. 593 (1980) (discussing the different standards of liability which have been imposed in design defect cases).

¹¹⁴ See Wade, *supra* note 18.

¹¹⁵ See *id.* at 829.

¹¹⁶ See *id.*

¹¹⁷ *Id.* at 835.

¹¹⁸ See *id.*

¹¹⁹ See *id.* at 837-38.

- (1) The usefulness and desirability of the product—its utility to the user and to the public as a whole.
- (2) The safety aspects of the product—the likelihood that it will cause injury, and the probable seriousness of the injury.
- (3) The availability of a substitute product which would meet the same need and not be as unsafe.
- (4) The manufacturer's ability to eliminate the unsafe character of the product without impairing its usefulness or making it too expensive to maintain its utility.
- (5) The user's ability to avoid danger by the exercise of care in the use of the product.
- (6) The user's anticipated awareness of the dangers inherent in the product and their avoidability, because of general public knowledge of the obvious condition of the product, or of the existence of suitable warnings or instructions.
- (7) The feasibility, on the part of the manufacturer, of spreading the loss by setting the price of the product or carrying liability insurance.¹²⁰

Over the past twenty years, this test has been used as a shield to ward off injured plaintiffs, as its proponents attempt to move the standard for liability closer to negligence.¹²¹ Upon closer inspection, however, it seems the test was originally intended to be a sword which would enable some plaintiffs to recover. If a product contains an open and obvious danger, a plaintiff most likely would be unable to recover using the consumer expectation test because he could not have any legitimate expectation of safety. Using the risk-benefit test, however, he might have an opportunity to recover if it were determined that the benefits of the chosen design were outweighed by the risks involved. For example, if a punch press machine were designed without a safety guard, it could still be defective, in spite of the fact that it is obviously dangerous. The benefits of designing the machine without a safety guard would likely be outweighed by the risk of serious injury that would be inherent in such a design.

This "softer" interpretation of the risk-benefit test appears to be

^{120.} *Id.*

^{121.} See Owen, *supra* note 112, at 748 ("It has been an open secret for many years that courts have been purporting to apply 'strict' liability doctrine to design and warnings cases while in fact applying principles that look remarkably like negligence.").

the position taken by the California Supreme Court in *Barker v. Lull Engineering Co.*¹²² In *Barker*, the plaintiff alleged that he was injured due to design defects in a high lift loader.¹²³ The court recognized the formulation of the correct test for design defect cases was a "formidable task" and set about to determine the answer in a manner consistent with the "fundamental policies which underlie the entire strict product liability doctrine."¹²⁴ The end result of this inquiry was a two pronged test to determine design defects. The court stated:

[I]n design defect cases, a court may properly instruct a jury that a product is defective in design if (1) the plaintiff proves that the product failed to perform as safely as an ordinary consumer would expect when used in an intended or reasonably foreseeable manner, *or* (2) the plaintiff proves that the product's design proximately caused injury and the defendant fails to prove, in light of the relevant factors, that on balance the benefits of the challenged design outweigh the risk of danger inherent in such design.¹²⁵

The court acknowledged that in some situations the consumer expectation test may be inadequate, primarily when the product is patently dangerous.¹²⁶ In these situations, the court rejected the consumer expectation test, refusing to let the "low esteem in which the public might hold a dangerous product to diminish the

¹²² 573 P.2d 443 (Cal. 1978) (holding that once a plaintiff demonstrates that a product's design proximately caused his injury, the burden shifts to the defendant to prove that when all relevant factors are considered, the benefits of the challenged design outweigh the risks of inherent danger). While by no means the law of the land, California has always been a leader in the development and shaping of modern products liability law. See *Escola v. Coca Cola Bottling Co.*, 150 P.2d 436, 440-44 (Cal. 1994) (Traynor, J., concurring) (advocating strict liability for manufacturers who place products on the market with the knowledge that those products will be used without inspection by the consumer); *Greenman v. Yuba Power Products, Inc.*, 377 P.2d 897, 900 (Cal. 1962) ("A manufacturer is strictly liable in tort when an article he places on the market knowing it is to be used without inspection for defects, proves to have a defect that causes injury to a human being.").

¹²³ See *Barker*, 573 P.2d at 443. Specifically, the plaintiff alleged that the loader was defective because it had an unusually narrow base and was not equipped with "outriggers," mechanical arms that would have stabilized the machine and prevented it from tipping over. See *id.* at 447-48.

¹²⁴ *Id.* at 446.

¹²⁵ *Id.* at 452 (emphasis added).

¹²⁶ See *id.* at 454.

manufacturer's responsibility for injuries caused by that product."¹²⁷ This interpretation of the risk-benefit test allows the plaintiff to use it as a "sword" if the consumer expectation test is insufficient to protect the consumer's interest in safety.

Most importantly, the court explicitly rejected the application of negligence principles in this type of case.¹²⁸ "[T]he trier of fact must focus on the product, not on the manufacturer's conduct, and the plaintiff need not prove that the manufacturer acted unreasonably or negligently in order to prevail in such an action."¹²⁹

The *Barker* test is important because it attempts to preserve a middle ground in the battle over the applicable standard in design defect cases. It represents a real effort to remain true to the principles of strict liability while realizing some of the special concerns that are raised in the area of design defects.

C. Which Test Should Be Applied in Air Bag Design Defect Litigation?

The Reporters for the Restatement (Third) have claimed that the consumer expectation test is accepted in only a minority of courts, and should thus become less prominent in the new Restatement.¹³⁰ However, there is certainly no consensus on the issue.¹³¹ Due to the considerable disagreement, and the potentially

¹²⁷. *Id.* at 447.

¹²⁸. *See id.*

¹²⁹. *Id.*

¹³⁰. *See* RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY Foreword (Proposed Final Draft, 1997). The ALI proposes to alter the elements of proof involved in a claim of design defect. "[A] claim of design defect must . . . be established by a showing of reasonable alternative design," not with the reasonable consumer expectations test. *Id.*; *see id.* § 2; *see also* James A. Henderson Jr. & Aaron Twerski, *A Proposed Revision of Section 402A of the Restatement (Second) of Torts*, 77 CORNELL L. REV., 1512, 1532 n.25 (1992) (distinguishing the authorities that have adopted a "consumer expectation" approach from those that have adopted a "risk-utility" based standard).

¹³¹. *See* Philip H. Corboy, *The Not-So-Quiet Revolution: Rebuilding Barriers to Jury Trial in Proposed Restatement (Third) of Torts: Products Liability*, 61 TENN. L. REV. 1043, 1047 (1994) (contending that some of the standards imposed in the Restatement (Third) are not only unduly burdensome to plaintiffs, but also are not clearly supported by precedent); John F. Vargo, *Caveat Emptor: Will the A.L.J. Erode Strict Liability in the Restatement (Third) for Products Liability*, 10 TOURO L. REV. 21, 23-24 (arguing that a strict liability standard for defective design cases is preferable to the negligence standard favored by the drafters); John F. Vargo, *The Emperor's New Clothes: The American Law Institute Adorns a "New Cloth" for Section 402A Products Liability Design Defects—A Survey of the States Reveals a Different Weave*, 26 U. MEM. L. REV. 493, 502-03 (1996) [hereinafter Vargo, *The Emperor's New Clothes*] (criticizing the drafters of the Restatement (Third) for misinterpreting precedent to create a consensus in what standard governs prod-

devastating long range consequences to consumers of adoption of the Restatement (Third), a few words on the American Law Institute ("ALI"), the co-reporters, and the proposed Restatement are necessary.

The ALI, which is responsible for selecting the co-reporters, "is a self-perpetuating organization of lawyers, judges, and academics," whose "primary function is to promulgate restatements of law."¹³² They are not directly responsible to the people as elected representatives and, as such, their legitimacy, if they are to have any, must stem from an aura of impartiality.¹³³ The need for impartiality is heightened by the fact that many of the ALI members involved in the revision process are far from disinterested observers. Several commentators have expressed the opinion that the committee revising the Restatement is generally biased and "anti-consumer."¹³⁴

There is ample evidence that the ALI and the co-reporters are not as open minded and impartial as they should be on the subject of design defects and strict liability.¹³⁵ For example, Professors Henderson and Twerski referred to strict liability as the "unyielding liability rule," which is both "inefficient and unfair."¹³⁶ This was *before* they were appointed as co-reporters.¹³⁷ In the words of one commentator, "[t]he authors of the Third Restatement apparently see a need to protect manufacturers, and are doing their best to fill that need."¹³⁸ The lack of impartiality, and the one-sided process which has tilted the proposed Third Restatement to an anti-consumer doctrine, has undermined its legitimacy.¹³⁹ Courts looking to it for guidance should be wary of accepting its interpretation of the existing law as gospel.

ucts liability where none exists); Ellen Wertheimer, *The Third Restatement of Torts: An Unreasonably Dangerous Doctrine*, 28 SUFFOLK U. L. REV. 1235, 1254 (1994) (arguing that there is no consistent law of products liability throughout the U.S.).

¹³² Alan Schwartz & Robert E. Scott, *The Political Economy of Private Legislatures*, 143 U. PA. L. REV. 595, 596 (1995).

¹³³ *See id.*

¹³⁴ *See Vargo, The Emperor's New Clothes, supra* note 131, at 507-13; Wertheimer, *supra* note 131, at 1245-46 (pointing out that the advisors to the Third Restatement are heavily weighted in favor of the defense).

¹³⁵ *See Wertheimer, supra* note 131 (pointing out that the drafters of the Second Restatement obviously felt that strict liability is perfectly consistent with, and may even be mandated by, principles of fairness).

¹³⁶ Henderson & Twerski, *supra* note 130, at 1517.

¹³⁷ It seems that the ALI knew what it wanted the new Restatement to say.

¹³⁸ Wertheimer, *supra* note 131, at 1255.

¹³⁹ *See id.* at 1256.

Some of the problems caused by the proposed Restatement's rigid rules can be illustrated in the air bag design defect case. The consumer expectation test is the proper test to apply in air bag litigation.¹⁴⁰ In order to explain why, it is helpful to bear in mind some of the policy justifications that support the concept of strict liability, for if the policies behind a rule still apply there is no reason to deviate from it.¹⁴¹ Generally speaking, strict liability is believed to increase social utility by satisfying four main objectives: encouraging (perhaps even forcing) investment in product safety; discouraging the public from using hazardous products; reducing transaction costs; and promoting loss spreading.¹⁴² The first and fourth objectives take on added importance in defective air bag cases.

Strict liability promotes investment in product safety by imposing liability rules that encourage manufacturers to find ways to reduce or eliminate avoidable product risks.¹⁴³ Although in theory this objective may also be accomplished through the use of a negligence standard, it is certain that manufacturers will escape some, if not most, negligence-based liability.¹⁴⁴ Therefore, negligence is considerably less effective at achieving the goal of enhanced product safety. Under strict liability, "[m]anufacturers will be less likely to escape liability and will have a greater incentive to invest in efforts to reduce product risks."¹⁴⁵ With respect to the promotion of loss spreading, the auto makers are quite capable of spreading the loss effectively through increased prices and through obtaining liability insurance for the known dangers.¹⁴⁶

¹⁴⁰ This Note does not address the question of whether or not the consumer expectation test is the correct test in every type of design defect case. As this Note shall attempt to illustrate, the air bag cases present compelling reasons for application of the consumer expectation test. The potential ramifications of applying either test in every design defect case is beyond the scope of this Note.

¹⁴¹ Perhaps this fundamental principle lies at the heart of the proposed Restatement. Since the co-reporters apparently do not agree with the policies that support the imposition of strict liability, it is understandable that they have attempted to alter it so radically. The proposed Restatement effectively eliminates strict liability for design defects. See RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY Foreword (Proposed Final Draft, 1997).

¹⁴² See James A. Henderson Jr., *Coping with the Time Dimension in Products Liability*, 69 CAL. L. REV. 919, 931-32 (1981).

¹⁴³ See *id.*

¹⁴⁴ This result obviously stems from the higher burden of proof placed on the plaintiff who brings a negligence, rather than strict liability, cause of action.

¹⁴⁵ Henderson, *supra* note 142, at 933.

¹⁴⁶ This is not meant to suggest that the ability to pay will alone justify the imposi-

When it comes to increasing product safety, it is painfully obvious that the auto industry will not undertake the task unless, (1) it is in their own best interests in the form of higher profits, or (2) they are forced to do so by the government, the courts, or the marketplace. One of the primary reasons for this is the cost of increasing the safety of the cars.¹⁴⁷ One chilling and dramatic example of this can be seen in the Ford Pinto case, *Grimshaw v. Ford Motor Co.*¹⁴⁸ In *Grimshaw*, "Ford knew from its own pre-marketing testing that the Pinto gas tank was subject to two serious problems upon rear impact."¹⁴⁹ Both problems involved a frightening tendency for the tank to rupture, gasoline to spill, and a fire to result.¹⁵⁰ In *Grimshaw*, the court found that although Ford could have made the vehicle relatively safe for approximately \$15 per car, it chose not to incur the extra cost.¹⁵¹ In an internal memorandum that was ruled inadmissible during the trial, Ford made cost-benefit calculations concerning gas tank integrity:¹⁵²

Using the number of anticipated deaths and injuries that would occur over the expected life of the model involved, Ford calculated the total amount of liability it expected to incur. Ford then compared that total with the net savings that would be generated, at eleven dollars per car, by not correcting the hazard. Its total savings would have been almost ninety million dollars.¹⁵³

tion of liability. As has been stated too many times to cite, manufacturers are not the "insurers of their products." However, in the air bag situation, where one side has all of the information and tells the other what it pleases, it can be said that it has assumed some level of culpability by removing the ability to make an informed choice. The average consumer, until recently, had no knowledge of the danger. Furthermore, the average consumer has no ability to bear the entire loss. It is particularly unfair to force consumers to do so in this type of situation.

¹⁴⁷ See Gerald F. Tietz, *Strict Product Liability, Design Defects and Corporate Decision-Making: Greater Deterrence through Stricter Process*, 38 VILL. L. REV. 1361, 1393 (1993) (discussing the auto industry's use of cost-benefit analyses).

¹⁴⁸ 174 Cal. Rptr. 348 (Cal. Ct. App. 1981).

¹⁴⁹ Tietz, *supra* note 147, at 1395; see *Grimshaw*, 174 Cal. Rptr. at 360 (discussing the design of the Pinto, and Ford's pre-marketing knowledge of the car's deficiencies).

¹⁵⁰ See *Grimshaw*, 174 Cal. Rptr. at 360.

¹⁵¹ See *id.* at 361. Some commentators have suggested that the dangerous condition could have been remedied for as little as \$5.08 per car. See FRANCIS T. CULLEN ET AL., CORPORATE CRIME UNDER ATTACK 162 (1987).

¹⁵² See Tietz, *supra* note 147, at 1395. The memo was ruled inadmissible because it directly concerned roll-over situations, not rear impact collisions. See *id.*

¹⁵³ *Id.* at 1395-96. In a very real sense, Ford was engaging in the type of balancing that is required by the risk-benefit test. This callous calculation, that requires balancing

In addition to the auto industry's reluctance to increase cost or decrease the bottom line, there is considerable evidence that it appears to have a general aversion to new safety measures. "Corporations tend to view the notion of safety, separate from considerations of specific safety costs, as incompatible with their quest for profits."¹⁵⁴ For example, General Motors attempted to thwart or delay the requirement of rear window stoplamps, even in the face of NHTSA studies that showed they reduced rear end collisions.¹⁵⁵ There is also ample support for this contention in the tumultuous history of FMVSS 208, and the auto industry's fierce resistance to its enactment at every opportunity.¹⁵⁶ It is clear that the policies that support strict liability in the abstract are quite relevant and justify its application in the air bag design cases.

Since there are strong policy justifications for applying strict liability to the automobile manufacturers for defectively designed air bags, what are the purported reasons to justify a departure from the consumer expectation test in the area of design defects? The most prominent justification is that "consumers in many design situations lack any real or informed expectation."¹⁵⁷ While this may be true in certain situations, it is clearly erroneous in the context of air bags.¹⁵⁸

The correct standard and test to apply in design defect cases was discussed in detail by the California Supreme Court in *Soule v. General Motors Corp.*¹⁵⁹ In *Soule*, the plaintiff suffered serious injuries to her ankles when she was involved in an automobile accident.¹⁶⁰ The plaintiff sued General Motors, asserting that her

the value of human life against corporate profits, illustrates a serious problem with the risk-benefit test.

Assume that air bags installed in production vehicles today cost, on average, \$250 per unit. What if a new, safer design could be produced for \$300? \$500? Does the extra cost outweigh the risk of death or serious injury posed by the cheaper air bag? These are not simple questions with simple answers. Also, does it make sense to allow the auto manufacturer to maximize profits by selecting the cheaper air bag design and then escape liability because the better air bag's cost was too high? This seems to be an inequitable result.

¹⁵⁴ *Id.* at 1400-01.

¹⁵⁵ *See id.* at 1401.

¹⁵⁶ *See supra* notes 26-37 and accompanying text.

¹⁵⁷ Green, *supra* note 107, at 612.

¹⁵⁸ Through aggressive advertising, consumers established real opinions and expectations about air bags and their safety. *See infra* notes 239-42 and accompanying text.

¹⁵⁹ 882 P.2d 298 (Cal. 1994).

¹⁶⁰ *See id.* at 301.

injuries were the result of a defect in both the manufacture¹⁶¹ and design¹⁶² of the vehicle. General Motors contended that the consumer expectation test is improper "whenever 'crashworthiness,' a complex product, or technical questions of causation are at issue."¹⁶³ General Motors argued that:

[The] test is deficient and unfair in several respects: First, it defies definition.¹⁶⁴ Second, it focuses not on the objective condition of products, but on the subjective, unstable, and often unreasonable opinions of consumers.¹⁶⁵ Third, it ignores the reality that ordinary consumers know little about how safe complex products they use can or should be made. Fourth, it invites the jury to isolate the particular consumer, component, accident, and injury. . . . Fifth, it eliminates the careful balancing of risks and benefits which is essential to any design issue.¹⁶⁶

The court acknowledged the dangers of improper use of the consumer expectation test, but explicitly rejected General Motors' suggestion to abolish it.¹⁶⁷ "[W]e cannot accept GM's insinuation that ordinary consumers lack any legitimate expectations about the minimum safety of the products they use. In particular circumstances, a product's design may perform so unsafely that the defect is apparent to the common reason, experience, and understanding of its ordinary consumers."¹⁶⁸ The court did rule, however, that in this particular case the consumer expectation test was inappropriate.¹⁶⁹ The court stated:

^{161.} See *id.* at 302. She asserted that as a result of substandard welding, the left front wheel collapsed rearward and inward, causing her injuries. See *id.*

^{162.} See *id.* The design of the bracket and configuration of the frame were allegedly defective because they did not limit the wheel's rearward travel. See *id.* As a result, the "toe pan" crumpled into the passenger compartment, thus injuring her ankles. See *id.*

^{163.} *Id.* at 309.

^{164.} Perhaps General Motors just does not like the result that would flow from the application of standard English definitions to these words.

^{165.} This argument is particularly specious in the context of air bags, because the auto makers, through extensive advertising, created whatever opinions and expectations consumers have of this device. See *infra* notes 239-42 and accompanying text.

^{166.} *Soule*, 882 P.2d at 309-10.

^{167.} See *id.* at 310.

^{168.} *Id.* An example of this might be when a highly touted safety device, such as an air bag, seriously injures or kills the user.

^{169.} See *id.*

An ordinary consumer of automobiles cannot reasonably expect that a car's frame, suspension, or interior will be designed to remain intact in any and all accidents. Nor would ordinary experience and understanding inform such a consumer how safely an automobile's design should perform under the esoteric circumstances of the collision at issue here.¹⁷⁰

This decision was based on the specific facts of the case. Air bags, on the other hand, present a much different factual situation. Consumers can reasonably expect that air bags will not kill them if they are in a minor accident. Furthermore, performance during a collision is the only expectation that consumers will have with respect to air bags; it is the only time they are supposed to perform. It would be unfortunate for any court to preclude the use of the consumer expectation test in an air bag case. It is patently absurd to suggest that the ordinary consumer lacks any legitimate expectations about the minimum safety of an air bag. They have been heavily marketed as a safety device. Consumers have paid extra for the privilege of having them in their cars. It taxes credulity to suggest that the American public is so stupid that it is willing to pay more for an item in which it has no legitimate expectation of performance. Furthermore, the automotive industry should not be heard to complain that this expectation is false or unreasonable in light of the fact that it is the one responsible for the expectation in the first place.¹⁷¹

In a more recent case, the California Court of Appeals, following the reasoning of both the *Barker v. Lull Engineering Co.*,¹⁷² and *Soule v. General Motors Corp.*¹⁷³ decisions, held that the consumer expectation test was applicable in an air bag design defect case. In *Bresnahan v. Chrysler Corp.*,¹⁷⁴ the plaintiff, Mary Bresnahan, alleged personal injuries as a result of a driver-side air

¹⁷⁰ *Id.*

¹⁷¹ See Fred Mannering & Clifford Winston, *Automobile Air Bags in the 1990's: Market Failure or Market Efficiency?*, 38 J.L. & ECON. 265, 267 (1995) (observing that a good deal of consumers' information about air bags came from the automakers themselves); see also *infra* notes 239-42 and accompanying text.

¹⁷² 573 P.2d 443 (Cal. 1918); see *supra* notes 122-29 and accompanying text (discussing the opinion).

¹⁷³ 882 P.2d 298 (Cal. 1994); see *supra* notes 159-70 and accompanying text (discussing the opinion).

¹⁷⁴ 32 Cal. App. 4th 1559 (Cal. Ct. App. 1995).

bag deployment in a relatively low-speed collision.¹⁷⁵ At trial, the court granted the defendants' motion for nonsuit following the plaintiff's opening statement.¹⁷⁶ The court did so after ruling that the consumer expectation test was inappropriate in the case.¹⁷⁷ The appellate court reversed the nonsuit and directed that the plaintiff be allowed to proceed using the consumer expectation test.¹⁷⁸

In attempting to prevent the application of the consumer expectation test, Chrysler presented the appellate court with a number of arguments. First, Chrysler claimed that since relatively few consumers have experienced the deployment of an air bag, the consumer expectation test was inappropriate.¹⁷⁹ The court noted that this would be the case every time safety equipment was initially triggered, and dismissed the contention as irrelevant.¹⁸⁰ The important consideration for the court was "whether the everyday experience of the consumer permits him or her to entertain minimum safety expectations of the product's performance under foreseeable circumstances."¹⁸¹ The court felt that "an ordinary consumer would be capable of forming an expectation, one way or the other about whether the design of the highly publicized, and by now commonplace product of an air-bag-equipped automobile satisfied minimal safety expectations."¹⁸²

The court also rejected Chrysler's second argument, that the technical novelty of the air bag would preclude the consumer expectation test.¹⁸³ Application of the test is not "foreclosed simply because expert testimony may be necessary to explain the nature of the alleged defect or the mechanism of the product's failure."¹⁸⁴

Third, Chrysler argued that asserted governmental conclusions about the benefits of air bags established that their use outweighs and justifies the risk of injuries.¹⁸⁵ The court rejected this as well, stating that "[r]isk benefit weighing is not a formal part of, nor

^{175.} See *id.* at 1562. The air bag allegedly forced her arm into contact with her car's overarching windshield, causing extensive damage to her elbow. See *id.* at 1562.

^{176.} See *id.*

^{177.} See *id.* The court granted the nonsuit to allow for appellate review of its *in limine* ruling that confined the plaintiff to a risk-benefit test. See *id.*

^{178.} See *id.*

^{179.} See *id.* at 1568.

^{180.} See *id.*

^{181.} *Id.*

^{182.} *Id.*

^{183.} See *id.*

^{184.} *Id.*

^{185.} See *id.* at 1569.

may it serve as a 'defense' to the consumer expectation test."¹⁸⁶ The court went further, ruling that "Chrysler may not adduce risk-benefit analysis as a counterweight or 'defense' to proof under the consumer expectation test."¹⁸⁷ This last ruling is significant because it recognizes that the consumer expectation test is separate and distinct from the risk-benefit test. The consumer expectation test is *not* to be used merely as one element of the risk-benefit test, as the latest version of the proposed Restatement suggests.¹⁸⁸

D. Why It Matters Which Test Is Used

Aside from the fact that the risk-benefit test is utilized as a negligence standard in disguise, there are at least two major reasons that the consumer expectation test is preferable to plaintiffs: (1) the alleged social utility of air bags as a safety device is misleading, and (2) it is difficult to prove a reasonable alternate design under the risk-benefit test.¹⁸⁹

Under the risk-benefit test, auto manufacturers will attempt to establish the social utility of the air bag through the introduction of evidence of the life-saving qualities of air bags in general. Air bag proponents claim that to date air bags have saved over 1100 lives and reduced traffic fatalities by 11%.¹⁹⁰ While these statistics are eye-catching, they are extremely misleading and irrelevant to the proper disposition of a products liability lawsuit alleging a defectively designed air bag. First, these studies were conducted by the same people who mandated air bags, arguably calling the validity of the studies into question.¹⁹¹ Even NHTSA officials concede that their air bag "save" figures are far from precise, and would probably not withstand statistical scrutiny.¹⁹² Second, the purported 11% reduction in fatalities does not address the fact that air bags may actually increase fatalities for persons who are under the

^{186.} *Id.*

^{187.} *Id.* at 1570.

^{188.} See RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 2 (Proposed Final Draft, 1997); see also *supra* note 130.

^{189.} See Leebron, *supra* note 102, at 404-05 (comparing the standards which plaintiffs must meet under each test).

^{190.} See NHTSA, EFFECTIVENESS, *supra* note 74, at 2-3; NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN., FATALITY REDUCTION BY AIR BAGS: ANALYSIS OF ACCIDENT DATA THROUGH EARLY 1996, at 19 (1996) (indicating safety statistics for air bags).

^{191.} See Asra Q. Nomani & Jeffrey Taylor, *Shaky U.S. Data Drive Air-Bag Debate: Statistics Don't Show If Seat Belts Were Used*, WALL ST. J. (Europe), Jan. 23, 1997, at 8 (noting that the data assessing air bags' effectiveness comes from NHTSA itself).

^{192.} See *id.*

age of thirteen, over the age of seventy, or small in stature.¹⁹³

These problems become merely peripheral, however, when the issue is stated correctly. These statistics are only relevant when comparing the overall benefits of the current air bag versus no air bag at all. This is not the ultimate comparison that must be made. The correct consideration will involve comparing the benefits of the air bag that caused the injury, versus some other "safer" air bag. Put simply, the issue is not whether any air bag is defective, but whether *this particular air bag* is defective.¹⁹⁴ When viewed in this light, these statistics are highly prejudicial and their only purpose is to mislead the jury into deciding the case on improper grounds.¹⁹⁵

The second major disadvantage facing plaintiffs under the risk-benefit test is the difficulty in proving a reasonable alternate design. As a practical matter this would quite likely be required in order to recover under either theory in an air bag case.¹⁹⁶ The auto manufacturers contend that in order to meet FMVSS 208, the air bags must be designed as they are.¹⁹⁷ While that issue is

¹⁹³ See NHTSA, EFFECTIVENESS, *supra* note 74, at 3, 18, 27.

¹⁹⁴ The existing statistics are flawed because they come from a study of *all* air bags and do not account for variations in each type of air bag. However, all air bags are not the same: each case of injury, in fact, will involve only one air bag design. In addition, it is possible that an alternate air bag design could be developed which would retain the life-saving potential of current air bags while eliminating some, if not all, of their dangers. See *infra* notes 198-214 and accompanying text. Yet, even if so, it would be difficult to prove at present that such a design would save as many (or more) lives than the current designs. Thus, because of the high degree of speculation involved in evaluating the statistics currently available, extreme caution should be used before suggesting that a jury use them as a basis for a decision.

¹⁹⁵ For example, the jury may be confused into thinking that it is deciding the relative merits of air bags in general. If it subsequently bases its decision on a belief that air bags are good devices, or that the manufacturer was merely trying to provide a safety feature, it would be in error. As mentioned earlier, the manufacturer's conduct is not the issue in strict liability; the only issue is the condition of the product. See Wilton & Campbell, *supra* note 104, at 555 (comparing the negligence approach, which focuses on the prudence of the manufacturer, with strict liability, in which the vehicle's state is the focus).

¹⁹⁶ While this could present a difficult burden for plaintiffs to meet, it would probably still be required because of FMVSS 208. If there were no alternative design, the manufacturer might successfully argue that the claim is preempted. This would be the reverse of the failure to install type case. In effect, it would be a "failure because you installed" claim, which arguably impliedly conflicts with the "choice" given by the standard. The probable fate of these claims may be assessed by looking at the "failure to install" cases. See *supra* Part II.B.

¹⁹⁷ It is extremely important to remember that FMVSS 208 does *not* require any particular design. Design specifications were, in fact, removed in an effort to give the

clearly not resolved and will eventually be decided by the trier of fact, there is considerable evidence that the auto manufacturers are not being entirely forthcoming about potential, alternate air bag technology.

One suggested alternate design is the "dual speed air bag."¹⁹⁸ Joan Claybrook, former Administrator of NHTSA under President Carter, believes that this might be the answer. According to Ms. Claybrook, dual speed air bags, which inflate slowly in low speed crashes and faster in high speed accidents, would maintain protection for adults in high speed crashes without sacrificing safety for children in low speed collisions.¹⁹⁹ This technology was available as far back as the mid-1970's, when General Motors installed dual-stage inflation air bags in over 10,000 cars sold to the public.²⁰⁰ Furthermore, according to Ms. Claybrook, the auto makers already have the knowledge and capability to implement this technology in mass-production vehicles. In fact, luxury car makers such as Mercedes and BMW already offer designs that distinguish the force of the crash and whether or not the occupants are wearing seat belts.²⁰¹

A 1981 study performed for NHTSA by Minicars, Inc. also reported highly favorable results for dual-inflation systems.²⁰² The report stated that although single-level inflation can satisfy the safety standards' protection requirements, "analysis and development have found a multi-level system to be better."²⁰³ The "studies showed that the use of a dual level system logic similar to that used in the GM production air bags of the mid-1970's could significantly reduce injuries to forward positioned children, yet still

automakers some flexibility. See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 58 Fed. Reg. 46,551, 46,552 (1993) (stating generally that vehicles must have "automatic crash protection"); *id.* at 46,562 (observing that NHTSA "does not wish to unnecessarily restrict future air bag designs"). FMVSS 208 is merely a performance standard, under which each vehicle must meet minimum injury requirements as measured on a test dummy in a 30 MPH crash barrier test. See *id.* at 46,553.

^{198.} See Joan Claybrook, *Statement on FMVSS 208 and Air Bags Transportation Subcommittee on Appropriations House of Representatives* (visited Mar. 6, 1998) <<http://www.citizen.org/claytest.html>>; Marcia Stepanek, *Safety Officials To Modify Rules Governing Air Bags*, THE TIMES UNION (Albany), Nov. 22, 1996, at A1.

^{199.} See Claybrook, *supra* note 198.

^{200.} See *id.*

^{201.} See *id.* One might logically infer from these facts that the technology is available for those willing or able to pay the added price.

^{202.} See 2 D. THEODORE ZINKE, SMALL CAR FRONT SEAT PASSENGER INFLATABLE RESTRAINT SYSTEM, CITATION AIR BAG SYSTEMS 1 (1981).

^{203.} *Id.* at 3.

maintain high performance levels for adults in severe crashes.²⁰⁴ Perhaps most importantly, the study concluded that the low-level deployment met the FMVSS 208 injury criteria.²⁰⁵ It is disturbing that this report has been ignored by the American automotive industry in the sixteen years that have passed since its completion.

Another potential alternative design, the tethered air bag, may not completely eliminate the problem, but is likely to help in some situations. The theory behind tethering is that by altering the distance the inflated bag travels towards the passenger before impact, the force of the impact is altered.²⁰⁶ A study performed for NHTSA in 1992 analyzed the deployment characteristics of different air bag designs, and compared tethered and untethered air bags.²⁰⁷ The untethered air bags, on average, extended five inches further than the tethered bags.²⁰⁸ As a result, the distance between the vehicle occupant and the deploying air bag is increased.²⁰⁹ Common sense indicates that this is a good thing.

The study also measured the peak air bag velocities of nine different air bag designs, all of which met FMVSS 208 injury criteria.²¹⁰ The velocities of the deployed air bags ranged from 98 MPH to 211 MPH.²¹¹ Thus, the force at which some air bags impact the occupant is significantly less than the force at which other air bags do. This might explain why certain vehicles, made by certain manufacturers, appear to account for an inordinately high percentage of the most serious injuries. In November 1996, the Center For Auto Safety petitioned NHTSA to begin defect investigations into the air bags installed in Chrysler 1994-1996 minivans, Ford 1990-1992 Taurus', and General Motors 1991-1992 Chevrolet Berettas and Corsicas.²¹² The Center claims that these models account for one-third of all air bag injuries and deaths, even though they account for less than 10% of all air bags on the road.²¹³

²⁰⁴ *Id.*

²⁰⁵ *See id.* at 17.

²⁰⁶ *See* NATIONAL HIGHWAY TRAFFIC SAFETY COMM'N, U.S. DEP'T OF TRANSP., *supra* note 4, at 30-31.

²⁰⁷ *See id.*

²⁰⁸ *See id.* at 31.

²⁰⁹ *See id.*

²¹⁰ *See id.* at 30.

²¹¹ *See id.* at 31.

²¹² *See Motor Vehicles: NHTSA Requests Data From Big Three in Response to Air Bag Defects Petition*, 25 *Prod. Safety & Liab. Rep.* (BNA) 133 (Feb. 7, 1997).

²¹³ *See id.*

Honda, on the other hand, uses a less aggressive air bag than other manufacturers and has not had any reported fatalities.²¹⁴

Whether an alternate design is reasonable in a certain set of circumstances is an issue that will have to be addressed on a case-by-case basis. However, these studies demonstrate that not all air bags are the same, and some are obviously not as safe as others.

E. Failure to Warn

If plaintiffs are unable to carry the burden of proving that the air bag was defective in its design, they may still be able to recover on the theory of failure-to-warn. Generally speaking, there are two different types of failure to warn claims.

The first type of claim is based on the premise that the consumer had the right to be apprised of the risk in order to make an informed choice about whether or not to use the product.²¹⁵ This claim requires the plaintiff to show that he would not have used the product had the risk been known.²¹⁶ Because the air bag is but one component in a much larger product—people buy cars, not air bags—this type of claim is of somewhat limited relevance to air bag litigation. Furthermore, with the high percentage of new vehicles that contain air bags, the consumer is not faced with a legitimate choice regarding air bag use.²¹⁷

In the second type of claim, the plaintiff asserts that the product could have been made safe, or at least safer, if adequate warnings or instructions had been provided.²¹⁸ In the context of air bags, the plaintiff would claim, for example, that the automaker did not warn him that air bags could kill children. Unaware of the serious danger, he continued to place his child in the front seat. As a result, his child was seriously injured or killed by the air bag. This type of claim is extremely relevant to the air bag situation and, in light of the difficulty and prohibitive cost of proving defective design, should be included in any claim against the automakers.

The first thing that must be done when considering a potential

²¹⁴ See Claybrook, *supra* note 198.

²¹⁵ See Leebron, *supra* note 102, at 415.

²¹⁶ See *id.*

²¹⁷ It should be noted that NHTSA recently authorized the use of on-off switches for certain specified categories of car owners. Under the new rule, car owners must apply to NHTSA to de-activate the airbag, and NHTSA ultimately decides whether the owner may de-activate or not. See Air Bag On-Off Switches, 62 Fed. Reg. 62,406, 62,441-42 (1997).

²¹⁸ See Leebron, *supra* note 102, at 415.

failure to warn claim is to determine when the vehicle was produced. This will place the vehicle into one of three categories: (1) vehicles produced before September 1, 1994, (2) vehicles produced after September 1, 1994, and (3) vehicles produced after February 25, 1997. The different warning labels required by NHTSA as of these dates will present each category with different warning language and different preemption concerns.

Prior to September 1, 1994, FMVSS 208 had no explicit provisions concerning air bag safety warning labels.²¹⁹ Claims involving vehicles produced before this date will not be subject to a claim of preemption. In November 1996, NHTSA issued a final rule amending the existing requirements for air bag warning labels in all air bag equipped vehicles manufactured on or after February 25, 1997.²²⁰ These new, improved warning labels are very detailed and attention grabbing. They explicitly warn of death and the serious dangers to small children.²²¹ The adequacy of these new warnings is beyond the scope of this Note, although they are clearly an improvement over previous labelling.

This Note will focus on the second category of vehicles: those produced after September 1, 1994, but before February 25, 1997. In 1993, NHTSA mandated that the following sun-visor label be included in all air bag equipped vehicles manufactured after September 1, 1994:

CAUTION

TO AVOID SERIOUS INJURY:

For maximum safety protection in all types of crashes, you must always wear your safety belt.

Do not install rearward-facing child seats in any front passenger seat position.

Do not sit or lean unnecessarily close to the air bag.

Do not place any objects over the air bag or between the air bag and yourself.

See the owner's manual for further information and explanations.²²²

²¹⁹ See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 61 Fed. Reg. 60,206, 60,215 (1996).

²²⁰ See *id.* at 60,215-16.

²²¹ See *id.* at 60,217-21.

²²² See Federal Motor Vehicle Safety Standards, Occupant Crash Protection, 58 Fed. Reg. 46,551, 46,564 (1993).

The coloring of this lettering was supposed to contrast with the background of the label.²²³ When the sun-visor is in the stowed position, an air bag alert label which reads "Air bag. See Other Side" is required.²²⁴ The rule also states that "[n]o other information shall appear on the same side of the sun-visor to which the label is affixed."²²⁵

At first glance, this rule appears to deliver a crushing blow to a cause of action for failure to warn; NHTSA was clear in its desire for uniform sun-visor labels.²²⁶ It is important to remember, however, that these rules merely apply to *sun-visor labels*. NHTSA expressly provided that the "[m]anufacturers are free, of course, to provide additional information in other places."²²⁷ NHTSA also did not mandate any particular language that must be included in the owner's manual.²²⁸

In order to accurately assess the adequacy of a warning, one must judge it in its entirety. The total warning consists of the sum of its parts, not each portion individually. The entire "warning package" must be adequate or else the warning will not effectively serve any purpose. It would be inequitable to preempt a failure to warn claim because the manufacturer complied with mandatory warning language for one location on the product. The manufacturers were free to provide additional information to the consumer and some did. The adequacy of the entire "warning package" can be fairly assessed by the jury, and it would be unfair to prevent the jury from doing so.

There are three primary questions that will shape the analysis in this area: (1) Was the automotive industry aware of the risks and dangers posed by air bags?; (2) Were the warning labels sufficient to alert the user of the nature and degree of the danger, as well as how that danger can be avoided?; (3) Did the automotive industry undercut or diminish the warnings through promotion of

²²³ See *id.* No specific colors were mandated. Many manufacturers chose to use light gray lettering on a white background. Some might argue that these are not contrasting colors. In the new warnings, bright yellow and black lettering is mandatory to avoid this type of minimizing. See *id.* at 46,564.

²²⁴ See *id.*

²²⁵ *Id.*

²²⁶ See *id.* ("NHTSA has . . . concluded that the sun visor label should be uniform for all vehicles.").

²²⁷ *Id.* (emphasis added).

²²⁸ See *id.* at 46,557, 46,564.

the air bag as a safety device? Each of these inquiries can be taken separately.

1. Did the Automakers Know?

In a 1969 research paper written by General Motors, the automaker concluded that "a small child close to an instrument panel from which an air cushion is deployed may, in our present estimation, be severely injured or even killed."²²⁹ In the years that followed, the automotive industry conducted numerous tests on air bags, particularly their known effects on children and out-of-position smaller adults, all of which showed ample evidence of the dangers posed by air bags.²³⁰ In his 1984 autobiography, Lee Iacocca expressed concern that air bags could kill vehicle passengers,²³¹ adding that "air bags are one of those areas where the solution may be worse than the problem."²³² While most experts would dispute Iacocca's 1984 contention, it is doubtful that anyone, especially the automotive industry, could deny the simple fact that the automotive industry was painfully aware of the serious, life-threatening, and potentially fatal dangers that air bags posed. This knowledge left the auto industry with two options. They could either design an air bag that was safe and effective for all size

²²⁹ Warren Brown & Cindy Skrzycki, *U.S. Doubts on Air Bags Date to '69; No Warnings Issued On Suspected Danger to Small Passengers*, WASH. POST, Nov. 21, 1996, at A1; see also *Air Bag Safety: Hearing Before the Senate Comm. on Commerce, Science, and Transp.*, 105th Cong. 136 (1997) (statement of Robert Sanders, Parents' Coalition for Air Bag Warnings); Joan Claybrook, Editorial, *GM Knew About Air Bag Problems*, CLEVELAND PLAIN DEALER, Dec. 9, 1996, at 9B.

²³⁰ See, e.g., H.J. MERTZ ET AL., RESPONSES OF ANIMALS EXPOSED TO DEPLOYMENT OF VARIOUS PASSENGER INFLATABLE RESTRAINT SYSTEM CONCEPTS FOR A VARIETY OF COLLISION SEVERITIES AND ANIMAL POSITIONS (1982); F. MONTALVO ET AL., GENERAL MOTORS CORP., POSSIBLE POSITIONS AND POSTURES OF UNRESTRAINED FRONT-SEAT CHILDREN AT INSTANT OF COLLISION (1982); ULRICH W. SEIFFERT & GUNNAR H. BORENIUS, RESEARCH AND DEVELOPMENT CENTER, VOLKSWAGENWERK AG, GERMANY, DEVELOPMENT PROBLEMS WITH INFLATABLE RESTRAINTS IN SMALL PASSENGER VEHICLES (1972).

²³¹ See LEE IACOCCA, *IACOCCA: AN AUTOBIOGRAPHY* 300-01 (1984).

²³² *Id.* Iacocca went on to say: "I'm not sure I'd want one of those gizmos in my car." *Id.* at 301. In an interesting change of heart, Iacocca himself became Chrysler's air bag pitchman when Chrysler began to install them as standard equipment. See *Chrysler Ad Campaign Touts Safety of Air Bags*, Highway & Vehicle Safety Rep. (Stamler Publ'g Co., Branford, Ct.), Apr. 23, 1990, at 5 [hereinafter *Chrysler Ad Campaign*]. According to Iacocca, air bags are "the greatest innovation since four-wheel brakes." Don Sherman, *It's in the Bag*, POPULAR SCI., Oct. 1992, at 58. Iacocca explained that while he had previously doubted air bags, new technology had made him a believer. See JOHN D. GRAHAM, *AUTO SAFETY: ASSESSING AMERICA'S PERFORMANCE* 212 (1989) (describing Chrysler's ads in the New York Times and other newspapers in which this statement is attributed to Iacocca).

occupants or, failing that, provide adequate warnings of the dangers involved. They chose not to modify the design of their air bags.

2. Were the Warnings Adequate?

Determining the adequacy of a warning is not an easy task. As previously stated, this determination will ultimately be a jury question. But generally speaking, juries will be guided by the principle that "adequate means that the reasonable user is likely to read it and that it sufficiently alerts the user to the nature and degree of the danger, as well as how that danger can best be avoided."²³³ A plaintiff will thus need to assert that the total "warning package" provided to him concerning air bags was inadequate, because it failed to sufficiently alert him of the nature and degree of danger, and how to avoid it.

Since the language provided by individual manufacturers in advertising as well as in the owner's manual will vary, each case will depend upon different facts. The Owner's Manual for a 1994 Dodge Intrepid shows a representative example of the additional warnings that the manufacturers chose to provide. The Manual states, "[r]elying on air bags alone could lead to more severe injuries in a collision. The air bags work *with* your seat belt to restrain you properly."²³⁴ Another warning states, "[b]eing too close to the steering wheel or instrument panel during airbag deployment could cause serious injury. Airbags need room to inflate."²³⁵ At no point is the possibility of death mentioned. Neither are the dangers to small children. In fact, consumers were warned explicitly that air bags can "harm your pet," but were told nothing about the risks to their children.²³⁶

The inadequacy of the warnings can be further established with evidence that the "warning packages" provided by the auto manufacturers have clearly failed to work. The warnings did nothing to increase the public awareness of air bag dangers. Only the increasing death toll and the concerned pleas of grieving parents have been able to do this. In fact, a recent survey performed by the Center for Risk Analysis at the Harvard School of Public Health shows that many consumers are still unaware of the serious dangers created by air bags.²³⁷ "Nearly sixty percent of adults

²³³ Leebron, *supra* note 102, at 416.

²³⁴ CHRYSLER CORP., OWNER'S MANUAL: 1994 DODGE INTREPID '24 (1994).

²³⁵ *Id.*

²³⁶ *See id.* at 28.

²³⁷ *See Most Unaware Passenger-Side Air Bags Are Danger to Kids*, CLEVELAND

polled . . . mistakenly believe that air bags are helping more children than they are hurting."²³⁸

3. Did the Automakers Undercut or Diminish the Warnings?

The air bag has been heavily marketed to the American automobile consumer as a safety device. In 1990, Chrysler launched a major advertising campaign focused on the safety of the air bag.²³⁹ The ads featured professional drivers in actual crash tests as well as testimonials from crash survivors.²⁴⁰ Chrysler chairman Lee Iacocca was featured in many of the ads, which all concluded with the campaign theme: "Advantage: Chrysler."²⁴¹ The ads did not mention any of the risks known to be associated with air bags. They were part of a well-planned strategy to promote the air bag as a safety device that every car owner should have.²⁴²

What precisely caused the automotive industry to install air bags as standard equipment in their vehicles before the mandatory compliance date is debatable. Some might argue that it was out of an altruistic desire to produce the safest vehicle for the public. Others might argue that it was because of a desire to comply with the federal regulations ahead of schedule.²⁴³ It is far more likely that the true motivation was a basic desire to increase profits.²⁴⁴

PLAIN DEALER, Mar. 17, 1997, at 9A (discussing the results of the Harvard study).

^{238.} *Id.* According to John Graham, the Director of the Center for Risk Analysis and the study's lead author, he has not "found any documented cases of children's lives being saved" by an air bag. *Id.*

^{239.} See *Chrysler Ad Campaign*, *supra* note 232, at 5. This Note does not wish to intimate that Chrysler was the only manufacturer to advertise in this manner. However, Chrysler does provide an excellent illustration of how the air bag was marketed to the American public. In particular, Chrysler used airbags to stress that their vehicles were safer than Japanese cars. See *id.*

^{240.} See *id.*

^{241.} See *id.*

^{242.} The overall merit of having air bags installed in vehicles is not the issue here. Rather, it is the effect that advertising had on public perception of air bags in general, and their willingness to pay extra for them in particular. Obviously, Chrysler and the other car makers would have been foolish to advertise the air bag as a dangerous device. This does not mean, however, that they were free to mislead the public by omitting vital information.

^{243.} This is somewhat unlikely considering the way in which the compliance dates for this standard had been regularly delayed by the automotive industry, but nothing is impossible. See *supra* notes 28-37 and accompanying text (documenting the alterations in compliance dates).

^{244.} See *Mannering & Winston*, *supra* note 171, at 278 (discussing the role of consumer demand in the air bag debate and stating that "the recent widespread adoption of air bags has not revived the decades-old debate over the justification for and effects of automobile safety regulations. As we see it, the adoption of air bags was a rational market

A study published in the *Journal of Law & Economics* raised some interesting points on this issue.²⁴⁵ The study set out to determine why the number of air bag equipped vehicles had increased so dramatically since 1988, and concluded that the ultimate reason was the equally dramatic increase in the "consumer willingness to pay."²⁴⁶ Interestingly, the two factors that had the greatest influence on the willingness to pay were the number of friends owning cars with air bags and the hours of daily television viewing.²⁴⁷ The average willingness to pay rose from \$331 in 1990, to over \$500 in 1993.²⁴⁸ Estimating the cost of the air bag between \$250 and \$300,²⁴⁹ it was easy to see why they became standard equipment in many vehicles. Air bags simply provided an opportunity to increase profits by several hundred dollars per vehicle.²⁵⁰

None of this makes the automotive industry guilty of anything, but it does suggest that it had a very real interest in promoting the air bag as a safety device. This interest was effectively carried out through aggressive advertising, advertising that ran directly contrary to the feeble warnings that were given. This also shows rather convincingly that the automotive industry itself is directly responsible for the public's perception of air bags. If public perception of air bag safety had the effect of diminishing, or even negating the minimal warnings that consumers were given, the car makers should not be able to successfully hide behind those warnings to

outcome"). This does not suggest that there is anything wrong with such a desire; that is why corporations are in business. However, the industry's motivation is relevant to understanding the entire air bag controversy and keeping it in perspective. For example, a great deal of criticism has been focused on NHTSA by the automotive industry in an effort to deflect responsibility for air bag injuries. While NHTSA and FMVSS 208 are clearly involved in many past and future issues concerning air bags, it should be remembered that NHTSA left air bag design specifications up to the car makers. NHTSA has also shown a willingness to delay the compliance date if the air bags were not ready. *See supra* Part II. Furthermore, NHTSA has no financial stake in air bags.

²⁴⁵ *See* *Mannering & Winston, supra* note 171.

²⁴⁶ *Id.* at 275. "[W]illingness to pay for an air bag on a particular vehicle model has a positive statistically significant effect on the probability that an air bag will be offered as standard equipment." *See id.*

²⁴⁷ *See id.* at 270-71. According to the study, "television viewing provides opportunities to obtain hard evidence of air bag effectiveness through *automakers' advertisements.*" *Id.* at 271 (emphasis added).

²⁴⁸ *See id.* at 272.

²⁴⁹ *See id.* at 275.

²⁵⁰ *See id.* The study also concluded that if every manufacturer discontinued air bags they would each lose millions of dollars per year. *See id.* at 277. Even more interestingly, the study concluded that if one individual manufacturer decided to discontinue them, that manufacturer would lose *hundreds* of millions of dollars as a result. *See id.*

avoid liability. In addition to the sun-visor warning label and the information provided in the owner's manual, the complete "warning package" should thus include statements made by the automotive industry concerning air bags.

Although every plaintiff will have to establish these facts in some manner, there is sufficient evidence to conclude that: (1) the automotive industry was well aware of the serious dangers related to air bags, (2) the "warning package" given prior to the most recent changes in 1997 was inadequate, and (3) the warnings, inadequate to begin with, were made even less effective and perhaps completely negated by the automotive industry through their aggressive marketing of air bags as a necessary safety device. There is a clear duty to warn of a known danger. The automotive industry has breached this duty with respect to air bags. They should be liable for that breach.

V. CONCLUSION

Products liability law is an extremely important area of American jurisprudence. It is the primary means through which the consumer may seek redress for injuries suffered as a result of a defect in a purchased product. Since the adoption of the Restatement of Torts (Second) in 1965, strict liability under section 402A has been the law of the land. It represents a belief that fault is not the issue when an innocent consumer has been injured by a product he has purchased. This Note argues that this belief was not faulty then, is not faulty now, and should not be abandoned in the future.

Over the past several years numerous individuals, including children, have been killed or seriously injured by the awesome force of deploying air bags. This is a serious problem which requires serious action. The prevention of future accidents is not enough, though. Fixing the problem now may prevent future tragedies, but it will not eliminate the pain of those whose lives have already been taken or destroyed in air bag related accidents. These

individuals and their families deserve answers to their questions. They deserve compensation for their losses: losses that could have been prevented.

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[†] I would like to thank my father for inspiring me, my mother for supporting me, and Audra, just for being who she is.

