

TARA GAUDIO, INDIVIDUALLY and as	:	IN THE SUPERIOR COURT OF
The ADMINISTRATRIX of the ESTATE	:	PENNSYLVANIA
of ANDREW M. GAUDIO, as well as in	:	
HER CAPACITY as PARENT to PATRICIA	:	
GAUDIO, CATHERINE GAUDIO, ROCCO	:	
J. GAUDIO, BROOKLYN GAUDIO, Minors,	:	
	:	
Appellant	:	
	:	
v.	:	
	:	
FORD MOTOR COMPANY, AUTOLIV,	:	
GIBBONS FORD, MASTHOPE RAPIDS	:	
PROPERTY OWNERS COUNCIL,	:	
	:	
Appellees	:	No. 1021 EDA 2007

Appeal from Judgment of the Order entered April 4, 2007,
 Court of Common Pleas, Pike County,
 Civil Division at No. 1135-2002

BEFORE: DONOHUE, McEWEN, P.J.E. and FITZGERALD*, JJ.

OPINION BY DONOHUE, J.:

FILED JUNE 1, 2009

¶ 1 Appellant Tara Gaudio ("Gaudio"), both individually and as the administratrix of the estate of Andrew M. Gaudio (the "Deceased"), appeals from the trial court's order dated April 4, 2007 entering judgment in favor of Appellee Ford Motor Company ("Ford") after a jury trial that resulted in a verdict in Ford's favor. Gaudio appeals various evidentiary rulings made by the trial court prior to and during trial, and further contends that the trial court erred in certain of its instructions to the jury. For the reasons set forth herein, we reverse and remand for a new trial.

*Former Justice specially assigned to the Superior Court.

¶ 2 The basic factual and procedural background of this case is not in dispute. At approximately 4:15 a.m. on June 20, 2001, the Deceased was driving a 1996 Ford F-150 pickup truck in his private community association in Lackawaxen, Pennsylvania on his way to work. As he approached a "T" intersection where the stop sign had been knocked down, he applied his brakes but skidded through the intersection into a ditch, where he hit a dirt embankment. When emergency personnel arrived on the scene, the Deceased was found dead in the passenger seat. The truck's air bag had deployed. The Deceased was not wearing a seat belt. Expert witnesses for Gaudio and Ford agreed that the Deceased had been traveling between 30-34 miles per hour before applying his brakes. Gaudio's experts estimated that he was traveling at a barrier equivalent speed of 8.6 mph when he hit the embankment, while Ford's experts estimated the speed at the time of impact to be 14 mph. An investigative report prepared by the National Highway Transportation Safety Association ("NHTSA"), entitled the "Veridian Report", estimated his speed at 11.6 miles per hour.

¶ 3 On November 13, 2002, Gaudio filed this civil action against, *inter alia*, Ford,¹ asserting claims sounding in negligence and strict liability. Prior to trial, the trial court issued a series of evidentiary rulings in response to motions *in limine* filed by the parties. Rulings on these motions relevant to

¹ Gaudio's claim against Masthope Rapids Property Owners Counsel, which was responsible for the fallen stop sign, settled prior to trial.

this appeal included denials of Gaudio's motions to exclude evidence and argument related to the Deceased's non-use of a seat belt, expert testimony regarding the Deceased's pre-impact conduct, and various statistical and risk/benefit evidence.

¶ 4 The case proceeded to trial only on Gaudio's strict liability claims. Gaudio presented evidence at trial to attempt to prove that the design of the F-150's air bag system was defective because (1) the placement and quantity of the timing sensors caused the driver's side air bag to deploy at a low collision speed where it should not have deployed at all, or (2) that it deployed too late, causing the Deceased's body to be too close to the steering wheel at the time of deployment. Gaudio argued that if the air bag had not deployed at all, or had deployed in a timely fashion, the Deceased would have suffered only minor injuries, if any.

¶ 5 Ford argued that its air bag system was not defective and that the air bag deployed precisely as designed. Through expert witnesses, Ford contended that the Deceased's heavy breaking at the intersection, his failure to use a seat belt, and perhaps other pre-impact conduct (e.g., reaching for something on the truck's floor) caused him to be out of position and too close to the steering wheel at the time of air bag deployment. Ford also argued that if the air bag had not deployed, Gaudio would have suffered significant injuries in the crash.

¶ 6 The jury returned a verdict in favor of Ford, indicating on the verdict form that the F-150's air bag crash sensor system was not defective. Based upon this finding, the jury did not reach the issues of causation or damages. The trial court denied Gaudio's post-trial motions and entered judgment in favor of Ford.

¶ 7 This timely appeal followed, in which Gaudio contests a number of the trial court's evidentiary rulings and jury instructions. Gaudio challenges the trial court's evidentiary rulings on the Deceased's non-use of a seat belt, Ford's introduction of evidence relating to the Deceased's pre-impact behavior, the F-150's compliance with government safety standards, various generalized statistics, and risk/benefit evidence. Gaudio raises four objections to the trial court's charge to the jury, contending that the charge failed to instruct the jury regarding the definition of crashworthiness and the irrelevance of Ford's due care, the Deceased's pre-impact behavior, and compliance with industry and government standards. Appellants' Brief at 9.

¶ 8 Before addressing these issues, we will first respond to Ford's argument that the trial court erred in denying its motions for a compulsory nonsuit and directed verdict on Gaudio's strict liability-crashworthiness claims, which Ford contends should have been granted as a result of our Supreme Court's decision in ***Pennsylvania Dep't of General Services v. United States Mineral Products Co.***, 587 Pa. 236, 898 A.2d 590 (2006) ("***General Services I***"). To this end, we will briefly review the history of

products liability law and the crashworthiness doctrine in this Commonwealth. Our Supreme Court first adopted section 402A of the Restatement (Second) of Torts in **Webb v. Zern**, 422 Pa. 424, 220 A.2d 853 (1966). To state a section 402A products liability claim in Pennsylvania, the plaintiff must prove that the defendant sold a product "in a defective condition," that the defect existed when the product left the defendant's hands, and that the defect caused the plaintiff's injuries. *See, e.g., Hadar v. AVCO Corp.*, 886 A.2d 225, 228 (Pa. Super. 2005). A product is "in a defective condition" when it lacks "any element necessary to make it safe for its intended use or possessing any element that renders it unsafe for the intended use." **Azzarello v. Black Bros. Co., Inc.**, 480 Pa. 547, 559, 391 A.2d 1020, 1027 (1978). Because the key inquiry in all products liability cases is whether or not there is a defect, it is the product, and not the defendant's conduct, that is on trial. *See, e.g., Hutchinson v. Penske Truck Leasing Co.*, 876 A.2d 978, 983 (Pa. Super. 2005), *affirmed*, 592 Pa. 38, 922 A.2d 890 (2007).

¶ 9 The crashworthiness doctrine is a subset of strict products liability law that most typically arises in the context of vehicular accidents. *See, e.g., Colville v. Crown Equip. Corp.*, 809 A.2d 916, 922 (Pa. Super. 2002), *appeal denied*, 574 Pa. 742, 829 A.2d 310 (2003). First explicitly recognized as a specific subset of product liability law by this Court in **Kupetz v. Deere & Co., Inc.**, 644 A.2d 1213 (Pa. Super. 1994), the term

"crashworthiness" means "the protection that a motor vehicle affords its passenger against personal injury or death as a result of a motor vehicle accident." *Id.* at 1218. The doctrine extends the liability of manufacturers and sellers to "situations in which the defect did not cause the accident or initial impact, but rather increased the severity of the injury over that which would have occurred absent the design defect." *Id.* To avoid liability, a manufacturer must design and manufacture the product so that it is "reasonably crashworthy," or, stated another way, the manufacturer must include accidents as intended uses of its product and design accordingly. *Id.*

¶ 10 A crashworthiness claim requires proof of three elements. First, the plaintiff must prove that the design of the vehicle was defective, and that at the time of design an alternative, safer, and practicable design existed that could have been incorporated instead. *Id.* Second, the plaintiff must identify those injuries he or she would have received if the alternative design had instead been used. *Id.* Third, the plaintiff must demonstrate what injuries were attributable to the defective design. *Id.*

¶ 11 In recognizing the crashworthiness doctrine in *Kupetz*, this Court relied upon our Supreme Court's prior decision in *McCown v. International Harvester Co.*, 463 Pa. 13, 342 A.2d 381 (1975), which adopted the principle tenet of the crashworthiness doctrine, i.e., manufacturers are strictly liable for defects that do not cause the accident but nevertheless

cause an increase in the severity of injuries that would have occurred without the defect. In **McCown**, the plaintiff's truck hit a guardrail as he was attempting to make a right turn. The collision caused the steering wheel to spin rapidly to the left, and when this occurred the spokes of the steering wheel struck plaintiff's right arm, resulting in fractures to his wrist and forearm. The manufacturer admitted that the steering wheel mechanism was defective, but claimed that the defect was not the cause of the accident. Our Supreme Court rejected the manufacturer's contributory negligence defense (i.e., that the plaintiff's careless driving caused the accident) and affirmed the judgment in plaintiff's favor. **Id.** at 17, 342 A.2d at 382. In so doing, the Court recognized that for purposes of a products liability claim, the defect does not have to be the cause of the accident resulting in the plaintiff's injuries, and instead acknowledged that a strict liability claim may allow recovery for injuries resulting after the collision occurred. **Id.**

¶ 12 Against this background, in **General Services I**, the Commonwealth brought a strict products liability property damage claim against a chemical manufacturer and others for contamination of a government office building. In the aftermath of a fire, the presence of polychlorinated biphenyls ("PCBs") was detected on surfaces and in the ambient air inside the building. The Commonwealth brought suit against, *inter alia*, the Monsanto Company (the PCB manufacturer) as well as the manufacturers and installers of PCB-

containing building products used in construction. Monsanto argued that it could not be held responsible for chemical contamination resulting from the fire because subjecting a building product to a fire is an abnormal use of the building product, not an intended use. The Commonwealth acknowledged the role of the fire in spreading the PCBs, but argued that fire is a foreseeable event against which Monsanto should have guarded. Trial resulted in a \$90 million verdict against Monsanto.

¶ 13 Our Supreme Court agreed with Monsanto and ordered a new trial. The Court recognized at an "abstract theoretical level" that the "overall concept of intended use should include all reasonably foreseeable uses and/or occurrences." **General Services I**, 587 Pa. at 257, 898 A.2d at 603. It refused, however, to "import[] the foreseeability concept into existing strict liability doctrine in a generalized fashion" because the "central tenets of such liability scheme have been constructed on the contrary notion that negligence concepts are foreign to it." **Id.** As a result, the Supreme Court concluded that "a manufacturer can be deemed liable only for harm that occurs in connection with a product's intended use by an intended user; the general rule is that there is no strict liability in Pennsylvania relative to non-intended uses even where foreseeable by a manufacturer." **Id.** at 253, 898 A.2d at 600 (citing **Phillips v. Cricket Lighters**, 576 Pa. 644, 841 A.2d 1000 (2003) (plurality decision)). Put another way, the Supreme Court held

that because incineration was not an intended use of building products, the manufacturer had no obligation to make the products "fireworthy".²

¶ 14 Ford argues that our Supreme Court's decision in **General Services I** precludes the application of the crashworthiness doctrine in this case. Ford contends that the fundamental basis for the crashworthiness doctrine is that crashes are intended uses of automobiles because they are foreseeable, and thus manufacturers must design their products to make them "crashworthy." Appellees' Brief at 15-19. As such, Ford concludes that "[w]hile [**General Services I**] was a 'fireworthiness' case rather than a 'crashworthiness' case, a holding that motor vehicle manufacturers – and only motor vehicle manufacturers – can be held strictly liable for harm resulting from foreseeable but unintended uses of products without the protection of the 'level field' available under negligence law would be flatly inconsistent with the holding of that decision." **Id.** at 18-19.³

² On remand, the Commonwealth tried the case again, on the theory that an unsafe level of PCBs existed in the building for reasons unrelated to the fire. The Commonwealth argued that the PCB contamination resulted from the intended use of the building materials (i.e., as construction supplies), and that vapors from the PCB-laden building materials had spread throughout the building from the ordinary use of the heating and ventilation systems. The retrial resulted in a defense verdict, which has subsequently been affirmed by both the Commonwealth Court, 927 A.2d 717 (Pa. Commw. 2007), and the Supreme Court, -- Pa. --, 956 A.2d 967 (2008).

³ The Product Liability Advisory Council, Inc. filed an *amicus curiae* brief in support of this position. **See** Brief of *Amicus Curiae* Product Liability Advisory Council, Inc. in Support of Defendants-Appellees at 3 ("Crashworthiness cannot qualify as a strict liability theory under

¶ 15 We disagree. Our Supreme Court in **General Services I** carefully avoided eliminating the crashworthiness doctrine as a cognizable subset of strict liability law and refused to equate crashworthiness with "fireworthiness". It began by describing the crashworthiness doctrine as follows:

[C]rashworthiness doctrine has developed as a discrete facet of product liability jurisprudence, having particularized elements requiring the fact finder to distinguish non-compensable injury (namely, that which would have occurred in a vehicular accident in the absence of any product defect) from the enhanced and compensable harm resulting from the product defect. **See generally Kupetz v. Deere & Co., Inc.**, 435 Pa. Super. 16, 26-27, 644 A.2d 1213, 1218 (1994).

General Services I, 587 Pa. at 255, 898 A.2d at 601. Without disapproving the discrete use of the foreseeable use concept in crashworthiness cases (i.e., motor vehicle accidents), the Supreme Court refused to extend the foreseeability test to other products:

[W]e are of the view that the metamorphosis of the particularized crashworthiness doctrine into a generalized conditions-of-use/outside-cause-or-instigator exception to the bar against resort to foreseeability concepts in the strict liability arena would, in fact, represent an extension of the type

Pennsylvania law. . . . The Supreme Court agrees. Only last year, it rejected 'fireworthiness' as a basis for strict liability on exactly the same rationale. [citing **General Services I**"].

that was disapproved by a majority of Justices in **Phillips**.⁴

Id. at 257, 898 A.2d at 603.

¶ 16 Thus, contrary to the interpretation urged by Ford, the Supreme Court in **General Services I** did not reject the crashworthiness doctrine. Although the Supreme Court refused to extend the rationale of the crashworthiness doctrine to other products, it clearly recognized the continued viability of the doctrine as a targeted exception to the prohibition against utilizing an analysis of the foreseeability of an intended use in strict liability law in Pennsylvania. **Id.** at 254 n.10, 257, 898 A.2d at 601 n.10, 603. The case *sub judice* presents a straightforward application of the

⁴ In **Phillips v. Cricket Lighters**, 576 Pa. 644, 841 A.2d 1000 (2003) (plurality), our Supreme Court affirmed the trial court's grant of summary judgment in favor of the manufacturer on a strict liability design defect claim after a small child's use of a butane lighter resulted in a fire. Based upon the finding that small children were not the intended users of butane lighters, the Supreme Court ruled that "in a strict liability design defect claim, the plaintiff must establish that the product was unsafe for its intended user." **Id.** at 657, 841 A.2d at 1006. In so ruling, the Supreme Court emphasized that the limitation on the scope of strict liability only to intended users was necessary because extending liability to use by all foreseeable users "would improperly import negligence concepts into strict liability law." **Id.**

In a concurring opinion in **Phillips**, Justice Saylor suggested that the negligence concepts included in Section 2 of the Restatement (Third) of Torts should be introduced into Pennsylvania's strict liability law, rather than continued adherence to Section 402A of the Restatement (Second) of Torts. **Id.** at 664-82, 841 A.2d at 1012-23 (Saylor, J., concurring). We note that the Supreme Court has granted appeal in a more recent case, **Bugosh v. Allen Refractories Co.**, 932 A.2d 901 (Pa. Super. 2007), *appeal granted*, 596 Pa. 265, 942 A.2d 897 (2008), to address the specific issue of "[w]hether this Court should apply § 2 of the Restatement (Third) of Torts in place of § 402A of the Restatement (Second) of Torts".

crashworthiness doctrine, as Gaudio argues that if the air bag had not deployed at all, or had timely deployed, the Deceased would have suffered at most only minor injuries. Accordingly, we find no error in the trial court's refusal to grant Ford a compulsory nonsuit or a directed verdict.

Evidentiary Issues

¶ 17 We turn now to the issues Gaudio raises on appeal, starting with her challenges to the trial court's evidentiary rulings. Although Gaudio raises a wide variety of such issues, for sake of discussion we will divide them into five broad categories: (1) evidence regarding seat belt usage, (2) evidence of the pre-impact conduct of the Deceased, (3) evidence of Ford's compliance with federal safety standards, (4) various statistical evidence, and (5) evidence relating to risk/benefit analysis.

¶ 18 In considering these issues raised by Gaudio, we note that our standard of review is a narrow one:

When we review a trial court's ruling on admission of evidence, we must acknowledge that decisions on admissibility are within the sound discretion of the trial court and will not be overturned absent an abuse of discretion or misapplication of law. In addition, for a ruling on evidence to constitute reversible error, it must have been harmful or prejudicial to the complaining party.

Stumpf v. Nye, 950 A.2d 1032, 1036 (Pa. Super. 2008); A party suffers prejudice when the trial court's error could have affected the verdict.

Trombetta v. Raymond James Financial Services, Inc., 907 A.2d 550, 561 (Pa. Super. 2006).

(1) Evidence Regarding Seat Belt Usage

¶ 19 In Motion *in Limine* No. 3, Gaudio asked the trial court for an order excluding, *inter alia*, any evidence or argument that the Deceased was not wearing his seat belt at the time of the accident. Gaudio further requested that the seat belt system in the Deceased's vehicle, including its role in the vehicle's overall restraint system, not be mentioned at trial, and that questions of defect and causation be decided without reference to the presence or use of a seat belt.

¶ 20 The trial court denied Gaudio's Motion *in Limine* No. 3, ruling that "the parties shall be permitted to include evidence and arguments regarding the pre-impact circumstances, but shall not be permitted to argue negligence or comparative fault of the decedent." Trial Court Order, 6/1/06, at 2. Based upon this ruling, Ford was permitted to introduce expert testimony at trial opining that the Deceased's failure to wear his seat belt explained why he was "out of position" and therefore too close to the air bag when it deployed. Notes of Testimony ("N.T."), 6/14/06, at 75. Ford's expert witnesses were also permitted to testify that the F-150's air bag system is referred to as a "supplemental restraint system" because the seat belts (lap and shoulder) are the primary restraint system and keep vehicle occupants in a proper seating position, thereby reducing the risk of them being out of position at

the time of air bag deployment. **See, e.g.**, 6/13/06 at 65-67, 134, 154, 222-23.

¶ 21 As part of Pennsylvania's Occupant Protection Act, section 4581 of the Vehicle Code is entitled "Restraint Systems." 75 Pa.C.S.A. § 4581. Subsection 4581(a)(2) requires drivers and front seat passengers to wear a properly adjusted and fastened safety seat belt. Subsection (e) then addresses the admissibility of evidence of non-use of a seat belt system in civil actions:

(e) Civil actions. In no event shall a violation or alleged violation of this subchapter be used as evidence in a trial of any civil action; nor shall any jury in a civil action be instructed that any conduct did constitute or could be interpreted by them to constitute a violation of this subchapter; nor shall failure to use a child passenger restraint system or safety seat belt system be considered as contributory negligence **nor shall failure to use such a system be admissible as evidence in the trial of any civil action. . . .**

75 Pa.C.S.A. § 4581(e) (emphasis added).

¶ 22 In this case, the trial court ruled that subsection 4581(e) "does not mandate an absolute bar" on evidence of seat belt usage, and that instead it merely prohibits the use of such evidence to prove contributory negligence. Trial Court Opinion, 6/14/07, at 7. The trial court found that the subsection does not prohibit the introduction of seat belt evidence "for the purpose of proving causation in a products liability claim," and that "to disallow such

evidence where it is necessary to disprove a products liability claim would be unjust." *Id.* at 8.

¶ 23 The application of a statute is a question of law, and our standard of review is plenary. *Commonwealth v. Baird*, 856 A.2d 114, 115 (Pa. Super. 2004). When interpreting a statute, the Statutory Construction Act dictates our approach. 1 Pa.C.S.A. § 1921; *Baird*, 856 A.2d at 115. "When the words of a statute are clear and free from all ambiguity, the letter of it is not to be disregarded under the pretext of pursuing its spirit." 1 Pa.C.S.A. § 1921(b). "The object of all interpretation and construction of statutes is to ascertain and effectuate the intention of the General Assembly." 1 Pa.C.S.A. § 1921(a). "When the words of a statute are clear and free from all ambiguity, they are presumed to be the best indication of legislative intent." *Chanceford Aviation Properties, L.L.P. v. Chanceford Tp. Bd. Of Supervisors*, 592 Pa. 100, 107-08, 923 A.2d 1099, 1104 (2007) (quoting *Hannaberry HVAC v. Workers' Comp. Appeal Bd. (Snyder Jr.)*, 575 Pa. 66, 77, 834 A.2d 524, 531 (2003)); *see also Commonwealth v. Bradley*, 575 Pa. 141, 151, 834 A.2d 1127, 1132 (2003) ("As a general rule, the best indication of legislative intent is the plain language of the statute.").

¶ 24 We find that the language in subsection 4581(e) highlighted above clearly and unambiguously expresses the intent of the Legislature that evidence of non-use of seat belts should be strictly prohibited in civil actions tried in Pennsylvania courts, for any purpose. Because the highlighted

language neither contains nor references any exceptions to its rule, we construe the legislative intent of the provision to be a blanket exclusion of evidence of seat belt usage in civil actions for any purpose, including to prove not only contributory negligence but also defect, causation and/or damages. ***Cf. Kmonk-Sullivan v. State Farm Mut. Auto. Ins. Co.***, 567 Pa. 514, 525, 788 A.2d 955, 962 (2001) (“As a matter of statutory interpretation, although ‘one is admonished to listen attentively to what a statute says[;][o]ne must also listen attentively to what it does not say.’”) (quoting Felix Frankfurter, *Some Reflections on the Reading of Statutes*, 47 Colum. L.Rev. 527, 536 (1947))).

¶ 25 We disagree with the dissent that subsection 4581(e) may be interpreted to preclude only evidence of contributory negligence, for at least two reasons. First, the highlighted language prohibits the use of non-seat belt usage “as evidence in the trial of any civil action,” without any limitation that the evidence at issue must pertain to contributory negligence. Listening attentively to what the statute does not say, we may not interpret the language to express a limitation it simply does not contain. Second, the third clause of the subsection in its entirety contains two independent provisions. The first provision is a specific bar to use of non-seat belt evidence to show contributory negligence (“nor shall failure to use a . . . safety seat belt system be considered as contributory negligence”). The second provision (the highlighted language) is a general bar to usage of

non-seat belt evidence for any purpose ("nor shall failure to use such a system be admissible as evidence in the trial of any civil action"). The dissent's recommended interpretation of the third clause would render the second provision as merely duplicative of the first provision, as both provisions would express precisely the same evidentiary exclusion (i.e., evidence to prove contributory negligence).⁵ Under our rules of statutory construction, we must give effect to every word in every provision of a statute, and we may not interpret statutory language in a manner that renders any provision as superfluous or mere surplusage. **Holland v. Marcy**, 584 Pa. 195, 206, 883 A.2d 449, 455 (2005) (plurality decision); **Keystone Aerial Surveys, Inc. v. Pa. Prop. & Cas. Ins. Guar. Ass'n**, 777 A.2d 84, 90 (Pa. Super. 2001), *affirmed*, 574 Pa. 147, 829 A.2d 297

⁵ We take issue with the trial court's reliance on this Court's decision in **Kreiensteck and Kreiensteck v. Saab-Scania A.B. et al.**, 2207 EDA 2001 (filed June 4, 2002). **Kreiensteck** was decided by unpublished memorandum and therefore has no precedential value. **See** 65 Pa. Code § 65.37 ("An unpublished memorandum decision shall not be relied upon by a Court or a party in any other action . . ."). Moreover, because one member of the three-judge panel dissented and a second concurred only in the result, the unpublished memorandum decision in **Kreiensteck** represented the views of a single judge. **See Commonwealth v. Blee**, 695 A.2d 802 (Pa. Super. 1997) (a decision offered by one member of a three-member Superior Court panel, with the remaining two judges either dissenting or concurring in the result, is of no precedential value); **McDermott v. Biddle**, 647 A.2d 514 (Pa. Super. 1994) (for any principle of law expressed in a decision of this Court to be considered precedent, it must command a majority of judges voting both as to disposition and principle of law expressed), *reversed on other grounds*, 544 Pa. 21, 674 A.2d 665 (1996). Thus, it is clear that even if published, **Kreiensteck** would have had no precedential value.

(2003); **Wiernik v. PHH U.S. Mortg. Corp.**, 736 A.2d 616, 620 (Pa. Super. 1999), *appeal denied*, 561 Pa. 700, 751 A.2d 193 (2000).

¶ 26 In at least three cases, this Court has interpreted the highlighted language in subsection 4581(e) to preclude the introduction of evidence of seat belt usage. In **Pulliam v. Fannie**, 850 A.2d 636, 641 (Pa. Super. 2004), *appeal denied*, 583 Pa. 696, 879 A.2d 783 (2005), this Court ruled that “[t]here is no ambiguity in the statute which sets forth an absolute prohibition against the introduction of such evidence and thus, we conclude that the court’s evidentiary ruling permitting inquiry into the matter was error.” In **Nicola v. Nicola**, 673 A.2d 950 (Pa. Super. 1996), this Court concluded that the language in subsection 4581(e) “speaks to the failure to use a safety seat belt system, generally, and directs that such facts cannot be considered contributory negligence *and cannot be used as evidence in the trial of any civil proceeding.*” **Id.** at 951 (emphasis added). And in **Grim v. Betz**, 539 A.2d 1365 (Pa. Super. 1988), we found that “Section (E) of § 4581 clearly states that the failure to use a ‘child passenger restraint system’ or ‘safety seat belt system’ shall not be considered, in any civil action, as contributory negligence, *and shall not be admissible as evidence in any civil action.*” **Id.** at 1369 (emphasis added).

¶ 27 Whether or not the application of a blanket exclusion of evidence of non-seat belt usage in a products liability case was “unjust”, as the trial court concluded, was not for the trial court and is not for this Court to

decide. In enacting subsection 4581(e), the Legislature determined the public policy of the Commonwealth with respect to this issue. **Commonwealth v. Newman**, 534 Pa. 424, 429, 633 A.2d 1069, 1071 (1993) ("Subject only to constitutional limitations, the legislature is always free to change the rules governing competency of witnesses and admissibility of evidence.").⁶ It is the function of this Court to determine the legislative intent of an enactment and give effect to that intention. **Commonwealth v. Reefer**, 816 A.2d 1136, 1141 (Pa. Super.), *appeal denied*, 574 Pa. 759, 831 A.2d 599 (2003); **Commonwealth v. Campbell**, 758 A.2d 1231, 1233-34 (Pa. Super. 2000). In this regard, we must assume that the Legislature understood that the outcomes of civil actions, including products liability claims for defectively designed vehicles, might be affected by a blanket rule prohibiting the introduction of evidence regarding

⁶ We reject Ford's contention that the evidentiary preclusion in subsection 4581(e) is unconstitutional under **Rich Hill Coal Co. v. Bashore**, 334 Pa. 449, 7 A.2d 302 (1939). In **Rich Hill**, our Supreme Court held that a rule of evidence adopted by the legislature may be unconstitutional if it either gives "probative value to a statement that has none" or if its application is not "impartial or uniform." *Id.* at 484-85, 7 A.2d at 319. The evidentiary rule in subsection 4581(e) does not give probative value to any statement, as it merely excludes certain evidence at trial. And it may be applied impartially and uniformly in this case, as neither party is permitted to introduce evidence regarding the F-150's seat belt system. The hypothetical issue raised by Ford in its brief, namely that in a proper case a plaintiff could introduce evidence that a vehicle occupant *was* using a seat belt (which the defendant could not rebut), is not before this Court and thus we will not address it.

seat belt usage. It is not this Court's role to substitute our judgment in this regard, just as it was not appropriate for the trial court to do so.

¶ 28 For these reasons, the trial court's denial of Gaudio's Motion *in Limine* No. 3 was error. In addition to its refusal to prohibit evidence of seat belt non-usage, the trial court should also have precluded evidence that the F-150 had a seat belt system and/or that the purpose of the seat belt system was to serve as the primary restraint system. In this regard, we find persuasive a decision from the United States District Court for the Eastern District of Philadelphia, **Russo v. Mazda Motor Corp.**, 1992 WL 210232 (E.D. Pa., August 17, 1992), in which the court found that "allowing Defendant to introduce evidence of the existence of the seat belt system falls but a half step short of allowing Defendant to introduce evidence of the decedent's failure to use the seat belt system." **Id.** at *2. To the extent that Ford introduced evidence relating to the existence and purpose of the F-150's seat belt system from which the jury could infer that the Deceased was not wearing a seat belt at the time of the accident, then the evidence was prohibited by subsection 4581(e).

¶ 29 Moreover, because subsection 4581(e) precluded the introduction of evidence related to the Deceased's non-use of the seat belt, the existence of a seat belt system in the F-150 and the purposes of that system were not matters at issue in the case. As a result of the statutory prohibition, such evidence was irrelevant based upon a lack of materiality. **See, e.g.,**

Commonwealth v. McNeely, 534 A.2d 778, 779-80 (Pa. Super. 1987) (“Relevance is comprised of two fundamental components: materiality and probative value. ... ‘If the evidence is offered to help prove a proposition which is not a matter in issue, the evidence is immaterial.’”) (quoting McCormick, *Evidence*, § 185, at 541 (Cleary 3rd ed. 1984))), *appeal denied*, 520 Pa. 582, 549 A.2d 915 (1988).

(2) Evidence Regarding Deceased’s Pre-Impact Conduct

¶ 30 In Motion *in Limine* No. 1, Gaudio asked the trial court for an order excluding any evidence or argument regarding the negligence or comparative fault of the Deceased.⁷ The trial court granted Gaudio’s request with respect to argument regarding Deceased’s negligence or comparative fault, but ruled that “[t]he parties shall be permitted to include evidence and arguments regarding the impact circumstances giving rise to the collision.” Trial Court Order, 6/1/06, at 5.

¶ 31 Based upon the trial court’s ruling, Ford’s expert witnesses were permitted to testify regarding the Deceased’s pre-impact conduct. For example, Dr. James Benedict offered the following testimony:

⁷ Gaudio’s Motions *in Limine* Nos. 7-10 requested orders prohibiting Ford’s expert witnesses from, *inter alia*, testifying about the pre-impact behavior of the Deceased. The trial court denied Motions Nos. 7-9 and granted in part and denied in part Motion No. 10, ruling that “such evidence may be introduced through expert testimony, so long as such testimony is based upon a reasonable degree of professional certainty.” Trial Court Order, 6/1/06, at 6.

Q. Now, Dr. Benedict, do you have an opinion or have you developed any conclusions with respect to this case that you hold to a reasonable degree of engineering certainty and medical certainty?

A. Yes, sir I have.

Q. What are those opinions, doctor?

A. My opinions [sic] basically that I believe it's my opinion to a reasonable degree of biomedical certainty that No. 1, [Deceased] is caught by surprise, that there's an element of surprise in this whole accident event, accident sequence. He is riding down a road that he is familiar with, he drives it on a regular basis, something on this day obviously, in my opinion, had him distracted because he was caught unaware, it is the whole accident sequence which is geared toward someone who is in a panic breaking, cannot control his vehicle, was cause unaware in a familiar interaction, so I think that's No. 1.

No. 2, is that it's my opinion that he is unrestrained at the time that this event occurred. No. 3, it is my opinion, during the braking phase because of whatever he is doing whether he is reaching down to the side for something, reaching for the radio, reaching for the ashtray, reaching for something on the floor, CB, the box on the seat, something has him distracted that I think begins to get him [sic] that he is not in a normal position because of his distraction.

I think that at the time he begins to realize - it is my opinion that at the time he begins to realize he is in danger, he is not in an optimal position to provide protection from either breaking the impact and that he is getting closer to the wheel, he is pre-impact braking which is going to be a panic type breaking, it is going to continue to move him forward and once he gets within a few inches of the wheel, then at the impact point he is going to be on to the wheel or very close to the wheel at the time of the interaction with the air bag.

* * *

It is my opinion also that had he been properly belted and properly seated at the start of this I think he would not have been fatally injured. The potential for serious injury would be markedly reduced.

N.T., 6/12/06, at 134-36.

¶ 32 Gaudio contends that such testimony wrongly injected negligence principles in a strict liability case and should have been ruled inadmissible because comparative negligence is not a defense in a strict liability case. Appellants' Brief at 17. Ford counters that while evidence of the Deceased's pre-impact conduct was inadmissible to prove contributory negligence, it was nevertheless admissible to prove lack of defect and causation. Appellee's Brief at 24-25. The trial court agreed with Ford, finding that while someone could "inappropriately" put forth "an argument regarding negligence on the part of the [Deceased], the fact is that [the evidence relating to pre-impact conduct] was not used in that fashion." Trial Court Opinion, 6/14/07, at 5-6. Instead, the trial court concluded that "the evidence was admitted to prove [Ford's] theory regarding the [Deceased's] position in the vehicle at the time of air bag deployment and at the time of the vehicle's impact with the embankment." *Id.* at 6.

¶ 33 Our Supreme Court has explained the underlying philosophical basis for recovery in strict liability cases as follows:

The development of a sophisticated and complex industrial society with its proliferation of new products and vast change in the private enterprise

system has inspired a change in legal philosophy from the principle of caveat emptor which prevailed in the early nineteenth century market place to [the] view that a supplier of products should be deemed to be 'the guarantor of his products' safety. The realities of our economic society as it exists today forces the conclusion that the risk of loss for injury resulting from defective products should be borne by the suppliers , principally because they are in a position to absorb the loss by distributing it as a cost of doing business. In an era of giant corporate structures, utilizing the national media to sell their wares, the original concern for an emerging manufacturing industry has given way to the view that it is now the consumer who must be protected. Courts have increasingly adopted the position that the risk of loss must be placed upon the supplier of the defective product without regard to fault or privity of contract.

Kimco Development Corp. v. Michael D's Carpet Outlets, 536 Pa. 1, 8-9, 637 A.2d 603, 606 (1994). For these reasons, the Supreme Court ruled that negligence concepts cannot be used to reduce the amount of recovery in a strict liability case, and that as a result comparative negligence may not be asserted as a defense in such actions. ***Id.*** at 8-9, 637 A.2d at 606-08 ("[W]e have been adamant that negligence concepts have no place in a strict liability action."); ***Phillips v. Cricket Lighters***, 576 Pa. at 655, 841 A.2d at 1006 (2003) (plurality) (same).

¶ 34 On the other hand, "[t]he progress of the law in extending liability without fault to product suppliers [has not been] in disregard to fundamentals pertaining to the law of causation." ***Bascelli v. Randy, Inc.***, 488 A.2d 1110, 1113 (Pa. Super. 1985) (quoting ***Oehler v. Davis***, 298 A.2d

895 (Pa. Super. 1972)). Accordingly, our Supreme Court has observed that "while evidence can be found inadmissible for one purpose, it may be admissible for another." **Spino v. John S. Tilley Ladder Co.**, 548 Pa. 286, 293, 696 A.2d 1169, 1172 (1997) (quoting **Bialek v. Pittsburgh Brewing Co.**, 430 Pa. 176, 185, 242 A.2d 231, 235 (1968)).

¶ 35 In applying these decisions, this Court has held that while evidence of a plaintiff's contributory negligence is generally inadmissible, there are certain limited exceptions in which the plaintiff's conduct in a particular case may be relevant. **See, e.g., Childers v. Power Line Equip. Rentals**, 681 A.2d 201, 207 (Pa. Super. 1996), *appeal denied*, 547 Pa. 735, 690 A.2d 236 (1997). Evidence of a plaintiff's voluntary assumption of the risk, misuse of a product, or highly reckless conduct is admissible to the extent that it relates to the issue of causation. **Clark v. Bil-Jax, Inc.**, 763 A.2d 920, 923 (Pa. Super. 2000) (quoting **Charlton v. Toyota Industrial Equipment**, 714 A.2d 1043, 1047 (Pa. Super. 1998)). To establish voluntary assumption of the risk, the defendant must show that the buyer knew of a defect and yet voluntarily and unreasonably proceeded to use the product. **Ferraro v. Ford Motor Co., Inc.**, 423 Pa. 423, 223 A.2d 746 (1966); **see also Charlton**, 714 A.2d at 1047 ("Evidence of contributory negligence, standing alone, is insufficient to prove a voluntary assumption of the risk..."). To establish misuse of the product, the defendant must show that the use was "unforeseeable or outrageous." **Childers**, 681 A.2d at 208. Highly reckless

conduct is akin to evidence of misuse and requires the defendant to prove that the use was "so extraordinary and unforeseeable as to constitute a superseding cause." **Dillinger v. Caterpillar, Inc.**, 959 F.2d 430, 431 (3d Cir. 1992); **see also Madonna v. Harley Davidson, Inc.**, 708 A.2d 507 (Pa. Super. 1998) (evidence of plaintiff's intoxication was admissible regarding causation); **Bascelli**, 488 A.2d at 1113 (evidence that plaintiff was operating motorcycle at more than 100 mph was admissible as to cause of accident).

¶ 36 Unlike these limited exceptions, "evidence of a plaintiff's ordinary negligence may not be admitted in a strict products liability action ... unless it is shown that the accident was **solely** the result of the user's conduct and not related in any [way] with the alleged defect in the product." **Charlton**, 714 A.2d at 1047 (emphasis in original). As we explained in **Madonna**, "a user's negligence is not relevant if the product defect contributed in any way to the harm." **Madonna**, 708 A.2d at 509.

¶ 37 In the case *sub judice*, Ford does not argue that any of these limited exceptions apply with regard to the Deceased's pre-impact conduct. The record contains no evidence that the Deceased was aware of any defect in his truck's air bag system or that he voluntarily assumed any risk in connection therewith, and Ford does not argue that the Deceased's alleged pre-impact conduct was unforeseeable, outrageous, or extraordinary. As

such, the exceptions for voluntary assumption of the risk, misuse of product, and highly reckless behavior do not apply here.

¶ 38 Instead, the evidence offered by Ford's expert witnesses regarding the Deceased's pre-impact conduct amounts to allegations of ordinary contributory negligence – claims that the Deceased caused the accident and his death by, for example, reaching for the radio, the CB, or something on the floor. Although Ford argues that this evidence was relevant to the issue of causation because it tended to prove that the Deceased was out of position at the time of air bag deployment, it was not admissible because the accident was not necessarily "**solely** the result of the Deceased's conduct and not related in any way with the alleged defect in the product." *Charlton*, 714 A.2d at 1047. Under one of her two principal theories of liability presented to the jury, Gaudio contended that the air bag system in the F-150 was defective because it deployed at a low collision speed where it should not have deployed at all. Based upon this theory of liability, the alleged product defect unquestionably contributed to the Deceased's death, regardless of whether or not he was out of position at the time of deployment.

¶ 39 Gaudio's second theory of liability, that the air bag deployed too late and thus caused the Deceased's body to be too close to the steering wheel at the time of deployment, is more problematic. As Ford correctly notes, this alleged defect could only have caused the Deceased's death if he had

been *in position* at the time of the accident, and not *out of position* as a result of other pre-impact conduct. Appellee's Brief at 27. As a result, under this theory of liability, evidence of the Deceased's position in the truck at the time of the accident is clearly relevant to the issue of causation.

¶ 40 We nevertheless conclude that the trial court erred in permitting Ford's expert witnesses to testify regarding possible explanations as to why the Deceased might have been out of position in the truck. Evidence that the Deceased was out of position was relevant and admissible as to the issue of causation. But evidence purporting to explain **why** he was out of position (e.g., because he was reaching for the radio) was neither relevant nor admissible. This "why" evidence injected otherwise inadmissible contributory negligence testimony into the trial without providing any relevant information regarding either defect or causation. The trial court should have permitted Ford to attempt to demonstrate that Gaudio was out of position at the time of the accident, but Ford should not have been allowed to present testimony to explain **why** he was out of position.

¶ 41 It is not necessary to address in detail Gaudio's argument that the testimony regarding the Deceased's pre-impact conduct was speculative. We do note, however, that Dr. Benedict admitted that no one could know for certain what actually happened at the time of the accident or why the Deceased was allegedly out of position. N.T., 6/13/06, at 110, 122, 162. As such, it is difficult to understand how Dr. Benedict (or Ford's other expert

witnesses) could have testified with a reasonable degree of professional certainty on these matters. The trial court allowed the testimony because it found that "it was not based purely upon speculation, but upon forensic evidence found in the vehicle." Trial Court Opinion, 6/14/07, at 6. This forensic evidence, however, including blood spatters in the truck, tended to show (if anything) only that the Deceased was out of position at the time of deployment. The evidence did not provide any sound basis to permit Ford's experts to speculate as to why or how the Deceased might have gotten out of position (e.g., reaching for the radio, something on the floor, for the ashtray or the CB).

¶ 42 For the reasons set forth herein, we conclude that the trial court's erroneous evidentiary rulings regarding seat belt non-usage and the Deceased's pre-impact conduct could have affected the verdict and thus Gaudio was prejudiced and is entitled to a new trial. ***Trombetta v. Raymond James Financial Services, Inc.***, 907 A.2d 550, 561 (Pa. Super. 2006). Allowing evidence of the Deceased's non-use of a seat belt and testimony regarding possible negligent pre-impact conduct may well have left the jury with the impression that its decision should have been based, in whole or in part, on a comparison between the relative fault of the Deceased in operating the vehicle and that of Ford in designing it. This was prejudicial, since the focus in all products liability cases must be on the product and not on the conduct of the parties. ***See, e.g., Hutchinson v.***

Penske Truck Leasing Co., 876 A.2d 978, 983 (Pa. Super. 2005), *affirmed*, 592 Pa. 38, 922 A.2d 890 (2007). We address the remaining issues raised by the parties to assist the trial court on remand.

(3) Evidence of Compliance with Federal Safety Standards

¶ 43 In its pretrial order dated June 12, 2006, the trial court granted Gaudio's Motion *In Limine* No. 5, excluding "any evidence or argument of compliance with federal standards and/or industry practice" In a footnote, the trial court warned that "[s]hould [Gaudio] introduce evidence of industry standards during their witnesses' testimony or during cross-examination of [Ford's] witnesses or through the introduction of any exhibit containing evidence of industry standards, [Ford] may then present evidence of industry standards." Trial Court Order, 6/14/06, at 2 n.1.

¶ 44 During trial, the trial court allowed at least two of Ford's experts (Dr. Benedict and Dr. Russell Brantman) to testify regarding the F-150's compliance with Federal Motor Vehicle Safety Standard 208 ("FMVSS 208") [49 C.F.R. § 571.208]. N.T., 6/13/06, at 23-25; N.T., 6/14/06, at 57. FMVSS 208 contains a complex set of federal regulations requiring vehicle manufacturers to install passive restraint systems capable of protecting crash test dummies in frontal barrier crashes at 30 miles per hour. The trial court permitted Ford to introduce testimony regarding its compliance with FMVSS 208 because it found that Gaudio had "opened the door" to such testimony as a result of her introduction of (1) expert testimony using

industry standards to establish a timing defect in the deployment of the air bag, and (2) the results of a government investigation of the Deceased's accident.

¶ 45 With regard to the expert testimony, the trial court focused on the testimony of Geoffrey Mahon, an engineering expert called by Gaudio. Mr. Mahon testified that the F-150's air bag system deployed late because, *inter alia*, it failed the "5 inch – 30 millisecond" timing rule used in the automotive industry (pursuant to which an air bag should fully deploy 30 milliseconds before the driver has moved 5 inches forward). N.T., 6/8/06, at 35-36.

¶ 46 We first note our agreement with the trial court's initial decision not to allow evidence of compliance with industry or government standards. In ***Lewis v. Coffing Hoist Division, Duff-Norton Company, Inc.***, 515 Pa. 334, 528 A.2d 590 (1987), our Supreme Court concluded that "the question of whether or not the defendant has complied with industry standards improperly focuses on the quality of the defendant's conduct in making its design choice, and not on the attributes of the product itself." ***Id.*** at 342, 528 A.2d at 594 (citing ***Lenhardt v. Ford Motor Co.***, 102 Wash.2d 208, 683 P.2d 1097 (1984)). Accordingly, the Court held that "such evidence should be excluded because it tends to mislead the jury's attention from their proper inquiry," namely "the quality or design of the product in

question."⁸ *Id.*; *see also Spino*, 548 Pa. at 1172, 696 A.2d at 292 (citing *Lewis*). The Supreme Court also indicated that "there is no relevance in the fact that such a design is widespread in the industry." *Id.* at 342-43, 528 A.2d at 594.

¶ 47 In subsequent cases, the rationale in *Lewis* for excluding evidence of compliance with industry standards has been extended to exclude evidence of compliance with government standards. *See, e.g., Sheenan v. Cincinnati Shaper Co.*, 555 A.2d 1352, 1355 (Pa. Super.) (evidence of compliance with Occupational Safety and Health Administration ("OSHA") standards excluded), *appeal denied*, 523 Pa. 633, 564 A.2d 1261 (1989); *Majdic v. Cincinnati Machine Co.*, 537 A.2d 334 (Pa. Super.) (evidence of compliance with American National Standards Institute ("ANSI") safety standards excluded), *appeal denied*, 520 Pa. 594, 552 A.2d 249 (1988); *cf. Harsh v. Petroll*, 840 A.2d 404, 425 (Pa. Commw. 2003) (based upon

⁸ Ford argues that a decision of this Court, *Jackson v. Spagnola*, 503 A.2d 944 (Pa. Super. 1987), compels a different result. In *Jackson*, we concluded that "[w]hile compliance with FMVSS is not conclusive as to the absence of liability under a theory of strict liability, compliance is of probative value in determining whether there was a defect." *Id.* at 948. In our view, however, *Jackson* was implicitly overruled by our Supreme Court's decision in *Lewis*, the first case from our Supreme Court to address evidence of compliance with industry or federal standards. In *Lewis*, the Court expressly rejected decisions from other courts permitting "manufacturer-defendants to prove that the quality or design of the product in question comports with industry standards or is in widespread industry use." *Lewis*, 515 Pa. at 343, 528 A.2d at 594; *see also Harsh*, 840 A.2d 404, 425 (Pa. Commw. 2003) (refusing to follow *Jackson* based upon *Lewis*).

Lewis, evidence of compliance with FMVSS standards is inadmissible in products liability actions); **but see Cave v. Wampler Foods, Inc.**, 961 A.2d 864, 869 (Pa. Super. 2008) (evidence of compliance with a federal regulation directly relevant to prove defect “under the unique facts of this food products claim” admissible, so long as the evidence not used to demonstrate defendant’s due care in violation of **Lewis**).

¶ 48 We also agree with the trial court that a plaintiff may “open the door” to the introduction of evidence of compliance with industry or government standards by a defendant if a plaintiff’s witness testifies about industry or government standards during either direct or cross-examination. **See, e.g., Castner v. Milwaukee Electric Tool Corp.**, 2004 U.S. Dist. Lexis 22488 at *2 (E.D. Pa., October 19, 2004). In this regard, however, the openings so created should be reasonably related in scope to the substance of the offending testimony. In **Leaphart v. Whiting Corp.**, 564 A.2d 165 (Pa. Super.), *appeal denied*, 525 Pa. 619, 577 A.2d 890 (1989), for example, this Court concluded that “even if the evidence [of industry standards] was in fact inadmissible, the appellants, having introduced the evidence in their case in chief, *cannot later deprive their opposition of the privilege of denying it.*” **Id.** at 171 (emphasis added). Similarly, in **Markovich v. Bell Helicopter Textron, Inc.**, 805 F.Supp. 1231 (E.D. Pa. 1992), a case relied upon by the trial court, the district court concluded that “[h]aving introduced this testimony [of industry standards] during their case in chief, the plaintiffs

cannot preclude the defendants from offering testimony in their case in chief *to rebut the statements made by [plaintiffs' expert].*" **Id.** at 1240.

¶ 49 As the **Leaphart** and **Markovich** cases make clear, a defendant's opportunity to introduce evidence of compliance with industry or government standards is limited to testimony necessary to respond to the evidence presented (i.e., to deny or rebut it). In the case *sub judice*, however, the trial court concluded that because Gaudio's witness (Mr. Mahon) testified regarding an industry standard (the "5 inch - 30 millisecond" timing rule), this opened the door generally to permit Ford to introduce evidence of compliance with any industry and/or government standards it so chose to discuss. Neither the trial court nor Ford contends that the testimony of Ford's experts regarding compliance with FMVSS 208 constituted an attempt to rebut or deny Mr. Mahon's testimony regarding the "5 inch - 30 millisecond" timing rule. In the absence of any basis for concluding that compliance with FMVSS 208 was reasonably related to Mr. Mahon's contention that the F-150's air bag system did not meet the industry's "5 inch - 30 millisecond" timing rule (including, for example, some contention that compliance with FMVSS 208 reasonably involved issues relating to the movement of the test dummy or the timing of air bag deployment), the testimony of Ford's experts regarding compliance with FMVSS 208 should not have been permitted.

¶ 50 We likewise disagree with the trial court's contention that references by Gaudio's counsel and expert witness, Bruce Enz,⁹ to the findings in the Veridian Report opened the door to evidence regarding FMVSS 208. The Veridian Report described the results of a NHTSA investigation into the circumstances and causes of the Deceased's accident. Once introduced by Gaudio, Ford was clearly entitled to (and did) introduce evidence to rebut or deny the factual findings and conclusions in that government report, including the results of its own investigations of the accident. The Veridian Report did not, however, contain any evidence regarding compliance with FMVSS 208, and therefore its introduction did not open the door to permit Ford's expert to testify regarding Ford's compliance with FMVSS 208.

(4) Various Statistical Evidence

¶ 51 Next Gaudio challenges various evidentiary rulings, which she lumps together as "generalized statistics" or "evidence of Ford's due care." Appellant's Brief at 31, 42. First, Gaudio objects to testimony from a Ford

⁹ In his opening statement, Gaudio's counsel stated that "it is our belief and it was the government's belief, that this accident occurred at a speed running your truck into a wall at somewhere between nine and eleven miles an hour. That is all. It was the government's conclusion and the conclusion of our experts that this occurred because this air bag fired late." N.T., 6/6/06, at 45. Mr. Enz's testimony included references to the Veridian Report as well. *Id.* at 144-162.

expert, Dr. Brantman, that NHTSA SCI¹⁰ statistics show that only two fatalities have resulted from air bag deployments in Ford F-150s:

As with any air bag system on any vehicle there is always some risk of the person ends up in an extreme out of position situation. Fortunately that is an extremely rare event. Really very rare event. Indeed if you look at the NHTSA SCI data base for the 1994 to 1996 F-150, that is 1994, 1995 1996 F-150 besides Mr. Gaudio's fatality there is only one other fatality in the SCI data base due to an air bag deployment. Put that into perspective, there are almost two million of these vehicles produced between 1994 and 1996. It had an exposure of over ten years of the statistic I'm quoting of two cases total, that includes Mr. Gaudio's is right to the present. That is over ten years of exposure in terms of the way we look at things that is two million vehicles, ten years of exposure, that is 20 million vehicle years of exposure, 20 million vehicle years of exposure and only two fatalities due to the air bag. So you can see how rare an event of this type of thing is. . . .

N.T., 6/14/06, at 74-75.

¶ 52 Gaudio argues that the jury should not have been allowed to hear this testimony because it reflected upon Ford's due care in designing the air bag system in the F-150. Appellant's Brief at 31. Gaudio further claims that it was confusing and misleading to the jury because the data was not restricted to low speed crashes. *Id.* at 33. Finally, Gaudio contends that Dr. Brantman was not a statistician and did not conduct the statistical surveys himself. *Id.* at 34.

¹⁰ National Highway Traffic Safety Administration Special Crash Investigations.

¶ 53 In **Spino**, our Supreme Court affirmed a trial court's decision to allow evidence of the lack of prior claims in a design defect case, even if the evidence also tended to prove that the defendant had acted with due care.

Spino, 548 Pa. at 296, 696 A.2d at 1173:

This Court is fully cognizant of the danger of misleading a jury and the problems of prejudice in the inability of the opposing party to meet the evidence. However, there is little logic in allowing the admission of prior similar accidents but never admitting their absence. . . . Opposing counsel can, and indeed should, soundly attack any prior claims testimony. We believe it is incumbent upon the party opposing the absence of prior claims testimony to attack such evidence through cross-examination, as well as request a cautionary or limiting instruction be provided.

Id. at 298, 696 A.2d at 1174-75.

¶ 54 In so ruling, the Supreme Court in **Spino** set forth two requirements for the introduction of lack of prior claims testimony: (1) the evidence must be relevant to the issue of causation, and (2) the offering party must lay a proper foundation. **Id.** at 296, 696 A.2d at 1173. The Court held that in determining whether a proper foundation has been laid, a trial court must determine whether the offering party has established that "that they would have known about the prior, substantially similar accidents involving the product at issue." **Id.** To establish this foundation, the offering party must show that "the accident occurred while others were using a product similar to that which caused plaintiff's injury." **Id.**

¶ 55 We agree with the trial court that these two requirements were satisfied in this case. First, as the above-quoted passage demonstrates, Dr. Brantman offered the NHTSA SCI data as evidence of causation, *i.e.*, to demonstrate how seldom drivers in F-150s with air bags become "out of position" during accidents resulting in fatalities. Second, a sufficient foundation was laid, as Dr. Brantman's testimony referenced accident data for Ford F-150 trucks produced in 1994-1996 -- the same make, model and year of manufacture of the truck driven by the Deceased, along with the other years of manufacture for the same air bag system design. While it is true, as Gaudio contends, that the statistics cited by Dr. Brantman did not focus specifically on low-speed crashes, it is also true that Dr. Brantman did not attempt to manipulate the data in Ford's favor -- instead, he merely cited to all of the data compiled by a government agency for relevant year Ford F-150s, data which would include all reported accidents (including those occurring at low speeds). We note that Gaudio's counsel questioned Dr. Brantman regarding the testimony on the NHTSA SCI data at some length on cross-examination. N.T., 6/14/06, at 158-161.

¶ 56 We disagree with Gaudio's contention that if we accept the Commonwealth Court's decision in *Harsh*, the result on this issue would be different. In *Harsh*, three passengers in a vehicle manufactured by General Motors ("GM") died in a post-crash fire. The trial court precluded a GM expert from testifying regarding the frequency of post-crash fires based on

statistics produced by the Fatal Accident Reporting System (FARS), a database maintained by the NHTSA. The Commonwealth Court affirmed this ruling on the grounds that GM had not established a foundation for the testimony. **Harsh**, 840 A.2d at 429. Among other things, GM's expert could not identify the types of vehicles involved in the collisions or whether their occupants were killed as a result of the impact or the post-crash fire. **Id.** As such, the Commonwealth Court concluded that "there was no basis to prove that the incidents described in the statistical reports were sufficiently similar to the Harsh incident." **Id.** In contrast, the statistics presented by Dr. Brantman in this case were specifically limited to incidents involving Ford F-150s for the relevant years of manufacture.

¶ 57 Second, Gaudio argues that the trial court erred in permitting Dr. Brantman to testify that the 1994 to 1996 Ford F-150 had received a "Five Star" safety rating from the NHTSA and a good "injury rating" from the Highway Loss Data Institute. Appellant's Brief at 35. We agree. As explained hereinabove, manufacturers may not attempt to prove the quality or design of their product by showing that it comports with industry or government standards or is in widespread industry use. **See, e.g., Lewis**, 528 Pa. at 342-44, 528 A.2d at 593-94. As such, comparisons between the safety ratings of the F-150 and those of other vehicles is not permitted in a strict liability design defect case.

¶ 58 Third, Gaudio contends that the trial court erred in permitting Dr. Brantman to testify that the air bag system in the F-150 had good or "acceptable" deployment times as compared to other vehicles. Appellant's Brief at 36. Dr. Brantman testified that "all the manufacturers have the must fire conditions that range from about twelve to fifteen miles per hour," N.T., 6/14/06, at 55-56, and later, that "you also have the opinions of all of the car manufacturers who basically have a must fire set between twelve and fifteen." *Id.* at 73-74. Although this testimony appears to violate the **Lewis** rule against the introduction of evidence of trade usage, on this issue Gaudio opened the door to permit Dr. Brantman to so testify since Gaudio's own expert, Mr. Mahon, offered substantially identical testimony on cross-examination earlier at trial:

- Q. [] Now you say in your report that generally an air bag is required for an unbelted occupant in a front barrier crash above twelve to fourteen miles per hour correct?
- A. Yes and *that is basically what most of the car companies in the world use as their unbelted must fire thresholds.*
- Q. Must fire twelve to fourteen, correct?
- A. Correct, some cars are a little bit higher they go to sixteen and some go down to eleven but realistically twelve to fourteen *is sort of where most people are.*

N.T., 6/8/06, at 108 (emphasis added).

¶ 59 Finally, Gaudio objects to testimony regarding changes to FMVSS 208 that allowed Ford to de-power air bags in years after 1996. Appellant's Brief

at 45. Gaudio asserts that this testimony related only to years after the F-150 at issue here had already been sold, and that “post-manufacture” evidence was therefore irrelevant to any issue in the case. *Id.* We note, however, that Gaudio did not preserve this issue for appeal, as no objection to the testimony was asserted at trial. *See, e.g., Bennyhoff v. Pappert*, 790 A.2d 313, 321 (Pa. Super. 2001), *appeal denied*, 573 Pa. 682, 823 A.2d 143 (2003). Moreover, the testimony in question (re: de-powering air bags) was elicited by Gaudio’s counsel on cross-examination. Ford did not raise the issue, and it would not have come up at all but for the question on cross-examination. As a result, the trial court committed no error in this regard.

(5) Risk-Benefit Analysis

¶ 60 In Motion *in Limine* No. 2, Gaudio asked the trial court to exclude, *inter alia*, any risk/benefits evidence or arguments to the jury, including the exclusion of any evidence relating the benefits or risks of the use of air bags. The trial court denied this motion. On appeal, Gaudio contends that Ford’s expert (Dr. Brantman) should not have been allowed to testify about Ford’s development of the air bag system in the 1996 F-150, including its reasons for decisions regarding the location of sensors and deployment speeds.

¶ 61 In this regard, Gaudio argues that evidence of risks and benefits is strictly prohibited, relying primarily on our Supreme Court’s decision in *Lewis*. While it is true that the Supreme Court in *Lewis* declined to define

"defect" in product liability cases using a risk-benefit approach, **Lewis**, 528 Pa. at 342-44, 528 A.2d at 593-94, it did not rule that the jury could not hear evidence of the risks and benefits of a product's design in an appropriate case. Such is particularly true in cases decided on the crashworthiness theory of liability, since in these cases a plaintiff must prove not only that the design was defective but also that "an alternative, *safer* design practicable under the circumstances existed." **Kupetz v. Deere & Co.**, 644 A.2d 1213, 1218 (Pa. Super. 1994) (emphasis added), *cf.* **Habacker v. Clark Equip. Co.**, 942 F.2d 210, 215 (3d Cir. 1991) (crashworthiness liability appropriate where "an alternative, feasible, safer design would have lessened or eliminated the injury plaintiff suffered. If no such alternative feasible design existed when the product was manufactured, then the design cannot be said to be 'defective'.").

¶ 62 As such, this Court has made clear that evidence of the risks and benefits of the allegedly defective product may be relevant in a design defect case¹¹:

¹¹ Under **Azzarello v. Black Bros. Co.**, 480 Pa. 547, 391 A.2d 1020 (1978), it is for the trial court, in the first instance, to conduct a risk/benefit analysis regarding whether the benefits of the alternate design outweighs its risks. In its written opinion, the trial court in this case fulfilled its function in this regard. Trial Court Opinion, 6/14/07, at 14 ("Applying these principles to the present case, the trial court allowed [Ford] to present evidence involving a risk/benefit analysis. Such evidence was then used by the trial court to rule on [Ford's] Motion for Compulsory Nonsuit. The trial court determined that recovery was appropriate under [Gaudio's] theory of the case."). We find no error in permitting the jury to receive and consider such

There can be no question that terms such as 'safeness' and 'defective' are terms of art subject to relative meaning. As our Supreme Court stated in **Spino**, 'the question is whether the product could have been designed more safely.' This passage suggests an analysis of relativity. A manufacturer could build automobiles to more closely resemble tanks. This might make them safer but, from a societal perspective, it is unlikely doing so would be viewed as a valid trade-off, particularly if, in the process, other danger is created.

* * *

Among other factors . . . for determining whether a product is 'defective' is 'the adverse consequences to the product and to the consumer that would result from a safer design.' . . . If, in fact, making the [product] in question 'safer' for its occupants also created an 'unbelievable hazard' to others, the risk-utility is essentially negative. The safety utility to the occupant would seemingly be outweighed by the extra risk created to others. The same could be said if, as used in the example above, an automobile were made to resemble a tank. It might make its occupants safer, but if in doing so it creates an unacceptable hazard to other motorists or pedestrians, the risk-utility is negative and the product design feature should be thought of as a negative, not a positive.

Phatak, 756 A.2d at 694; **see also** **Duchess v. Langston Corp.**, 564 Pa. 529, 560, 769 A.2d 1131, 1150 (2001) ("Langston also could have addressed the trade-offs associated with the design process on such terms,

evidence, since the jury must ultimately decide whether the product was defective and whether an alternative, safer design existed. **See Phatak, v. United Chair Co.**, 756 A.2d 690, 694 (Pa. Super. 2000) ("many factors could be weighed *by the jury* in reaching the ultimate conclusion whether the product was defective," and the risks and benefits of the alternative design "enters into the equation of whether the product is 'defective' ") (emphasis added).

for example, by pointing out that an interlock would require substantial adjustments to the set-up process that were not warranted given the safety of the existing design.”).

¶ 63 In the case *sub judice*, Mr. Mahon testified at length regarding the alleged defects in the F-150 air bag system. According to Mr. Mahon, the air bag system in the F-150 was defective because it only employed two deployment sensors, mounted side by side relatively high on the front end of the truck. Having just two sensors mounted in upper locations, Mr. Mahon testified, caused the air bags to deploy too late in the event of a low-speed crash. Mr. Mahon further testified that a safer, feasible alternative deployment sensor system was available to Ford at the time of design. Specifically, Mr. Mahon indicated that the system would have been safer if Ford had added a third deployment sensor and situated the three sensors in a triangle or inverted triangle. Mr. Mahon also explained that Ford should have used then-available (but more expensive) higher bias sensors with stronger magnets. According to Mr. Mahon, with three higher bias sensors situated in a triangle design, the air bag that killed the Deceased would either not have deployed at all (due to the low speed of the crash) or would not have deployed late (i.e., when his head was too close to the wheel).

See generally N.T., 6/8/06, at 14-104.

¶ 64 In response, Dr. Brantman defended the location of the deployment sensors, testifying that Ford evaluated various sensor locations in a wide

variety of tests – including at high and low speeds, rough road conditions (e.g., off road, over railroad tracks), and different types of collisions (e.g., front and side). Dr. Brantman further explained that no sensor system can be designed to deploy at the same speed in all conditions, and that instead such systems must be designed to deploy over a range of speeds. He explained that Ford chose eight miles per hour as its “no fire” speed and fourteen miles per hour as its “must deploy” speed. Over this range from eight to fourteen miles per hour, Ford’s intention was to design a system that never deployed in an eight mile per hour crash, deployed half of the time at eleven miles per hour (the center point, or “grey zone”), and always deployed at fourteen miles per hour. According to Dr. Brantman, Ford used the results of its testing to select the “best overall system that would work to not deploy in a whole set of rough road conditions at eight miles per hour while still providing a timely deployment in the must fire conditions.” N.T., 8/14/06, at 55.

¶ 65 We disagree with Gaudio’s contention that Dr. Brantman’s testimony constituted impermissible “risk-benefit analysis”. Dr. Brantman’s testimony raised legitimate factual issues for the jury to consider, including whether the alternative design proposed by Mr. Mahon (three high bias sensors in a triangle configuration) was a safer design overall. For example, considerable disagreement existed over the exact speed at which the Deceased was traveling when he struck the embankment – Gaudio’s expert (Bruce Enz)

opined that it was at less than nine miles per hour, Ford's expert (Dr. Geoff Germane) believed it to be closer to fourteen miles per hour, and the government's Veridian Report calculated it at 11.6 miles per hour. Dr. Brantman testified that while Ford could have designed the sensor system never to deploy at 11.6 miles per hour per the Veridian estimate (using configurations and high bias sensors like those proposed by Mr. Mahon), but that to do so would have required it to increase the "must deploy" end of its deployment range to well above fourteen miles per hour – which would ultimately result in a less safe system overall, since more injuries and fatalities occur in higher speed crashes. *Id.* at 67-73. Given our Supreme Court's admonition that "in a design defect case, the question is whether the product could have been designed more safely," *Spino*, 548 Pa. at 293, 696 A.2d at 1172, Dr. Brantman's critique of Mr. Mahon's proposed alternative design was relevant and admissible.

Jury Instructions

¶ 66 A trial court must instruct the jury on the correct legal principles applicable to the facts presented at trial. *Commonwealth v. Cox*, 546 Pa. 515, 530, 686 A.2d 1279, 1286 (1996); *Commonwealth v. Matroni*, 923 A.2d 444, 452 (Pa. Super.), *appeal denied*, 597 Pa. 729, 952 A.2d 675 (2007). A trial court has wide latitude choosing the precise language of the charge, but in all instances must fully and adequately convey the applicable law to the jury. *Wilson v. Anderson*, 616 A.2d 34, 36 (Pa. Super. 1992).

¶ 67 Gaudio raises four objections to the trial court's charge to the jury in this case. First, Gaudio contends that the trial court failed to instruct the jury that evidence of Ford's due care was not relevant to its deliberations. Gaudio's requested jury instruction provided in relevant part that Ford "is legally responsible for the consequences of selling an unsafe product even if you might otherwise find that Ford acted with reasonable care in designing, manufacturing and marketing the product. . . . You are to judge the product not the defendant."

¶ 68 The trial court rejected Gaudio's proposed instruction in favor of the following:

The supplier of a product is liable for the injuries caused to a Plaintiff by a defect in the article which existed when the product left the possession of the supplier. **Such liability is imposed even if the supplier has taken all possible care in the preparation and sale of the product. The manufacturer of a product is a guarantor of its safety.** . . . If you find that the product at the time it left [Ford's] control lacked any element necessary to make it safe for its intended use or contained any condition that made it unsafe for its intended use and there was an alternative safer design then the product was defective. [Ford] is liable for all harm caused by the defect.

N.T., 6/15/06, at 15-16 (emphasis added). While not the precise language preferred by Gaudio, the trial court's instruction, in particular the highlighted language, accurately and clearly conveyed to the jury that it should not consider Ford's due care in reaching its decision.