The Products Liability Coordinator. A Partial Solution

Phillip E. Downs

Florida State University

Douglas N. Behrman

Florida State University

Product liability problems have beset businesses for the past decade. Lack of availability of products liability insurance, soaring insurance premiums, proliferation of products liability lawsuits, astronomical damage awards and ever changing products liability laws have created severe problems in many industries. While many states are enacting new products liability laws modeled after federal legislation to ease the burden, businesses must take the initiative to solve their own problems. Most companies have relied on their legal staffs to deal with product liability. This paper presents an organizational change that can help manufacturers cope with products liability. A products liability coordinator can generate, process, and disseminate relevant information in this dynamic area and oversee corporate strategic decisions which might result in products liability.

INTRODUCTION

Products liability, while certainly not a new business concern, has been the subject of much consternation and despair during the latter half of the 1970s and early 1980s. Problems related to products liability have reached crisis dimensions within the insurance industry and among manufacturers of products as diverse as football helmets and hair rollers. The purpose of this article is to: 1) review the major problems confronting business with respect to products liability and the legal developments that precipitated the current crisis; 2) explore solutions to the products liability crisis; and 3) present a comprehensive, company-wide strategy designed to minimize products liability exposure.

© 1986, Academy of Marketing Science Journal of the Academy of Marketing Science Fall, 1986, Vol. 14, No. 3, 058-065 0092-0703/86/1403-0058 \$2.00

PROBLEMS

A devastating set of interrelated products-liability problems have beset businesses. These problems include the proliferation of products liability cases in the last seven years, the skyrocketing amounts of the damage awards, lack of availability of products liability insurance and the related problem of astronomical premiums for such coverage, the tremendous and rapid change in products liability law, the stifling effect that products liability cases have on product innovation, and the trend toward intraindustry joint liability. Although there is no doubt about the complexity and existence of these problems, many conflicting sets of facts and figures are available to argue one's case in court (Morgan 1982).

Proliferation of Liability Cases

Only a decade ago relatively few product liability cases were filed each year. Recently this has not been the case. In fact, in 1976 the U.S. Department of Commerce reported that approximately 84,000 product liability suits were filed in 1976 ("The Devil's ..." 1983). Other sources indicated that the number of product liability cases filed in Federal Courts around the country has more than doubled in the last three years. The 9,071 cases in 1981 represent over a 100% increase compared to 4,372 filed in 1978 (Geisel 1981a).

It is significant to note that this rapidly increasing rate of product liability claims has not been accompanied by a like increase in the number of product related accidents occurring during this same time period ("Executive Summary..." 1977). Other factors besides the defectiveness of products were responsible for this sudden and significant increase in product liability claims. Several of the most important factors that have contributed to the dynamic increase in product liability claims are discussed later in this article.

Amounts of Damage Awards

The average amount of jury-decided settlements and the number of big-dollar settlements have increased dramatically in the past decade. A survey done by The Research Group for the Interagency Task Force on Product Liability demonstrated that average awards for product liability cases selected frcm eight representative states from 1971 to 1977 had jumped to \$220,000 ("An Ounce..." 1977). Another recent study performed by the Alliance of American Insurers focused on 174 separate incidents representing only large-loss liability claims closed during 1979. In all, these claims involved 195 claimants and resulted in insurance claims of slightly more than \$60 billion, an average of \$386,587 per incident ("Can Monstrous..." 1980).

Additionally, plaintiffs today are seeking punitive damage judgments against corporations. Since 1976 there has been a trend among jury trials for the juries to award punitive damages ("A Product Liability..." 1980).

An impressive list of damage awards that exceed one million dollars had developed prior to 1978. A few selected examples of these awards include:

- \$7.0 million award to a youth whose neck was broken when he dove into a municipal swimming pool (Gorskay 1978).
- 2) \$3.5 million award to a man who received head and brain injuries from a mining machine (Hoenig 1977).
- \$1.75 million award to a farmer and his wife when the farmer was injured while operating a hydraulic press (Hoenig 1977).
- 4) \$5.3 million to a boy whose neck was broken in a football game (judgment went against the helmet manufacturer) (Hoenig 1977).

While the aforementioned individual claims are large enough to cause great concern to insurers and insured alike, product liability claims in which many people are injured in a single occurrence, or identical situations across multiple occurrences, result in significantly larger awards.

An estimated damage award resulting from alleged deformity of children whose mothers had taken an anticholesterol drug and a thalidomide sleeping pill was \$4.30 million. It was reported that \$30 million was paid to farmers whose animals had been destroyed when polybraminated biphenyl was inadvertently mixed into the animal feed. Three hundred additional claims were pending in that case, and more claims were expected (Gorskay 1978).

Despite the astronomical amounts of the claims and the estimated number of claims, the reader should be warned that no official industry figures are available. There has been a lack of individual company and industry wide data related to the size and number of claims and to the size of insurance premiums. Few states have laws which require manufacturers or insurers to report product liability data (Maes 1979). As more states and insurance companies assist in compiling accurate products liability data, it will be possible to more accurately determine the severity of the products liability crisis.

Availability and Cost of Products Liability Insurance

Several industries that produce products which are more susceptible to products liability claims have maintained that products liability insurance has not been readily available. For example, a survey by the National Machine Tool Builders Association revealed that twenty percent of the NMTBA members were not able to get products liability insurance ("Bustling Tool ... " 1978). However, the Federal Interagency Task Force on Product Liability found that only a few companies dealing in high-risk product lines had difficulty obtaining product liability insurance. The irony for many manufacturers was that while insurance was available, it was priced at a level which resulted in the practical equivalent of it being unavailable. In 1978, manufacturers and retailers paid an estimated \$2.75 billion for product liability insurance compared with a \$1.13 billion in 1975 ("The Devil's ..." 1983).

Another adverse development during the 1970s was that insurers were reluctant to increase limits of liability for existing policies while potential liability to the insured continued to increase. A final burden on manufacturers seeking products liability insurance was the increasing levels of deductibles. While the increasing frequency and level of deductibles may have been a voluntary action on the part of the insured, such action was precipitated by increasing premiums ("Executive Summary..." 1977).

Changes in Products Liability Law

During the 1800s, manufacturers were held liable to individuals with whom they had contractual relationships (the doctrine of privity). This doctrine guided court decisions until the landmark MacPherson vs. Buick Motor Company case in 1916. The court ruled that absence of privity of contract was not an adequate defense.

Two other theories developed side-by-side with the doctrine of privity, but outlived this latter, more restrictive doctrine. First, plaintiffs were afforded the opportunity to bring suit on grounds of breach of implied or expressed warranties. An implied warranty refers to either the fitness of a product for a particular purpose or the merchandisability of the product, i.e., in general, its fitness for sale.

A second cause of action available to a wronged consumer was the "Theory of Negligence." Negligence is a tort concept which is based on fault. If it is proven that a manufacturer failed to exercise reasonable care in the manufacture and sale of his product, then the manufacturer is liable under the theory of negligence.

During the Twentieth Century, through a gradual series of landmark decisions, the doctrine of strict liability became the prevalent theory applied to products liability cases. According to the Association of Trial Lawyers of America, the strict liability doctrine is recognized in forty-two states ("Product Liability..." 1977). Succinctly stated, the doctrine of strict liability holds a manufacturer liable for damages if an individual suffers an injury while using the product that was placed into commerce by the manufacturer.

The doctrine of strict liability allows the manufacturer several defenses which will be discussed in the next section.

Hence, the doctrine is not one of absolute liability. Many business and insurance people feared that open-ended, unlimited and absolute liability was the next logical step in the progression of products liability decisions favoring the plaintiff. One product-liability-prevention consultant predicted the advent of the doctrine of secondary impact ("An Ounce..." 1977). Such a doctrine would presumably allow a speeding driver who throws his car out of control and is injured by bouncing around the insufficiently padded interior of his car, and into its unnecessary protrusions, to bring a successful suit against the automobile manufacturers (Gray 1977). To complement the catastrophic hardships presented to manufacturers by strict liability, the California Supreme Court in 1980, in the Sidell case, ruled that where a product is made by many manufacturers, and the specific manufacturers cannot be identified, liability must be divided based on market share.

Defense

While the manufacturer has been placed in a very tenuous position due to changes in the products liability area, he is certainly not without defense in products liability cases. The doctrine of strict liability holds that the product must be unreasonably dangerous to the consumer or user. If the consumer is an expert in product use and should be expected to spot product defects, then such defects are not "unreasonably dangerous" to the consumer. This defense can be applied if the expert consumer had actual knowledge of defects or could be expected to possess such knowledge.

A closely related defense is that the consumer voluntarily assumed risk when using the product. This defense is limited to the consumer's actual knowledge of the danger of the product.

Strict products liability also holds that the manufacturer is liable if the product is used for a purpose reasonably foreseeable by the manufacturer. Some courts have stretched the definition of "reasonably foreseeable." The classic case which circulated through several journals and publications, but was later found to be fictitious, was the case of the individual injured when holding a lawn mower in his hands and using it to trim a hedge.

Another defense which has been liberally interpreted in favor of the plaintiff by some courts is the defense that the plaintiff misused or altered the product, and that such misuse or alteration resulted in the injury.

Some products possess inherent danger. For example, it is known that a knife can bring great harm to the human body. The existence of inherent danger can be used as a defense.

Another type of defense deals with the negligence of the user. The courts used to follow the doctrine of contributory negligence. Under this doctrine, all recovery by the plaintiff was barred if it were proven that he contributed to the cause of the accident.

Contributory negligence, however, has given way to the doctrine of comparative negligence. In applying this doctrine, the court decides what proportion of the negligence is contributed by the plaintiff, and subtracts

this amount from the award of damages. In practice, two separate trials are held, one to determine allocation of comparative negligence, and a second to determine the damage figure.

The final defense is called the patent danger doctrine. The courts have traditionally ruled that patent or obvious defects do not constitute grounds for granting the plaintiff relief in a products liability suit.

SOLUTIONS TO THE PRODUCT LIABILITY CRISIS

Two primary moves are underway to curtail the problems in the products liability area. The first of these, amending and enacting products liability tort reform legislation, has been proceeding for the past five years. The second major area of relief relates to products liability insurance and involves product risk pools.

Tort Reform

From the manufacturers' and insurers' standpoints, products liability law and courtroom activity have become unfairly stilted in the plaintiff's favor, and state-by-state variations in laws and court decisions have created undue uncertainty among manufacturers and insurers concerning the range and severity of liability. In response to these two problems, state legislatures and the Commerce Department began action five years ago to make improvements in products liability law. The Commerce Department's efforts were directed at formulating a uniform, nationwide products liability model law that would hopefully be adopted by the individual states. It was felt that such action would give insurers the certainty required to accurately assess and quantify products liability exposures.

After nearly three years of designing and modifying, the Commerce Department unveiled its products liability model bill in January 1979. The major provisions of that bill were:

- 1) To allow product alteration or modification as a defense against liability;
- 2) To limit manufacturers' liability to the "useful life" of their products;
- 3) To impose a three year statute of limitations after injury on the filing of claims;
- 4) To establish state-of-the-art defense as a stronger defense against liability (that is, more weight would be given to product standards in effect at the time of manufacture rather than to more stringent standards adopted subsequent to manufacture);
- 5) To have judges rather than juries determine the amount of punitive damages;
- 6) To limit the amount of pain and suffering damages to \$25,000;
- 7) To impose a ten year statute of limitations to a manufacturer's liability unless plaintiff (after ten years) provides "clear and convincing evidence" that a defect caused injury;

- 8) To reduce duplicity of compensation by reducing awards to the plaintiff by the amount of compensation received from public sources;
- To reduce damage awards based on the basis of negligence attributed to plaintiff of another party;
- 10) To require plaintiff, defendant, or their attorneys to pay legal costs for bringing "frivolous" cases to court:
- 11) To use arbitration to settle products liability suits claiming less than \$30,000 in damages; and
- 12) To generally resolve any liability on the part of the wholesaler (Geisel 1979a).

Initial reaction by the business community to the model bill was favorable. Insurers showed general approval, since the bill covered most of the statutes outlined by the American Insurance Association eighteen months earlier (Rubin 1978). However, there are signs that the model bill did not fit the needs of all parties involved, and it was revealed in August of 1979 that changes to the bill were soon to be promulgated. Provisions to be altered or added included the statute of limitations on manufacturers' liability, state-of-the-art defense, the impact that availability of workers compensations has on the damage award, and a new provision involving express warranties.

Concurrent with the Commerce Department's development of the model bill, state legislatures were busy enacting state products liability laws. By September 1982, twenty-five states had enacted tort reforms, while four more states had bills pending (Geisel 1982). Unfortunately, since few states followed the model bill, these actions on the part of state legislatures did not eliminate the problem of the diversity of laws from state to state. In fact, the Commerce Department's model bill was used in at least one case (by Governor Arthur Link, North Dakota) as rationale for vetoing state tort reform bills (Geisel 1979c). Governor Link claimed that his veto was based on his concordance with the Commerce recommendation that state legislatures not pass unduly differing proposals. Despite affirmative action in at least half of the states, twenty states either introduced no products liability bill or killed the bill in committee meetings or one house of the state congress. Unfortunately, the model bill has not gained the nationwide acceptance needed, and weaknesses in reform measures, lack of uniformity, and the failure of states to pass comprehensive measures has persisted.

The significance of the result of a uniform, nationwide reform to products liability law is dramatically demonstrated by the results of a study conducted by the American Mutual Insurance Alliance. The study was an examination of the effect that specific statutes would have on payment of claims. By analyzing data from the eight largest insurance company members of AMIA, it was found that:

1) Given a six year statute of limitations on liability, 19% of the bodily injury claims would be eliminated;

- 2) Misuse of modification statutes would eliminate 34% of the claims; and
- 3) By disallowing current state-of-the-art arguments 18% of the claims would be eliminated ("Product Liability..." 1977).

In October 1981 Senator Bob Hasten unveiled a federal tort reform bill after eight previous drafts. Many employers have shown support for nationwide tort legislation that would define the rights and responsibilities of manufacturers in personal injury cases. The main provisions of the federal tort bill are:

- 1) A plaintiff must identify the manufacturer (contrary to the California Supreme Court decision in the Sindell case);
- 2) Wholesalers are generally not liable;
- 3) Manufacturers are responsible for only the "useful safe life" of a product;
- 4) Major capital goods, like printing presses, are presumed to have a safe life of 30 years; appliances are presumed to have a safe life of 20 years;
- 5) Product alternation and misuse is a defense against liability;
- 6) Compliance with government safety standards is a stronger defense;
- Manufacturers do not have to warn of obvious dangers; and
- 8) Awards are reduced by the extent a plaintiff was negligent (Geisel 1981).

Although the bill has support, congressional sources feel that it could take three to five years because of: 1) the complexity of the issue; 2) the competition from other bills; and 3) the opposition from three major groups: trial attorneys, consumer activists, and labor unions.

Product Risk Pools

One plan developed to bring relief to businesses hampered by high liability insurance premium rates, drastic fluctuation of rates, and the high level of deductibles, involves risk pooling. Federally chartered insurance cooperatives would serve as liability risk retention organizations (Geisel 1979d). These organizations would be exempt from state insurance regulations and would presumably cause stable rates and acceptable deductible levels.

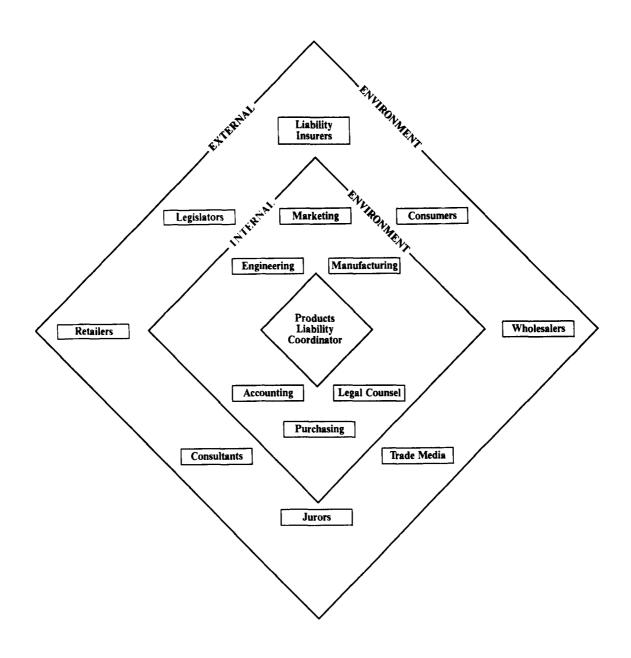
These product risk pools were initially greeted coldly by the Carter Administration, but by August 1979, the Administration had endorsed the federally monitored program. On September 25, 1981, Congress passed the risk retention act, which facilitate manufacturers' fight to combat rising costs by: 1) easing self-insurance against product liability and completed operations liability, and 2) permitting product sellers to purchase comprehensive general liability coverage, including product liability insurance on a group basis (Swartz 1982).

COMPANY STRATEGIES

It is definitely advantageous to a manufacturer to develop a comprehensive strategy to minimize the probability of having products liability action taken against him, and to present the strongest possible defense in the event that a suit is brought forth. Figure 1 schematically presents an integrated comprehensive network that can help protect a company against products liability exposure.

At the center of this visual is the products liability coordinator. This coordinator could be one individual or group of individuals, depending upon the magnitude of the business. The primary responsibility of the coordinator, by definition, is to coordinate product liability activities with groups internal and external to the firm. Each internal company unit must be informed of steps taken by other intra-company units to eliminate duplicity, inconsistency, and omission. The coordinator must also ensure that products liability information reaches the proper external

FIGURE 1 PRODUCTS LIABILITY NETWORK



group. Whether interacting with internal or external groups, the products liability coordinator's primary objectives should be to: 1) develop a product safety attitude for the firm, and 2) develop liability prevention programs.

A key area of concern that should be handled by the coordinator is the examination of the use-environment. The following questions will affect design, instructions, warnings, and safety features ("An Ounce..." 1977):

- 1) Who will use the product?
- 2) How might the product be misused?
- 3) Where will the product be used?
- 4) What type of servicing will be required by the customer or repairperson, and how will this affect the safety of the product?
- 5) What is the useful life of the product? What safety liability surfaces after the useful life period has expired?
- 6. Can the product be used without builtin safety devices?
- 7) Can the product be assembled in a hazardous manner?

In fostering a company-wide product safety attitude and developing a liability prevention program, the products liability coordinator will often review procedures and outputs from other company units. For example, product testing data from engineering should be scrutinized. The products liability coordinator should review critical marketing outputs such as advertising, sales promotion, operating instructions, and warranties. Further, reports of near accidents and complaints and customer safety records should be systematically examined.

Several internal company functional units must take explicit actions to minimize products liability exposure (see Figure 1). Certainly, marketing has a prominent role in the products liability area. Any premotional material, including advertising, personal selling, and sales promotional material, must carefully and accurately portray the product.

Printed promotional material can be excruciatingly damaging, as in the case of a boy injured while playing on a feeder auger ("Products Liability ... " 1979). The damage award was \$840,000. The auger manufacturer had stated in a promotional brochure that "even a child can do your feeding." Also in the brochure was a photograph of the auger with its safety cover removed. The intent was to show the inner workings of the auger. The jury found that the promotional brochure was misleading in terms of the safety of the product and operation conditions.

Promotional materials must be designed so as to not show the product being used in extreme or unusual conditions. It is tempting to show a product performing unexpected feats in order to prove its superiority in performing expected tasks. Such misrepresentation may serve to widen the court's interpretation of "foreseeable" use. It is also tempting to show "abnormal" product users to prove the ease of product use. As in the feeder auger case, a child may be shown using the product. Or, for

the aesthetic quality of a promotional graphic, a person using a machine or tool may be shown without safety glasses, hard hat, or steel toed boots. (It is interesting to note that Black and Decker had Bob Lilly, ex-Dallas Cowboy football player and B & D spokesperson, outfitted in safety glasses in its television commercials.)

Instructions and warnings are extremely critical printed material in products liability cases. Juries' decisions often hinge on whether or not the instructions are adequate and sufficient warnings have been given. Note that it is not sufficient to give a warning. Cases have gone against the defendant when "insufficient" warnings against misuse were given. On the positive side, a lawn mower manufacturer was absolved of liability when the jury found that sufficient warning (concerning mowing horizontally on sloping terrain) was given by the manufacturer in the promotional material ("Products Liability..." 1979).

Engineering departments can aid in reducing products liability exposure by continually developing safety mechanisms. It may not be sufficient to merely comply with existing industry or government safety standards. Engineering, upon receiving information from the products liability coordinator about misuse, alteration, or user servicing activities, can strive to develop as many failsafe concepts as feasible. Product testing should be another key concern for the engineering department. An extensive testing procedure that has been well documented is a strong defense. Although the doctrine of strict liability focuses on the condition of the product when it leaves the manufacturer, the conduct of the manufacturer is often an influential factor in deciding products liability cases (Karosas 1979). Extensive, documented testing procedures provide evidence that a manufacturer has followed a conscientious product-development process.

Manufacturing has the critical task of maintaining quality standards. It is well-known that as quality control standards approach the level of zero defects, associated costs increase at an exponential rate. The optional trade-off between higher quality control standards and estimated future monetary risks incurred through products liability cases needs to be determined.

The legal staff of a company must monitor current products liability cases and review the developments of state legislatures as they deal with tort reform. The legal staff must also alert the other company units as to appropriate documentation procedures.

The accounting department can help in the area of products liability by supplying relevant and timely warranty expense, costs of returned products, and cost adjustments. Products whose ratios on the preceding measures get out of line can soon become products liability problems. More directly, accounting information on product liability costs cannot only identify products liability problems before they become critical, but it can also indicate profit concerns for certain products. Traver reported a case in which product liability expenses exceeded the retail selling price (Traver 1979). Finally, the purchasing department can assist with the products liability problem by maintaining high quality specifications on all materials used in manufacturing.

Communicating to the External Environment

There are several key "publics" with which the products liability coordinator must interact to minimize products liability exposure. Previously in this paper, it was noted that the coordinator must monitor and often predict aspects of the end-use environment. Since there is no uniform statute of limitations for the time period between sale of a product and the time of an accident, it is advisable to attempt to locate and possibly upgrade old machines. Trade magazines and other promotional media provide a mechanism for informing users of the company's intent to locate and upgrade aging products.

The coordinator must also establish communication lines with distributors (wholesalers and retailers) to make sure that distributors understand appropriate use situations. Distributors can also provide useful information on current user practices which may affect the risk of a product-related injury. It is also advisable to keep records of relationships and relative responsibilities of the manufacturers, suppliers, subcontractors, and distributors.

The ability to get products liability insurance has become a critical key to success in some industries. Just as it makes sense to maintain good relationships with suppliers in the event that key materials shortages may occur, maintaining a positive working relationship with insurance companies has become very important. Attempts to acquire products liability insurance exemplify a classic illustration of a broadened view of a company's marketing activities. A company is attempting to facilitate exchange between itself and its insurer. The "product" that the company is marketing is its product safety program. In exchange, the company seeks products liability insurance. Insurance industry leaders stress that a product safety program is absolutely necessary if the insurance agent is to convince the underwriter to sell products liability insurance (Gorskay 1978). Currently, the underwriter has to be "sold," thus reversing the relationship between insurer and insured which existed only a few years ago.

State legislatures should be targets of heavy lobbying activity in behalf of tort reform. Lobbyists can inform legislators about Senator Hasten's federal bill. One problem inherent in the state-by-state tort reform process is that many legislators know very little about the Federal bill, or the bill currently before them in their own state legislature! Jerry Geisel, Washington editor for Business Insurance, has expressed concern that state tort reform has been proceeding so rapidly that legislators do not adequately understand implications of their actions (Geisel 1979b).

The products liability coordinator should also interact with principles in the judicial process. Perhaps the only proper way to influence the judicial process (other than through trial preparation) is through public education. It certainly will be beneficial to the defendant if a juror had received some products liability information prior to his selection as a juror. Based on a Department of Commerce study, from 1965 to 1977 in product liability cases in eight selected states, plaintiff won more jury trials, while defendant won more non-jury trials ("An Ounce..." 1977). The pro-consumer bias of juries needs to be eliminated. A straightforward educational program may help.

A more controversial, yet quite common method of affecting verdicts and settlements by jury trials, is to intercede in the jury selection process. The sociology literature contains several references to empirical studies in which juror demographic and psychographic traits were correlated with trial decisions and the magnitude of awards (Mowan 1982). In addition to developing profiles of proplaintiff and pro-defense jurors, studies have found that personal and life-style similarities between juror and defendant or plaintiff can significantly affect jurors' decisions.

Another group with whom the products liability coordinator should interact are consultants specializing in products liability problems and strategies for dealing with these problems. The American Legal Forum is one such consultant that has gained some visibility for being able to create heightened awareness among company employees and change their attitudes with regard to products liability (McIntyre 1979).

Finally, communication with the consumer can lessen products liability exposure. Safety needs to be stressed in all types of communication to the consumer. Several years ago very few companies utilized their warranty programs as an active part of their marketing strategy. Yet, immediately prior to federal warranty legislation in 1975, companies began using this "messy legal area" as a marketing weapon. Safety can also be turned into a positive marketing tool.

CONCLUSIONS

The products liability area has been one of the major problems facing many businesses during the last decade. Perhaps as an outgrowth of the consumerism movement of the late 1960s, products liability cases have grown at an exponential rate, while damage awards have been skyrocketing. As insurers pay more and higher awards, products liability insurance has become difficult to secure, and deductible levels have increased dramatically in some product lines. In step with the general consumerism mood are the findings of judges and juries. While the number of accidents has not increased substantially, products liability cases have increased significantly. Changing court interpretations have consistently favored consumers. Moreover, widespread and rapid state tort reform has added more uncertainty concerning liability.

Despite the diversity of the state-by-state tort reform, such reform provides a partial solution to the products liability problem. The new Federal Bill introduced in October 1981 is a step in the right direction. Federally chartered risk-retention pools should provide some relief to businesses that have experienced difficulty in securing products liability insurance.

It is apparent that problems related to products liability will not simply disappear. Companies must take active steps to limit their products liability exposure. A comprehensive products liability strategy, spearheaded by a products liability coordinator, will definitely lessen product liability exposure.

REFERENCES

- "Bustling Tool Industry Faces Insurance Crisis." 1978. Purchasing (May 10): 18. 31.
- "Can Monstrous Product Liability Claims Be Contained?" 1980. Journal of American Insurance (Fall): 20-22.
- "The Devil's in the Product Liability Laws." 1983. Business Week (February 12): 72-78.
- "Executive Summary for the Final Report of the Federal Interagency Task Force on Product Liability." 1977. *The Insurance Law Journal* (November): 606-699.
- Geisel, Jerry. 1979a. "Business Groups Endorse Model Product Liability Bill." Business Insurance (January 22): 1, 38.
- . 1979b. "State Product Liability Tort Reform Tail Spins into a National Debate." *Business Insurance* (March 19): 64.
- ______. 1979c. "N.D. Business Claims Victory over Tort Reform Veto." Business Insurance (April 2): 4.
- _______. 1979d. "Carter's Support Revives Product Risk Pools Plan."

 Business Insurance (September 3): 1, 64.
- ______. 1981a. "Product Liability Lawsuits Double over Three Years." Business Insurance (October 12): 3.
- ______. 1982. "Product Liability Scorecard." Business Insurance (September 20): 34.
- Gorskay, Robert C. 1978. "An Overview of the Products Liability Crisis." Best Review (Property Edition) 18 (January): 17-18+.
- Gray, Irwin. 1977. "Product Liability: How the Courts Stand on Manufacturers Malpractice." Management Review 66 (June): 31-34.
- Hoenig, Michael. 1977. "Products Liability Problems and Proposed Reforms." The Insurance Law Journal (April): 213-256.
- Karosas, George V. 1979. "Products Tests Bolster Defense." Business Insurance (July 9): 31.
- Maes, John. 1979. "At Last! Insurers Divulge Product Liability Loss Data." Business Insurance (March 19): 64-66.
- McIntyre, Kathryn J. 1979. "Workers Study Law to Learn to Foresee Product Liability Risk." Business Insurance (June 11): 56-57.
- Morgan, Fred W. 1982. "Marketing and Product Liability: A Review and Update." *Journal of Marketing* 46 (Summer): 69-78.
- Mowen, John C. 1982. "On the Role of Marketing in the Product Liability Trial." Working Paper, College of Business Administration, Oklahoma State University, Steelwater, Oklahoma, July.
- "An Ounce of Prevention is Worth a Pound of Reliability." 1977. Iron Age (August 1): 140-150.

- Press, A. and D. Foote. 1981. "Trials by Trial Jury." Newsweek (March 9): 84.
- "Product Liability The Search for a Solution." 1977. Nation's Business (June): 24-31.
- "A Product Liability Bill Has Insurers Uptight." 1980. Business Week (March 31): 43.
- "Products Liability." 1979. Insurance Law Journal (January): 64.
- Rubin, Harvey W. 1978. "The Impact of Tort Reform on the Products Liability Crisis: A Reinsurance Viewpoint." Insurance Law Journal (June): 421-426.
- Swartz, Victor. 1982. "Risk Retention Act: Questions about New Federal Law Answered." Business Insurance (January 11): 19.
- Traver, Spencer J. 1979. "Six Steps to Product Liability Loss Control." Business Insurance (March 19): 41.

ABOUT THE AUTHORS

PHILLIP E. DOWNS is an Associate Professor of Marketing at Florida State University. He received his Ph.D. in Business Administration from the University of North Carolina at Chapel Hill in 1976. His recent research has focused on survey research methodology. He has over twenty publications in the Journal of Marketing and Public Policy, Journal of Business Research, Journal of the Academy of Marketing Science, Journal of the Market Research Society and various national and regional conference proceedings.

DOUGLAS N. BEHRMAN is an Associate Professor of Marketing at Florida State University. He received his Ph.D. in Business Administration from the University of North Carolina at Chapel Hill in 1978. He has published in several scholarly journals including *Decision Sciences* and the *Journal of Business Research*. His current research is involved in investigating factors which affect performance of salespersons.