THE MANUFACTURER'S DUTY TO WARN OF DANGERS INVOLVED IN USE OF A PRODUCT

The manufacturer's liability for injuries caused by his products is a rapidly developing area of the law of torts.[1] Erosion of the doctrine of privity has greatly increased the number of potential plaintiffs who can recover from the manufacturer,[2] and given added importance to this area of the law.

Product liability rests on theories of strict liability,[3] negligence[4] and breach of warranty.[5] This note examines one of the theories of recovery within the area of negligence—the duty of the manufacturer to warn of dangers involved in the use of his product. Products which are taken internally, *i.e.* food, drugs, beverages, etc., are not considered here because most courts apply a theory of strict liability rather than negligence in deciding these cases.[6] Also excluded is consideration of the duty of retailers and distributors to warn consumers of dangers involved in use of a product, except to observe that a distributor may be held to the same duty as the manufacturer if he either assembles the product or markets it as his own.[7]

It is unrealistic to hope to manufacture a product incapable of causing some injury, *i.e.* a non-dangerous product. However, a product may be "dangerous" and yet not have been negligently produced.[8] Though cases frequently label products which have caused an injury "defective",[9] the term would appear to mean no more than that the product is dangerous. Therefore, the negligence analyzed in this note is not negligence in manufacture or testing of the product, though such negligence may incidentally be present in some cases. The negligence focused upon here is the failure to give the warning the reasonably prudent manufacturer would have given.

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1. W. Prosser, Torts § 96 (3d ed. 1964).
2. *Id.* at § 96, 662-63.
3. *Id.* at § 97, 672-78.
4. *Id.* at § 96, 658-72.
5. *Id.* at § 97, 678-85.
6. *Id.* at § 97, 674-76.
7. *See* King v. Douglas Aircraft Co., 159 So. 2d 108 (Fla. Ct. App. 1963); Poplar v. Bourjois, 298 N.Y. 62, 80 N.E.2d 334 (1948).
8. *See, e.g.,* Tampa Drug Co. v. Wait, 103 So. 2d 603 (Fla. 1958); Martin v. Bengue, Inc., 25 N.J. 359, 136 A.2d 626 (1957).
9. *E.g.,* Foster v. Ford Motor Co., 139 Wash. 341, 246 Pac. 945 (1926).

I. When The Duty Exists

> [T]oday a manufacturer who undertakes to produce and sell to the general public a product with a high risk of human harm must provide specification, instruction, and *warning*, so that it is reasonably safe for ordinary persons to use it, ...[10] (emphasis added).

Dangers which are characterized as inherent or imminent give rise to the duty to warn.[11] Inherent dangers are defined as dangers stemming from the nature of the product,[12] *e.g.*, noxious fumes emitted by carbon tetrachloride.[13] Imminent dangers are those arising from a defect in the manufacture of the product,[14] *e.g.*, a tractor which overturned because of a design defect which placed too little weight on the front wheels.[15] The terms often are used in conjunction[16] and their independent meanings are not always observed.[17] Consequently, most of the cases cannot be analyzed by application of the isolated definitions of these terms. Instead, the phrase "inherently and imminently dangerous" often expresses the court's conclusion that the product subjected the user to a risk of serious harm to himself or his property.[18]

Where the danger will cause only slight injury,[19] or the injury threatened is not to a person or his property,[20] there is no duty to warn.[21] Further,

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10. Boyl v. California Chem. Co., 221 F. Supp. 669, 674 (D. Ore. 1963).

11. *See, e.g.*, Larramendy v. Myres, 272 P.2d 824 (Cal. Dist. Ct. App. 1954); Poplar v. Bourjois, 298 N.Y. 62, 80 N.E.2d 334 (1948).

12. LaPlant v. E. I. DuPont DeNemours & Co., 346 S.W.2d 231 (Mo. Ct. App. 1961); *see* Martin v. Bengue, Inc., 25 N.J. 359, 136 A.2d 626 (1957).

13. Tampa Drug Co. v. Wait, 103 So. 2d 603 (Fla. 1958).

14. *See* Ford Motor Co. v. Mathis, 322 F.2d 267 (5th Cir. 1963); Altorfer Bros. Co. v. Green, 236 Ala. 427, 183 So. 415 (1938); Biller v. Allis Chalmers Mfg. Co., 34 Ill. App. 2d 47, 180 N.E.2d 46 (1962); Outwater v. Miller, 3 Misc. 2d 47, 155 N.Y.S.2d 357 (Supp. Ct. 1956).

15. Ford Motor Co. v. Mathis, *supra* note 14.

16. *See* cases cited in note 11, *supra*.

17. *See* Lovejoy v. Minneapolis-Moline Power Implement Co., 248 Min. 319, 79 N.W.2d 688 (1956).

18. Schuylerville Wall Paper Co., Inc., v. American Mfg. Co., 272 App. Div. 856, 70 N.Y.S.2d 166, *appeal denied*, 272 App. Div. 997, 73 N.Y.S.2d 830 (1947).

19. Jamieson v. Woodward & Lothrop, 247 F.2d 23, 29 (D.C. Cir.), *cert. denied*, 355 U.S. 855 (1957); Tingey v. E. F. Houghton & Co., 30 Cal. 2d 97, 179 P.2d 807, (1947); Braun v. Roux Distrib. Co., 312 S.W.2d 758, 765 (Mo. 1958).

20. Where the danger involved is economic in character, *i.e.* loss of profit in operation of a business, recovery was denied. Donovan Constr. Co. v. General Elec. Co., 133 F. Supp. 870 (D. Minn. 1955); Lucette Originals, Inc. v. General Cotton Converters, Inc., 8 App. Div. 102, 185 N.Y.S.2d 854 (1959).

21. The forseeability of the type of harm that may occur, the persons who may be subjected to the danger, the use to which the product may be put and the probability that the harm will in fact occur are considered later in the note. Although the courts have found that the manufacturer is under no duty to warn of dangers in some cases

there is no duty unless the manufacturer subjectively knew or objectively should have known of the existence of the danger.[22] In applying the objective standard to determine whether the manufacturer should have been aware of the danger, courts hold him to possess the knowledge of an expert[23] and require him to keep abreast of scientific discoveries relating to his type of product.[24]

Even if the dangers involved in use of his product are not known to the manufacturer at the time he puts it on the market, he may be required to issue a warning when dangers later come to his attention.[25] In several cases, the manufacturer became aware of the latent danger through other users being injured by the product.[26] Although apparently no cases on the point have been decided, failure to give a warning after the manufacturer should reasonably have discovered the danger, even though the products had already been marketed, may give the injured user a ground for recovery. The result of decisions has been to require the manufacturer to follow his product into the hands of the consumer and warn of any dangers which are later discovered.[27] The question of how long the duty exists is as yet unanswered. Recent warnings issued by the auto industry, via mass communications media, underscore the importance of the duty to warn of subsequently discovered dangers and the likelihood of liability for failure to do so.

II. Discharging the Duty

To discharge the manufacturer's duty, the warning must be given in such form as would reasonably be expected to reach and alert the reasonably prudent man who may be reasonably expected to use the product. It must convey the nature and extent of the danger in a manner which is comprehensible to the average user.

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falling within those areas, it is analytically sounder to consider these areas as limitations on liability rather than as conditions precedent to imposition of a duty to warn.

22. Blitzstein v. Ford Motor Co., 288 F.2d 738, 744 (5th Cir. 1961); Imperial v. Central Concrete Co., 2 N.Y.2d 939, 142 N.E.2d 209, 162 N.Y.S.2d 35 (1957).

23. Boyl v. California Chem. Co., 221 F. Supp. 669, 674 n.5 (D. Ore. 1963).

24. Braun v. Roux Distrib. Co., 312 S.W.2d 758 (Mo. 1958).

25. Comstock v. General Motors Corp., 358 Mich. 163, 99 N.W.2d 627 (1959); Moberly v. Sears Roebuck & Co., 4 Ohio App. 2d 126, 211 N.E.2d 839 (1965).

Note, however, that the manufacturer's duty has not been extended to warn of those dangers which arise as a result of continued use (i.e. from ordinary wear and tear). Ein v. Goodyear Tire & Rubber Co., 173 F. Supp. 497, 499 (N.D. Ind. 1959); Auld v. Sears Roebuck & Co., 288 N.Y. 515, 41 N.E.2d 927 (1942).

26. Comstock v. General Motors Corp., 358 Mich. 163, 99 N.W.2d 627 (1959); Moberly v. Sears Roebuck & Co., 4 Ohio App. 2d 126, 211 N.E.2d 839 (1965).

27. Comstock v. General Motors Corp., 358 Mich. 163, 99 N.W.2d 627 (1959).

A. *To Whom Warning Must Be Given*

The warning does not have to reach the user; it is sufficient if the means chosen is reasonably calculated to reach him.[28] Placing a label or decal, containing the warning, on the product or its container has been held to be a reasonable means.[29] Literature, such as owners' manuals or handbooks, which accompanies the product also has been held sufficient.[30] Ordinarily a warning given to or reasonably calculated to reach the original purchaser of the product will satisfy the duty to warn any user,[31] though there is a split of authority in cases in which the original purchaser is an employer and the person using the product is his employee. The majority of courts hold the warning sufficient on the theory that is is reasonable to expect that the employer will convey the warnings he received to his employee.[32] The minority cases, which hold that it is not reasonable to expect the employer to relay the warning, involved dangers which might result in the user's death.[33] The severity of the possible harm may have been the decisive factor in these cases. Two courts have indicated that a retailer can reasonably be expected to pass on warnings to a consumer,[34] though at least one court indicated the contrary.[35] In light of the cases discussed above

28. *See* McLaughlin v. Mine Safety Appliance Co., 11 N.Y.2d 62, 181 N.E.2d 430, 226 N.Y.S.2d 407 (1962); Walton v. Sherwin-Williams Co., 191 F.2d 277 (8th Cir. 1951). But, even in those instances in which the original purchaser has actually been warned [by the manufacturer of the dangers involved in the use of his product] the warning is held to be insufficient if the failure by the purchaser to pass on the warning is reasonably forseeable by the manufacturer. For the proposition that forseeable intervening negligence does not preclude liability on the part of the manufacturer see Mazzi v. Greenlee Tool Co., 320 F.2d 821 (2d Cir. 1963); Spruill v. Boyle-Midway, Inc., 308 F.2d 79 (4th Cir. 1962); Martin v. Bengue, Inc., 25 N.J. 359, 136 A.2d 626 (1957).

29. Singleton v. Olin Mathieson Chem. Corp., 131 So. 2d 329 (La. Ct. App. 1961). However, McLaughlin v. Mine Safety Appliances Co., 11 N.Y.2d 62, 181 N.E.2d 430, 226 N.Y.S.2d 407 (1962), raises doubts that a label placed on a container will be sufficient in all cases. If the container is likely to be discarded the probability that the warning will reach the ultimate user is slight, the manufacturer will be liable to the unwarned user. *Id.* at 69, 181 N.E. 2d at 434, 226 N.Y.S. 2d at 410 (distributor held himself out to be the manufacturer). Placing a label on the product itself may not be a reasonable means of conveying the warning if the label is so flimsy that it cannot be expected to remain intact. Gall v. Union Ice Co., 108 Cal. App. 2d 303, 317, 239 P.2d 48, 55 (1951).

30. Brown v. General Motors Corp., 355 F.2d 814 (4th Cir. 1966).

31. Cases cited note 28, *supra.*

32. *E.g.,* Soto v. E. C. Brown Co., 283 App. Div. 896, 130 N.Y.S.2d 21 (1954).

33. *E.g.,* Montesano v. Patent Scaffolding Co, 213 F. Supp. 141 (W.D. Pa. 1962); Orr v. Shell Oil Co., 352 Mo. 288, 177 S.W.2d 608 (1943).

34. *See* Victory Sparklers & Specialty Co. v. Latimer, 53 F.2d 3 (8th Cir. 1931); Elrod v. King, 105 Ga. App. 46, 123 S.E.2d 441, (1961).

35. *See* Kentucky Independent Oil Co. v. Schnitzler, 208 Ky. 507, 271 S.W. 570 (1925).

in which the courts refused to find a warning to an employer sufficient, it is at least questionable whether such a warning would be sufficient if the risk and extent of the harm were sufficiently great. One court has held that a distributor cannot reasonably be expected to relay warnings to retailers and ultimately to the consumer.[36] Therefore, the warning must at least be addressed to the next lowest link of the marketing chain for the manufacturer to hope to escape liability.

B. *Physical Aspects of Warning*

In determining whether the warning could reasonably be expected to alert the reasonably prudent man in the circumstances of its use, the courts emphasize the conspicuousness of the warning. The warning was held insufficient when it was part of a block of type—all of the same size and color.[37] The fact that it was preceeded by the words "safety note" was not adequate to call the user's attention to it. Warnings placed on the back of a label visible through the bottle,[38] or at the bottom of the narrow side of a rectangular can were also held inadequate.[39] However, there are pitfalls in emphasizing the danger. One case has held that emphasis of one danger could render accompanying warnings of other dangers inadequate. Also, when all possible dangers are listed, the court may hold that all of the specific warnings are lost in "a volume of verbiage that no user could be expected to labor through, thus effectively failing as any warning at all."[40]

C. *Specificity of The Warning*

The warning must designate specifically all of the dangers that may cause serious injury; a general warning that the product is dangerous is insufficient. A recent federal case points up the specificity that may be required.[41] The plaintiff, a crop dusting pilot, crashed after being overcome by toxic ingredients in a dust-defoliant. The label contained the following warnings:

> CAUTION Avoid inhalation of dust and contact with skin, eyes, and clothing. Wash thoroughly with soap and water after handling and

36. Gall v. Union Ice Co., 108 Cal. App. 2d 303, 239 P.2d 48 (1951).

37. Spruill v. Boyle-Midway, Inc., 308 F.2d 79 (4th Cir. 1962); Bean v. Ross Mfg. Co., 344 S.W.2d 18 (Mo. 1961). Cases in which only the same size type was considered include McLaughlin v. Mine Safety Appliances Co., 11 N.Y.2d 62, 181 N.E.2d 430, 226 N.Y.S.2d 407 (1962); Maize v. Atlantic Refining Co., 352 Pa. 51, 41 A.2d 850 (1955).

38. Spruill v. Boyle-Midway, Inc., 308 F.2d 79 (4th Cir. 1962).

39. Maize v. Atlantic Refining Co., 352 Pa. 51, 41 A.2d 850 (1955).

40. Crane v. Sears Roebuck & Co., 220 Cal. App. 2d 855, 859, 32 Cal. Rptr. 754, 757 (1963).

41. Gonzalez v. Virginia-Carolina Chem. Co., 239 F. Supp. 567 (E.D. S.C. 1965).

> before eating or smoking. In case of contact with skin or eyes, get medical attention. Wear clean clothing, avoid contamination of feed and foodstuffs.[42]

The court held that the pilot was overcome by the "cumulative effects" of inhalation and exposure and that the warning failed to warn of this specifically. The holding may indicate an unwillingness to find warnings sufficient on policy grounds, *i.e.* that the manufacturer is better able to sustain the cost of the injury than the injured party.

It would seem the court could have held that the warning implicitly gave notice of the danger of the type of injury suffered. Warnings of considerably less specificity have been held adequate in other cases. A statement of the chemical composition of the product has even been held adequate to warn of dangers normally accompanying the presence of these chemicals.[43] Instructions which merely prescribe the procedure for efficient use of the product and for avoiding the danger but which do not alert the user to the danger they seek to avert, are insufficient to constitute a warning which will enable the manufacturer to avoid liability.[44] Ordinarily a warning need not be accompanied by instructions, though at least a few cases have imposed such a requirement.[45]

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42. *Id.* at 569.

43. *See* Kaempfe v. Lehn & Finks Prods. Corp., 21 App. Div. 2d 197, 202, 249 N.Y.S. 2d 840, 847 (1964), *appeal dismissed,* 18 N.Y.2d 784, 221 N.E.2d 809, 275 N.Y.S.2d 268 (1966). "Of course the statement that the product contained a particular sulfate [aluminum sulfate] was adequate to warn any and all persons who knew that they had an allergy with respect to the same." *Id.*

44. McClanahan v. California Spray-Chem. Corp., 194 Va. 842, 75 S.E.2d 712 (1953); *see* Boyl v. California Chem. Co., 221 F. Supp. 669 (D. Ore. 1963). *Contra,* E. I. DuPont De Nemours & Co. v. Baridon, 73 F.2d 26 (8th Cir. 1934); *see* Briggs v. National Indus., 92 Cal. App. 2d 542, 207 P.2d 110 (1949).

45. Boyl v. California Chem. Co., 221 F. Supp. 669 (D. Ore. 1963). In this case the plaintiff had applied a weed killer containing sodium arsenite to her driveway with a back pack, air-pressure spray pump. After finishing, she rinsed out the tank and poured the rinse water containing the residue of the solution upon a grass covered area in her back yard. A few days later she took a sun bath on this area and (due to an absorption through) her skin (of the) sodium arsenite which had remained as residue she suffered accute malfunctioning. The court held the manufacturer liable because there was no warning or protective advice whatsoever as to the disposal of the fluid and that this total lack of advice as to the disposal of the rinse misled the user into concluding that there was no lingering risk after immediate use. *See* De Vito v. United Air Lines, Inc., 98 F. Supp. 88 (E.D. N.Y. 1951). *But see* May v. Allied Chlorine & Chem. Prods., Inc., 168 So. 2d 784 (Fla. Ct. App. 1964). *See also* Gonzalez v. Virginia-Carolina Chem. Co., 239 F. Supp. 567 (E.D. S.C. 1965) in which the court held the manufacturer liable for a failure, among other things, to have listed an antidote on its label.

D. *Warning of the Extent of the Danger*

The warning must reasonably communicate the extent or seriousness of harm that could result from the danger:

> Implicit in the duty to warn is the duty to warn with a degree of intensity that would cause a reasonable man to exercise for his own safety the caution commensurate with the potential danger.[46]

A warning that breathing the vapor from a floor cleansing product was "harmful" and should be "avoided' was insufficient to warn of the fatal consequences which ensued.[47] In another case the fact that it might be common knowledge that getting paint into an eye will cause painful consequences did not foreclose the need to warn that blindness might result.[48] In still another case, one judge contended that is was necessary to point out the disease that the user would contract if the warnings were not followed.[49] It should be observed that where the extent of danger which flows from the use of the product is such that it will be readily recognizable to the consumer, the warning need not indicate the consequences.[50]

E. *Comprehensibility to the Average User*

All of the previously discussed substantive requirements of a warning are complemented by the requirements that the warning be comprehensible to the average user.[51] The warning cannot be couched in technical language.[52] One problem is to determine who is the "average user." Implicit in the determination is the question of forseeability of the use to which the product will be put, the type of person who may come into contact with the product or may use it, and the conditions under which the product may be used. This general problem of forseeability is dealt with under limitations on liability, *infra*. For purposes of the discussion here, it is sufficient to say that the "average user" may range from a child to an expert, the nature of the product usually being the decisive factor. A child

46. Tampa Drug Co. v. Wait, 103 So. 2d 603, 609 (Fla. 1958).

47. *Id.*

48. Haberly v. Reardon Co., 319 S.W.2d 859 (Mo. 1958).

49. Weekes v. Michigan Chrome & Chem. Co., 352 F.2d 603, 613 (6th Cir. 1965) (concuring opinion).

50. Singleton v. Olin Mathieson Chem. Corp., 131 So. 2d 329, 334 (La. Ct. App. 1961).

51. Spruill v. Boyle-Midway, Inc., 308 F.2d 79 (4th Cir. 1962); *see* Haberly v. Reardon Co., 319 S.W.2d 859 (Mo. 1958), wherein a warning label which stated that the product contained calcium oxide was held insufficient in that it is not common knowledge to the average user that calcium oxide is lime.

52. *See* Haberly v. Reardon Co., 319 S.W.2d 859 (Mo. 1958).

may be classified as an "average user" for a product such as a firecracker.[53] Conversely, a special type shell for use in testing shotguns was marketed with warnings sufficient to average users, defined by the court as arms manufacturers and dealers in shells, a highly skilled group.[54] If the product is manufactured for a special purpose and that purpose is evident on the face of the product or is otherwise brought to the attention of the user, then the warning need be comprehensible only to the *intended* users.[55]

F. *Patent Dangers*

The law has recognized the fact that some products are so obviously, or patently, dangerous that they carry their own warning. As one court observed, "a man knows he may be stuck by a pin."[56] The doctrine proceeds on the theory that "no one needs notice of what he already knows."[57] In those instances when the injured person had actual knowledge of the danger, the failure to warn could not factually have been the cause of the injury. Therefore, the doctrine is most significant in those cases in which the court holds that the danger should have been obvious to the average user. The question for the court to determine is whether the manufacturer could reasonably expect that the user will realize the danger.[58] Apparently the requisites of a sufficient warning for patent dangers must be satisfied to answer this question in the affirmative—*i.e.* the nature and extent of the danger must be obvious and understandable to the average user. Courts have held that there is no duty to warn that a cleaning agent will injure the eye,[59] but there is a duty to warn that getting paint in the eye will cause blindness.[60] It is common knowledge that a vaporizer with a loose fitting lid may be pulled over by a child and scald him,[61] but a manufacturer must warn that floor wax could poison a child who consumes it.[62] The unguarded rollers of a bailing machine[63] are a patent danger; and the dangers of household items have been held to be in the realm of common knowledge because of their frequent use by housewives.[64]

53. Victory Sparklers & Specialty Co. v. Latimer, 53 F.2d 3 (8th Cir. 1931).
54. Harper v. Remington Arms Co., Inc., 156 Misc. 53, 280 N.Y.S. 862 (1935), *aff'd*, 272 N.Y. 675, 290 N.Y.S. 130 (1936).
55. *See* Smith v. United States, 155 F. Supp. 605 (E.D. Va. 1957); Harper v. Remington Arms Co., Inc., 156 Misc. 53, 280 N.Y.S. 862 (1935).
56. Jamieson v. Woodward & Lothrop, 247 F.2d 23, 29 (D.C. Cir. 1957).
57. *Id.* at 26.
58. *Id.* at 29.
59. Sawyer v. Pine Oil Sales Co., 155 F.2d 855 (5th Cir. 1946).
60. Haberly v. Reardon Co., 319 S.W.2d 859 (Mo. 1958).
61. Blissenbach v. Yanko, 90 Ohio App. 557, 107 N.E.2d 409 (1951).
62. Spruill v. Boyle-Midway, Inc., 308 F.2d 79 (4th Cir. 1962).
63. Yaun v. Allis-Chalmers Mfg. Co., 253 Wis. 558, 34 N.W.2d 853 (1948).
64. Sawyer v. Pine Oil Sales Co., 155 F.2d 855 (5th Cir. 1946).

III. Causation

Even though the manufacturer has a duty to warn the consumer of the dangerous propensities of his product and breaches this duty either by failing to supply any warning or by failing to supply a sufficient warning, the consumer cannot recover unless he establishes a causal relationship between the breach and the injuries he subsequently suffers. Causation, however, is relatively easy for the consumer to establish. Apparently all he need show is a subjective state of mind indicating that he would have been more cautious if a sufficient warning had been given[65]—a requirement which, in effect, relegates the problem of establishing causation to a showing of disproof by the manufacturer. In fact, few cases have held for the manufacturer on this point.[66]

IV. Contributory Negligence

There is a dearth of cases in which the defense of contributory negligence has been advanced by a manufacturer or seriously considered by a court. The few instances in which the plaintiff's negligence was obviously a contributing cause of the harm may indicate, however, that the defense will not be favored. In one case, a workman was injured when a scaffold collapsed.[67] If it had been constructed properly, the injury would not have occured. However, the plaintiff had erected it in a manner which violated existing safety codes. The court ignored the possibility of relieving the manufacturer of liability on grounds of contributory negligence. The opinion is unclear as to whether the defense was not pleaded or the court summarily rejected it. However, it would seem that if the court favored such a defense, it would probably have at least felt compelled to discuss it. Courts have uniformly refused to relieve the defendant of liability, via the doctrine of intervening cause, when an intermediate vendee negligently fails to discover the dangerous propensity of a product.[68] It is not unlikely that the court would grant relief to a plaintiff who failed to discover the danger and was injured.[69]

V. Limitations on Liability

Although the manufacturer has breached the duty to warn, and this breach factually has caused or contributed to the resulting harm, he is not

65. *See* Haberly v. Reardon Co., 319 S.W.2d 859 (Mo. 1958).

66. *But see* Westinghouse Elec. Co. v. Pierce, 271 S.W.2d 422 (Tex. 1954).

67. Swaney v. Peden Steel Co., 259 N.C. 531, 131 S.E.2d 601 (1963).

68. McLaughlin v. Mine Safety Appliances Co., 11 N.Y.2d 62, 71, 181 N.E.2d 430, 435, 226 N.Y.S.2d 407, 413-14 (1962).

69. *Id.*

liable if the plaintiff or the injury were not forseeable, or if the negligence of a third party intervened.

A. *The Unforseeable Plaintiff*

The manufacturer is liable for injuries suffered by forseeable users,[70] persons he should anticipate will be in the "forseeable zone of danger" during the use of the product,[71] and those persons he reasonably should anticipate will come into contact with the product.[72]

1. *Users*

Users are that class of persons who, "within the reasonable contemplation of the manufacturer, are expected to use the product in question."[73] The question is which uses—and consequently which users—can be anticipated or forseen. Except in the relatively few instances in which a product is manufactured and suitable for use only for a special purpose,[74] the scope of the forseeable use is broad.[75]

2. *Within the Forseeable Zone of Danger during the Use*

The fact that the courts liberally define the forseeable use of the product establishes a broad foundation for determining which persons can reasonably be anticipated to be within the zone of danger during that use. In answering the question, the courts also consider the environment in which the product will be used. Based upon these considerations, one court refused to limit liability in the case of a child who drank furniture polish which his mother had been using,[76] while another court held a manufacturer liable to a construction worker who suffered skin injuries from fumes which arose when two other workers ignited a "dope pot".[77] It is reasonable to anticipate in the first case that a child will come into contact with a household product and in the latter case that non-using workmen will be in the vicinity of a "dope pot" when a roofing operation is underway.

3. *Persons Who Come Into Contact With the Product*

Courts have held that the manufacturer should reasonably have anticipated that certain persons will come into contact with a product, and thus

70. Starr v. Koppers Co., 398 S.W.2d 827,830-31 (Tex. Civ. App. 1965).
71. *Id.*
72. *See, e.g.,* Land O' Lakes Creameries, Inc. v. Hungerholt, 319 F.2d 352 (8th Cir. 1963).
73. Smith v. United States, 155 F. Supp. 605, 609 (E.D. Va. 1957).
74. Harper v. Remington Arms Co., Inc., 156 Misc. 53, 280 N.Y.S. 862 (1935), *aff'd,* 272 N.Y. 675, 290 N.Y.S. 130 (1936).
75. *See* Boyl v. California Chem. Co., 221 F. Supp. 669 (D. Ore. 1963).
76. Spruill v. Bolye-Midway, Inc., 308 F.2d 79 (4th Cir. 1962).
77. Starr v. Koppers Co., 398 S.W.2d 827 (Tex. Civ. App. 1965).

be subjected to an unreasonable risk of harm, even though they will not be users or within the zone of danger during use. The manufacturer should reasonably have forseen that workmen will handle the product, or its container, while it is being transported to the ultimate user, in preparing for its use, or in disposing of it. Thus, a manufacturer was held liable for dermatitis suffered by a workman caused by fertilizer coming into contact with his skin when a bag broke open as he loaded it onto a truck.[78] Liability was also imposed when a housewife suffered injuries sunbathing on grass where she had previously disposed of a weed killer.[79]

B. *Unforseeable Injuries*

The manufacturer is liable only for those injuries he could reasonably anticipate or forsee would occur.[80] Therefore, the issue is which injuries may be reasonably anticipated. It is clear that he normally will not be liable for serious injuries suffered when only minor injuries were reasonably anticipated,[81] for injuries which are not likely to occur from use or handling of the product,[82] for rare types of injuries which occur,[83] or for injuries from unforseen uses.[84]

1. *Which Injuries Are Reasonably Forseeable?*

Many of the same considerations applied to determine the forseeability of the plaintiff are equally crucial to determination of forseeability of harm. The manufacturer must consider the injuries that could flow from the

78. Land O' Lakes Creameries, Inc. v. Hungerholt, 319 F.2d 352 (8th Cir. 1963).

79. Boyl v. California Chem. Co., 221 F. Supp. 669 (D. Ore. 1963).

80. McClanahan v. California-Spray Chem. Corp., 194 Va. 842, 75 S.E.2d 712 (1953).

81. *See* Jamieson v. Woodward & Lothrop, 247 F.2d 23, 29 (D.C. Cir.), *cert. denied,* 355 U.S. 855 (1957).

82. Grau v. Proctor & Gamble Co., 324 F.2d 309 (5th Cir. 1963); Bonowski v. Revlon Inc., 25 Iowa 141, 100 N.W.2d 5 (1959) (1 complaint out of 5,304,272 bottles of sun tan lotion sold); Moran v. Insurance Co. of North America, 146 So. 2d 4 (La. Ct. App. 1962) (1 complaint out of 433,047 tubes of sun tan lotion sold); Bennett v. Pilot Prods. Co., 235 P.2d 525 (Utah 1951) (1 out of 1,000 suffered allergy from hair solution). In all of these cases liability was denied on the grounds that the defendant manufacturer could not be charged with knowledge of the dangers involved in the use of his product and therefore was under no duty to warn the consumer.

83. Bish v. Employers Liability Assurance Corp., 236 F.2d 62, 69 (5th Cir. 1956); Kaempfe v. Lehn & Fink Prods. Corp., 21 App. Div. 2d 197, 200, 249 N.Y.S.2d 840, 845 (1964), *appeal dismissed,* 18 N.Y.2d 784, 221 N.E.2d 809, 275 N.Y.S.2d 268 (1966).

84. Smith v. Hobart Mfg. Co., 185 F. Supp. 751, 753 (E.D. Pa. 1960). "The defendant contends that operation without the guard was a use for which the machine was never intended, and the manufacturer is relieved by law from liability from accidents resulting from such use. However, to relieve a manufacturer of liability from negligent use, it must be so remote from that intended as to be unforseen by him."

dangerous propensities of his product in the light of the use to which he can anticipate his product will be put, the environment in which this use will occur, the type of person who will be subjected to the danger, the manner in which persons will handle or otherwise come into contact with the product, and the amount of danger to third persons near the user.

Courts have gone to great lengths to find the injury forseeable in light of these considerations. For example, one court considered the environment and type of person likely to use the product in holding a manufacturer liable for injuries to a crop dusting pilot who crashed after being overcome by inhalation and exposure to a dust-defoliant.[85] Since the home is the obvious environment for use of furniture wax, a manufacturer was held liable for chemical pneumonia suffered by a child who drank the wax—apparently on the theory that it is forseeable that household products will come into the hands of a child and that children sometimes consume noxious liquids.[86] In another case, liability was imposed for dermatitis suffered by a workman when a bag containing fertilizer broke during loading—ostensibly because it was forseeable that the chemical would come into contact with a person's skin in use or handling.[87] Liability has been imposed on the theory that it is forseeable that noxious fumes from a "dope pot" can injure workmen,[88] and that a storage drum filled with acid may burst causing its lid to strike a workman.[89].

The term "use" may even be broad enough to encompass "misuse" of the product in instances where the misuse should have been anticipated. Custom of the trade in which the product will be used is the criterion for expanding forseeability of harm into the area of misuse.[90] The manufacturer of a scaffold was held liable for injuries to a workman[91] which occured because the scaffold was erected in a faulty manner. The court based its holding on the fact that the faulty manner of construction, which was a violation of existing safety standards, was a general custom of the trade. However, unless the manufacturer has actual knowledge of the custom or it is so general that a manufacturer is charged with notice, the harm is not forseeable.[92] It would seem that ordinarily a misuse of the product should take the resultant injury out of the realm of forseeable

85. Gonzalez v. Virginia-Carolina Chem. Co., 239 F. Supp. 567 (E.D.S.C. 1965).

86. Spruill v. Boyle-Midway, Inc., 308 F.2d 79 (4th Cir. 1962).

87. Land O' Lakes Creameries, Inc. v. Hungerholt, 319 F.2d 352 (8th Cir. 1963).

88. Starr v. Koppers Co., Inc., 398 S.W.2d 827 (Tex. Civ. App. 1965).

89. Gall v. Union Ice Co., 108 Cal. App. 2d 303, 239 P.2d 48 (1951).

90. *See* Mazzi v. Greenlee Tool Co., 320 F.2d 821 (2d Cir. 1963); Swaney v. Peden Steel Co., 259 N.C. 531, 131 S.E.2d 601 (1963).

91. Swaney v. Peden Steel Co., 259 N.C. 531, 131 S.E.2d 601 (1963).

92. McCready v. United Iron & Steel Co., 272 F.2d 700 (10th Cir. 1959).

injuries—or render the manufacturer free from liability because of the intervening negligence of the injured person. In one case, a woman who suffered skin injuries in using a hair preparation was denied recovery on grounds, *inter alia,* that the injury would not have occurred if she had used the product as directed.[93] This would seem to be a legitimate restriction of the concept of forseeable use. Courts have also restricted the scope of anticipated use where the product is manufactured and suitable for use only for a special purpose and the user is put on notice of the special purpose.[94] Any other use of the product might be considered a misuse—or at any rate an unforseeable use.[95]

2. *Remote Possibilities*

The term "reasonably forseeable" does not encompass that which is only remotely possible[96] or within the "far reaches of the pessimistic imagination".[97] The law does not hold the manufacturer liable for extraordinary consequences. Consequently the manufacturer is not liable for severe injuries when he should have expected that the plaintiff would only be subjected to the risk of minor injuries, or for injuries that are so unusual that they could only have been forseen as unlikely eventualities.

Courts have refused to impose liability on manufacturers for a detached retina when the manufacturer should have expected the user to suffer no more serious injury than a black eye.[98] In another case, the heel of a woman's shoe broke as she was descending a flight of stairs causing her to suffer various severe injuries.[99] The court held that "the heel of a shoe is not such an article that is reasonably certain to place life or limb in peril".[100] As another court has stated:

> A lead pencil can stab a man to the heart or puncture his jugular vein . . . but if a person accidentally slips and falls on a pencil point in his pocket, the manufacturer of the pencil is not liable for the injury.[101]

93. Briggs v. National Indus., 92 Cal. App. 2d 542, 207 P.2d 110 (1949).

94. *See* Harper v. Remington Arms Co., Inc., 156 Misc. 53, 280 N.Y.S. 862 (1935), *aff'd,* 272 N.Y. 675, 290 N.Y.S. 130 (1936).

95. *Id.*

96. Bish v. Employers Liability Assurance Corp., 236 F.2d 62, 69 (5th Cir. 1956); Kaemfe v. Lehn & Finks Prods. Corp., 21 App. Div. 2d 197, 200, 249 N.Y.S.2d 840, 845 (1964), *appeal dismissed,* 18 N.Y.2d 784, 221 N.E.2d 809, 275 N.Y.S.2d 268 (1966); *see* Tingey v. E. F. Houghton & Co., 30 Cal. 2d 97, 103, 179 P.2d 807, 811 (1947).

97. Jamieson v. Woodward & Lothrop, 247 F.2d 23, 29 (D.C. Cir.), *cert. denied,* 355 U.S. 855 (1957).

98. *Id.*

99. Poplar v. Bourjois, 298 N.Y.62, 80 N.E.2d 334 (1948).

100. *Id.* at 66, 80 N.E. 2d at 336.

101. Jamieson v. Woodward & Lothrop, 247 F.2d 23, 26 (D.C. Cir.), *cert denied,* 355 U.S. 855 (1957).

Therefore, although in fact the manufacturer may have forseen that these eventualities could occur, they are too unusual for the law to hold them to be within the range of forseeable injuries.

A caveat should be added, however. The fact that the number of persons who will be harmed is small, or that the product has been used for a substantial time by the public without any injuries occuring will not inevitably result in the court's holding an injury unforseeable.[102] If there is a substantial likelihood that even a small number will be subjected to a substantial probability of injury, even in cases involving very rare allergies,[103] the injury is held to be forseeable. A manufacturer who knows there is a danger of injury cannot rely on the fact that no injuries have occurred to escape liability.[104] Finally, it should be noted that courts apparently are less willing to find very serious injuries or death unforseeable than moderate or petty injuries.[105]

C. *Intervening Causes*

As was pointed out earlier, most courts hold that the manufacturer satisfies the duty to warn by issuing the warning in a manner reasonably calculated to reach the ultimate user.[106] The fact that the warning failed to reach the user has no effect on imposition of liability in these cases. A minority of courts reach substantially the same result via a different theoretical route—the doctrine of intervening negligence of a third party. Therefore, when the warning reached the retailer,[107] an original pur-

102. Martin v. Bengue, Inc., 25 N.J. 359, 136 A.2d 626 (1957).

103. Gober v. Revlon, Inc., 317 F.2d 47 (4th Cir. 1963); Wright v. Carter Prods., Inc., 244 F.2d 53 (2d Cir. 1957) (defendant manufacturer knew aluminum sulfate was an irritant even though only 373 complaints out of 82,000,000 jars of deodorant sold); Proctor & Gamble Mfg. Co. v. Superior Ct., 124 Cal. App. 2d 157, 268 P.2d 199 (1954); Braun v. Roux Distrib. Co., 312 S.W.2d 758 (Mo. 1958) (defendant manufacturer had sold 50,000,000 packages of hair dye without compliant but it contained a known sensitizer). *Contra,* Merril v. Beaute Vues Corp., 235 F.2d 893 (10th Cir. 1956).

104. Braun v. Roux Distrib. Co., 312 S.W.2d 758 (Mo. 1958).

105. *See* Tingey v. E. F. Houghton & Co., 30 Cal. 2d 97, 179 P.2d 807 (1947).

106. *See* notes 28-36 *supra* and accompanying text.

107. Victory Sparkler & Specialty Co. v. Latimer, 53 F.2d 3 (8th Cir. 1931). Here a small child ingested a firecracker which contained a poisonous substance. The manufacturer was held liable for failing to warn the child *or* retailer of the presence of said poison. The court said that if the retailer had received knowledge of the poisonous character then no recovery could have been had against the manufacturer, the retailer's negligence in failing to pass on the warning having supervened the manufacturer's negligence. *See* Elrod v. King, 105 Ga. App. 46, 49, 123 S.E.2d 441, 442 (1961) in which it was held that if "the defect is discovered later by one under a duty to repair the defect or give warning of it [in this instance a retail installer of a heating system], this discovery will insulate the manufacturer from any damages resulting from its manufacture of a latently defective machine." *But see* Kentucky Independent Oil Co. v. Schnitzler, 208 Ky. 507, 271 S.W. 570 (1925).

chaser,[108] or the employer of an injured workman[109] the manufacturer has escaped liability by pleading that the negligence of the intervening party in failing to relay the warning was the cause of the injury. There are no cases allowing the manufacturer to escape liability by pleading that he warned a distributor and that the distributor failed to relay the warning.[110] It would seem that if the user is warned, then third parties within the foreseeable zone of danger cannot recover from the manufacturer because the user's negligent failure to relay the warning to the third parties is the intervening cause of the harm.[111] Whether the majority of courts would in fact follow this reasoning is, at best, a matter of conjecture.

While courts have been willing to relieve the manufacturer of liability by labeling the failure to relay the warning as a superceding cause, they have been unwilling to do so when the intervening party failed to discover the danger and no warning or an inadequate warning had been given by the manufacturer.[112] In at least one case, the contributory negligence of the injured workman in erecting a scaffold in a manner which violated safety codes was either not pleaded or was ignored by the court in holding the manufacturer liable for failing to warn of dangers present from his product in constructing the scaffold in this manner.[113] This probably indicates an unwillingness on the part of the court to relieve the manufacturer of the duty to warn—apparently a not uncommon attitude.

Conclusion

The great bulk of cases involving the duty to warn have been decided within the past decade—indicating the growing acceptance and importance of this theory in the overall field of product liability. It would appear to give an important tool to the plaintiff who has been injured by a product, because it offers a ground for recovery which is broader than the theory of negligence in manufacture. It may also offer a ground for recovery where disclaimers have restricted the ability of the plaintiff to proceed on

108. Ford Motor Co. v. Atcher, 310 S.W.2d 510 (Ky. Ct. App. 1957); McLaughlin v. Mine Safety Appliance Co., 11 N.Y.2d 62, 181 N.E.2d 430, 226 N.Y.S.2d 407 (1962). But, even in those instances in which the original purchaser has actually been warned by the manufacturer of the dangers involved in the use of his product, the warning is held to be insufficient if the failure by the purchaser to pass on the warning is reasonably forseeable by him. *See,* Spruill v. Boyle-Midway Inc., 308 F.2d 79 (4th Cir. 1962).

109. Bertone v. Turco Prods., Inc., 252 F.2d 726, 729 (3d Cir. 1958).

110. *See* Gall v. Union Ice Co., 108 Cal. App. 2d 303, 239 P.2d 48 (1951).

111. *See* Starr v. Koppers Co., 398 S.W.2d 827 (Tex. Civ. App. 1965).

112. McLaughlin v. Mine Safety Appliance Co., 11 N.Y.2d 62, 181 N.E.2d 430, 226 N.Y.S.2d 407 (1962).

113. Swaney v. Peden Steel Co., 259 N.C. 531, 131 S.E.2d 601 (1963).

a theory of breach of express or implied warranties. Even where the plaintiff has the option of proceeding on a theory of negligence in manufacture of the product, proof of the breach of the duty to warn may be a more attractive route to recovery. The plaintiff is not faced with the difficulty in discovering the negligent conduct that occurred in a complex manufacturing process or in relying, in the alternative, on the doctrine of *res ipsa loquitor*. Instead, he proves that the product is capable of causing serious injury, *i.e.* that it is imminently and inherently dangerous, a fact that is probably painfully obvious. He then proves that he received no adequate or sufficient warning. The proof in such a case obviously is fairly easy to gather and is readily available. Therefore, it is reasonable to predict that plaintiffs will turn to this ground of recovery more often in the future. The increased number of cases decided during the recent years would seem to support this.

The net result of establishment of the duty to warn as a major weapon in the plaintiff's arsenal would seem to be an increase in the scope and likelihood of the manufacturer's product liability. It places a heavy burden on the manufacturer to discover those dangers which are present in the use of or contact with his product and to convey a sufficient notice of these dangers to the public. Because he is charged with the knowledge of an expert, the manufacturer must keep abreast of scientific discoveries relating to his product. He has been held responsible for dangers discovered after the product was placed on the market and sold to consumers—forcing him to follow the product and warn the present owners. This would not seem an unfair burden to place on the manufacturer in today's economy. The manufacturer is most familiar with his product and therefore in the best position to discover dangers. It would not appear to be unfair to require him to keep abreast of developments in the field, and it is likely that a manufacturer of any size is going to do this anyway in order to effectively compete with other companies. The manufacturer is usually able either to spread the loss among his customers by a slight increase in price or to insure against the loss and spread the cost of the premium to his customers through a price increase. Finally, the consumer in today's economy is ill-equipped to detect latent defects and must rely on the knowledge and good faith of the manufacturer to produce a safe product or to point out the dangers he should be aware of in its use. The duty to warn seems to be an adequate means of assuring the consumer's safety.