Westlaw.

760 P.2d 574

157 Ariz. 574, 760 P.2d 574, Prod.Liab.Rep. (CCH) P 11,732

(Cite as: 157 Ariz. 574, 760 P.2d 574)

Page 1

 \triangleright

Court of Appeals of Arizona, Division 1, Department A.

Roberta BAROLDY and Lee Baroldy, wife and husband, Plaintiffs-Appellees Cross Appellants,

ORTHO PHARMACEUTICAL CORPORATION, a foreign corporation, Defendant-Appellant Cross Appellee.

No. 1 CA-CIV 9204.

March 22, 1988. Review Denied Sept. 14, 1988.

Products liability action was brought against diaphragm manufacturer as result of injury from toxic shock. The Superior Court, Maricopa County, Cause No. C-498754, Thomas W. O'Toole, J., entered judgment for products liability claimants and appeal was taken. The Court of Appeals, Corcoran, P.J., held that: (1) state law rather than North Carolina law was applicable to products liability action; (2) issue as to whether use of diaphragm caused toxic shock was for jury; and (3) evidence of diaphragm manufacturer's subsequent revisions in its patient information on booklet was admissible in products liability action to impeach diaphragm manufacturer.

Affirmed.

West Headnotes

[1] Appeal and Error 30 \$\infty\$ 893(1)

30 Appeal and Error
30XVI Review
30XVI(F) Trial De Novo
30k892 Trial De Novo
30k893 Cases Triable in Appellate Court
30k893(1) k. In General. Most

Choice of law is question of law reviewed de novo by Court of Appeals.

[2] Products Liability 313A \$\infty\$ 105

313A Products Liability
313AI In General
313Ak105 k. What Law Governs. Most Cited
Cases
(Formerly 313Ak3)

Products Liability 313A 228

313A Products Liability
313AIII Particular Products
313Ak223 Health Care and Medical Products
313Ak228 k. Contraceptive Drugs and
Devices. Most Cited Cases
(Formerly 313Ak3)

State's significant relationship to products liability claimant's injury allegedly caused by toxic shock associated with use of diaphragm and to parties justified application of state law as opposed to North Carolina law as exception to rule that local law of state where injury occurred generally applied; although place of injury was North Carolina, location was mere happenstance as products liability claimant was in North Carolina because of temporary military assignment over which her husband had no control, damages for both future medical expenses and loss of future income were likely to continue in state where products liability claimant was domiciled, manufacturer's corporate decision about what to include in warning most likely occurred at its principal place of business in New Jersey and such law was similar to state law, and state had more significant interest in litigation.

[3] Evidence 157 🗪 555.5

157 Evidence
157XII Opinion Evidence
157XII(D) Examination of Experts
157k555 Basis of Opinion
157k555.5 k. Cause and Effect. Most

Page 2

Cited Cases

"Occlusion theory" used as basis for several of experts' opinions that diaphragm caused toxic shock was not sort of procedure or technique to which Frye v. United States test of general acceptance required for admission of scientific expert testimony was usually applied, and was instead scientific hypothesis of causation.

[4] Evidence 157 \$\infty\$ 555.5

157 Evidence
157XII Opinion Evidence
157XII(D) Examination of Experts
157k555 Basis of Opinion
157k555.5 k. Cause and Effect. Most Cited Cases

Evidence 157 \$\infty 556

157XII Opinion Evidence

157 Evidence

157KII(D) Examination of Experts
157k556 k. References to Authorities on Subject. Most Cited Cases
Even if Frye v. United States test of general acceptance required for admission of scientific expert testimony was applicable to "occlusion theory," advanced as basis for several of experts' opinions that diaphragm caused toxic shock, products liability claimants showed through testimony of cross section of medical experts and through published writings in treatises and journal that occlusion theory was one accepted scientific hypothesis to explain causal relationship between diaphragms and toxic shock so as to render occlusion theory admissible in products liability action.

[5] Evidence 157 \$\infty\$ 571(9)

157 Evidence
157XII Opinion Evidence
157XII(F) Effect of Opinion Evidence
157k569 Testimony of Experts
157k571 Nature of Subject
157k571(9) k. Cause and Effect.

Most Cited Cases

Products liability claimants were only required to show that "occlusion theory," advanced as basis for the experts' opinions that diaphragm caused toxic shock embodied one generally accepted scientific hypothesis of causation to render it admissible in products liability action, but they did not need to establish that occlusion was only theory of causation or that it commanded universal acceptance, and thus, diaphragm manufacturer's expert witnesses testimony did not disprove theory, but merely created conflict in medical testimony that went to weight rather than sufficiency of evidence.

[6] Products Liability 313A \$\iii 390\$

313A Products Liability
313AIV Actions
313AIV(C) Evidence
313AIV(C)4 Weight and Sufficiency of Evidence

313Ak389 Proximate Cause 313Ak390 k. In General. Most

Cited Cases

(Formerly 313Ak82.1, 313Ak82)

Plaintiffs need not provide existing scientific study showing statistical correlation between product and injury to establish causal relation in products liability action.

[7] Products Liability 313A 228

313A Products Liability
313AIII Particular Products
313Ak223 Health Care and Medical Products
313Ak228 k. Contraceptive Drugs and
Devices. Most Cited Cases
(Formerly 313Ak88, 138k22 Drugs and Narcotics)

Products Liability 313A 409

313A Products Liability
313AIV Actions
313AIV(D) Questions of Law or Fact
313Ak408 Proximate Cause

760 P.2d 574

157 Ariz. 574, 760 P.2d 574, Prod.Liab.Rep. (CCH) P 11,732

(Cite as: 157 Ariz. 574, 760 P.2d 574)

313Ak409 k. In General. Most Cited Cases

(Formerly 313Ak88, 138k22 Drugs and Narcotics)

Issue as to whether prolonged use of diaphragm caused products liability claimant to suffer toxic shock was for jury in products liability action based on theory of failure to warn.

[8] Products Liability 313A \$\infty 228

313A Products Liability
313AIII Particular Products
313Ak223 Health Care and Medical Products
313Ak228 k. Contraceptive Drugs and
Devices. Most Cited Cases
(Formerly 313Ak98, 138k20.1, 138k20 Drugs and Narcotics)

Products Liability 313A \$\infty\$ 420

313A Products Liability
313AIV Actions
313AIV(E) Instructions
313Ak420 k. In General. Most Cited Cases
(Formerly 313Ak98, 138k20.1, 138k20 Drugs and Narcotics)

Instruction on notice to manufacturer through its agent that use of diaphragm caused increased growth of bacteria that causes toxic shock was amply supported by evidence that physician wrote to manufacturer's agent about possible dangerous relationship between toxic shock and diaphragm which was acknowledged by manufacturer's director of medical services who requested that physician complete drug experience report on patient who had developed toxic shock after diaphragm use; physician's testimony concerning conversation with unidentified sales representative of diaphragm manufacturer was not only evidence supporting instruction.

[9] Evidence 157 🗪 357

157 Evidence

157X Documentary Evidence
157X(C) Private Writings and Publications
157k357 k. Letters, Telegrams, and Other
Correspondence. Most Cited Cases

Evidence 157 € 361

157 Evidence
157X Documentary Evidence
157X(C) Private Writings and Publications
157k360 Books and Other Printed Publications

157k361 k. In General. Most Cited Evidence of diaphragm manufacturer's two subsequent revisions of its patient information booklet accompanying diaphragm, letter manufacturer sent to physicians, and articles, reports and medical records published after products liability claimant was discovered to be suffering from toxic shock were admissible in products liability action against manufacturer to impeach manufacturer's claim that its diaphragm did not cause products liability claimant's injury; although warnings did not explicitly admit diaphragm use caused toxic shock, they attenuated manufacturer's claim that its diaphragm could not cause toxic shock to extent warning suggested possibility of causal relationship between diaphragm use and toxic shock especially in light of instruction limiting jury consideration of subsequent revisions for impeachment use only.

[10] Evidence 157 544

157 Evidence
157XII Opinion Evidence
157XII(C) Competency of Experts
157k544 k. Cause and Effect. Most Cited Cases

Microbiologist who had doctoral degree in microbiology, specialized in staphylococcal disease and had done research on toxic shock syndrome who was associate professor of pathology at university school of medicine and was director of clinical microbiology laboratory at hospital was competent to testify as expert to diagnosis, causation, and signi-

760 P.2d 574

157 Ariz. 574, 760 P.2d 574, Prod.Liab.Rep. (CCH) P 11,732

(Cite as: 157 Ariz. 574, 760 P.2d 574)

ficance of particular medical records in products liability action brought by claimant as result of toxic shock syndrome allegedly associated with use of diaphragm.

[11] Evidence 157 544

157 Evidence

157XII Opinion Evidence

157XII(C) Competency of Experts

157k544 k. Cause and Effect. Most Cited

Cases

Nonmedical doctor is not precluded from testifying as to diagnosis and causation solely because he is not medical doctor.

[12] Evidence 157 536

157 Evidence

157XII Opinion Evidence

157XII(C) Competency of Experts

157k536 k. Knowledge, Experience, and Skill in General. Most Cited Cases

Expert may be qualified to give opinion by reason of actual experience or careful study.

[13] Evidence 157 538

157 Evidence

157XII Opinion Evidence

157XII(C) Competency of Experts

157k538 k. Due Care and Proper Conduct in General. Most Cited Cases

Labeling consultant who spent 18 years as director of labeling and hazard assessment for chemical company that produced, among other things, pharmaceutical products and who established labeling policies, including decisions regarding advanced reports about company products was competent to testify as expert that diaphragm manufacturer had duty to warn of association between use of diaphragm and toxic shock syndrome on basis of pharmaceutical industry standards and about diaphragm manufacturer's information regarding association of diaphragm use and toxic shock syndrome.

[14] Evidence 157 508

157 Evidence

157XII Opinion Evidence

157XII(B) Subjects of Expert Testimony

157k508 k. Matters Involving Scientific or Other Special Knowledge in General. Most Cited Cases

Rule allows expert testimony if it will assist trier of fact to understand evidence or to determine fact in issue. 17A A.R.S. Rules of Evid., Rule 702.

[15] Products Liability 313A 🖘 113

313A Products Liability

313AII Elements and Concepts

313Ak113 k. Strict Liability. Most Cited (Formerly 313Ak5)

Manufacturer of product in strict liability case is treated as having skill of expert concerning its product.

[16] Appeal and Error 30 € 1053(1)

30 Appeal and Error

30XVI Review

30XVI(J) Harmless Error

30XVI(J)10 Admission of Evidence

30k1053 Error Cured by Withdrawal,

Striking Out, or Instructions to Jury

30k1053(1) k. By Withdrawal or

Striking Out. Most Cited Cases

Any prejudice arising from labeling consultant's improper testimony concerning contents of diaphragm manufacturer's warning as to association between toxic shock and diaphragm use was cured when trial judge struck labeling expert's testimony as to adequacy of warnings.

[17] Evidence 157 \$\infty\$ 156

157 Evidence

157IV Admissibility in General

157IV(E) Competency

157k156 k. Evidence Inadmissible by Reason of Exclusion of Similar Evidence of Adverse Party. Most Cited Cases

Page 5

Trial court did not abuse its discretion in precluding diaphragm manufacturer's expert witness from testifying that diaphragm manufacturer did not have duty to revise its patient information booklet to disclose association between toxic shock and diaphragm use as trial did not allow either manufacturer's expert who was microbiologist or microbiologist-expert of products liability claimant to testify about duty to revise booklets.

**576 *576 Fennemore Craig, P.C. by John D. Everroad, Paul J. Mooney, E.J. Kotalik, Jr., Phoenix, for plaintiffs-appellees, cross appellants.

Evans, Kitchel & Jenckes, P.C. by William M.J. Shattuck, Phoenix, Arter & Hadden by George Gore, John D. Maddox, Cleveland, Ohio, for defendant-appellant, cross appellee.

OPINION

CORCORAN, Presiding Judge.

Defendant-appellant Ortho Pharmaceutical Corporation (Ortho) appeals from the judgment entered in favor of appellees Roberta Baroldy and Lee Baroldy (plaintiffs) after a jury awarded them \$1,500,000 in this products liability suit.

Ortho is incorporated in Delaware with headquarters in New Jersey. It does business in all 50 states. Ortho contends on appeal that the trial court erred in applying Arizona law rather than North Carolina law, and then applied that law erroneously in its evidentiary rulings, resulting in prejudice**577 *577 to Ortho that requires a new trial. Ortho does not claim that Arizona courts do not have jurisdiction or provide a proper venue.

Plaintiffs cross-appeal on the basis of an evidentiary ruling, but because they request no affirmative relief and conceded at oral argument that they do not desire reversal, we do not address that issue.

Because we find no reversible error, we affirm the judgment.

1. Factual Background

Approximately 6 weeks after the birth of her first child in April 1982, Roberta Baroldy's obstetrician prescribed an Ortho All-Flex diaphragm. Ortho has manufactured and sold many millions of diaphragms for more than 40 years. Roberta began using the diaphragm in early July 1982, and experienced discomfort. She returned to her obstetrician on July 8, 1982, to check the fit of the diaphragm, and was assured it fit well. During the next three days, she inserted and removed the diaphragm repeatedly, wearing it for extended periods. On July 11, 1982, Roberta awoke with a high fever and a flushed appearance. Her husband, Lee, took her to the emergency room of the local hospital, where she was told she had the flu. Roberta returned home, where her symptoms worsened. She returned to the emergency room late that afternoon, and was admitted for treatment. Her hospital record indicates that a culture taken from her diaphragm tested positive for Staphylococcus aureus (S. aureus), a common symptom of toxic shock syndrome (TSS). See generally Chesney, Bergdoll, Davis & Vergeront, The Disease Spectrum, Epidemiology, and Toxic-Shock Etiology ofSyndrome. Ann.Rev.Microbiol. 315 (1984). The admitting physician recorded in Roberta's medical record that his initial evaluation was "Toxic shock state secondary to retained vaginal diaphragm." Roberta was hospitalized for 41 days with TSS, at times comatose and near death.

Ortho does not dispute on appeal that Roberta had TSS, although that issue was litigated at trial. Plaintiffs' medical witnesses testified at trial that Roberta will continue to have physical problems the rest of her life as a result of the disease.

At the time Roberta's diaphragm was prescribed, the Patient Information Booklet (PIB) accompanying the device contained the following statements:

You need not feel any urgency about removing the diaphragm. It is safe to let it remain in position for 24 hours. Should you forget to remove it for

760 P.2d 574

157 Ariz. 574, 760 P.2d 574, Prod.Liab.Rep. (CCH) P 11,732

(Cite as: 157 Ariz. 574, 760 P.2d 574)

some hours, or should removal be inconvenient at any particular time, that is no cause for concern. Just bear in mind that if you desire to have intercourse again, you must first apply more spermicidal jelly or cream.

Prior to and during Roberta's hospitalization, plaintiffs were living in North Carolina, where Lee was temporarily stationed in the United States Army. After Roberta's release from the hospital, plaintiffs returned to Arizona, where they had lived prior to Lee's enlistment. In October 1983, plaintiffs filed this products liability suit against Ortho in Arizona, claiming first, that the diaphragm was defective under 2 Restatement (Second) of Torts § 402A (1965) (§ 402A) because Ortho's PIB failed to warn diaphragm users of the danger of TSS, and second, that the product was defective under § 402B because the PIB contained false or misleading statements. Plaintiffs also asserted claims of negligence and breach of warranty, which were later withdrawn.

After a lengthy trial, the court entered judgment for the plaintiffs on the jury's verdict. The jury awarded plaintiffs compensatory damages in the amount of \$1,500,000. Although the issue of punitive damages was submitted to the jury, none were awarded. Ortho has timely appealed from this judgment, but Ortho does not claim that the judgment is excessive.

2. Choice of Law

Ortho first argues that the trial court erred in applying the products liability law of Arizona rather than the negligence law of North Carolina. Arizona has adopted §§ 402A and 402B, but North Carolina has not. Compare **578*578Salt River Project Agric. Improvement & Power Dist. v. Westinghouse Elec. Corp., 143 Ariz. 368, 694 P.2d 198 (1984)with Smith v. Fiber Controls Corp., 300 N.C. 669, 268 S.E.2d 504 (1980). North Carolina thus does not recognize the doctrine of strict products liability. Byrd Motor Lines, Inc. v. Dunlop Tire and Rubber Corp., 63 N.C.App. 292, 304 S.E.2d 773 (1983).

Ortho contends that 1 Restatement (Second) of Conflicts § 146 (1971) (§ 146) FNI creates a presumption that the law of the state where the injury occurred-here, North Carolina-governs the choice of law issue. Ortho also contends that, under the gen-

law issue. Ortho also contends that, under the general principles of § 145, FN2 North Carolina law should apply because North Carolina has more contacts with the parties and the occurrence than does Arizona.

FN1. Section 146 provides as follows:

Personal Injuries

In an action for a personal injury, the local law of the state where the injury occurred determines the rights and liabilities of the parties, unless with respect to the particular issue, some other state has a more significant relationship under the principles stated in § 6 to the occurrence and the parties, in which event the local law of the other state will be applied.

FN2. Section 145 provides as follows:

The General Principle

- (1) The rights and liabilities of the parties with respect to an issue in tort are determined by the local law of the state which, with respect to that issue, has the most significant relationship to the occurrence and the parties under the principles stated in § 6.
- (2) Contacts to be taken into account in applying the principles of § 6 to determine the law applicable to an issue in-clude:
- (a) the place where the injury occurred,
- (b) the place where the conduct causing the injury occurred,
- (c) the domicile, residence, nationality,

760 P.2d 574

157 Ariz. 574, 760 P.2d 574, Prod.Liab.Rep. (CCH) P 11,732

(Cite as: 157 Ariz. 574, 760 P.2d 574)

place of incorporation and place of business of the parties, and

(d) the place where the relationship, if any, between the parties is centered.

These contacts are to be evaluated according to the relative importance with respect to the particular issue.

The parties argued this issue at trial after plaintiffs sought partial summary judgment on the choice of law question. The trial court found that "Arizona law clearly applies and controls this case, rather than the law of either North Carolina or New Jersey," after concluding that "the most significant relationship to the occurrence and the parties exists in this jurisdiction and Arizona has the greater interest in the determination of this matter."

[1] Because choice of law is a question of law, our review of this issue is de novo. See, e.g., Bryant v. Silverman, 146 Ariz. 41, 703 P.2d 1190 (1985): Ambrose v. Illinois-California Express, Inc., 151 Ariz. 527, 729 P.2d 331 (App.1986). Our analysis has three parts. First, we must consider the general principles of § 145 to determine the number of contacts and the weight of each state's contacts with the parties and the occurrence. Second, those contacts must be taken into account in applying the principles of 1 Restatement (Second) of Conflicts § 6 (§ 6) FN3 to determine which state has the most significant to the occurrence and the parties. Third, the specific principles of § 146 must be applied. See generally Bates v. Superior Court, 156 Ariz. 46, 749 P.2d 1367 (1988); Bryant v. Silverman; Ambrose v. Illinois-California Express, Inc.; Kimble & Lesher, Products Liability §§ 331-36 (1979).

FN3. Section 6 provides as follows:

Choice-of-Law Principles

(1) A court, subject to constitutional restrictions, will follow a statutory directive of its own state on choice of law.

- (2) When there is no directive, the factors relevant to the choice of the ap-
- (a) the needs of the interstate and international systems,
- (b) the relevant policies of the forum,

plicable rule of law include

- (c) the relevant policies of other interested states and the relative interests of those states in the determination of the particular issue,
- (d) the protection of justified expectations,
- (e) the basic policies underlying the particular field of law,
- (f) certainty, predictability and uniformity of results, and
- (g) ease in the determination and application of the law to be applied.

[2] A. Section 145. Beginning with § 145, we find that Arizona has the most significant contacts with the parties and occurrence. First, although the "place of injury" was North Carolina, that location **579 *579 was a mere happenstance because Roberta was in North Carolina because of temporary military assignment over which her husband had no control, and because the same injury could have happened to her regardless of where she lived. Cf. Hitchcock v. United States, 665 F.2d 354 (D.C.Cir.1981) (place of injury was fortuitous when plaintiff was injured while temporarily assigned to a location in connection with government service). Additionally, here plaintiffs demonstrated damages for both future medical expenses and loss of future income, indicating that the injuries are likely to continue in Arizona, where plaintiffs are domiciled. Cf. Moore v. Montes, 22 Ariz.App. 562, 566, 529 P.2d 716, 720 (1974) (Arizona has an interest in insuring that its injured residents do not become wards of the state as a result of long-term injuries

Page 8

that require medical treatment).

Second, although the place where the conduct causing the injury occurred is unclear, it is unlikely that the conduct occurred either in Arizona or North Carolina. Cf. Ambrose, 151 Ariz. at 530, 729 P.2d at 334. In a failure to warn case, the "place of conduct" is where the tortious decision is made. See§ 146, comment d; Danner v. Staggs, 680 F.2d 427, 430 (5th Cir.1982) (place of misconduct in a negligence action is where the negligent decision is made). Thus, plaintiffs' incidental conduct is not relevant to the choice of law issue. Hitchcock, 665 F.2d at 359-61. Here, Ortho's corporate decision about what to include in its PIB most likely occurred at its principal place of business in New Jersey.FN4 See Bates, 156 Ariz. at 49-50, 749 P.2d at 1370-71. The parties have agreed that the products liability laws of Arizona and New Jersey are virtually identical for purposes of this analysis; New Jersey law thus presents no "conflict" to resolve. Comment i to § 145 indicates that, when the law of two states does not conflict, the contacts from those two states should be considered as if they were from the state involved in the choice of law question. See also Myers v. Cessna Aircraft Corp., 275 Or. 501, 513, 553 P.2d 355, 367 (1976). Thus, for purposes of our § 145 analysis, the place where the conduct occurred-New Jersey-can be considered an Arizona contact.

FN4. Neither party argued in the trial court that Delaware law should apply to this matter. The parties further agreed that, although New Jersey has an interest in regulating Ortho's conduct, New Jersey law would not apply.

Third, the domicile, residence, and principal place of business of the parties again indicate an Arizona contact. Ortho does not dispute that plaintiffs have always been Arizona domiciliaries. Although plaintiffs were residing in North Carolina at the time of the injury, we have already dismissed that temporary circumstance as fortuitous. Ortho has its principal place of business in New Jersey. Com-

ment e to § 145 indicates that the corporate place of business is a more important contact than the place of incorporation. Again, grouping New Jersey contacts with Arizona contacts because the laws of those states do not conflict, the "domicile" factor weighs heavily in favor of Arizona. In § 145 analyses, the domicile of the plaintiff often carries the greatest weight. See, e.g., Bates; Bryant; Ambrose. This is because "the state where the injury occurs does not have a strong interest in compensation if the injured plaintiff is a nonresident.... Compensation of an injured plaintiff is primarily a concern of the state in which plaintiff is domiciled." Bryant, 146 Ariz. at 45, 703 P.2d at 1194. In this case, the fact that plaintiffs are Arizona domiciliaries is the most significant factor.

Fourth, the place where the relationship between the parties was centered was undisputedly North Carolina. This factor, however, carries little weight in our analysis because of the fortuitous location of the injury. Plaintiffs could have duplicated their relationship with Ortho anywhere.

Section 145 thus indicates that Arizona is the state with the most qualitative contacts between the parties and the occurrence.

B. Section 6. We next turn to the choice-influencing factors of § 6 relevant to choosing the applicable rule of law.

**580 *580 First, the parties agree that the needs of the interstate system will not be impaired by the application of Arizona law. Second, the relevant policies of the forum indicate that Arizona has the more significant interest. Arizona has adopted §§ 402A and 402B to protect its citizens from defective products by compensating resident tort victims and preventing future misconduct. See, e.g., Salt River Project Agric. Improvement & Power Dist., 143 Ariz. at 375, 694 P.2d at 205. North Carolina courts, on the other hand, have declined to adopt §§ 402A and 402B out of deference to the legislature as a policymaker. Smith v. Fiber Controls Corp. Furthermore, even if North Carolina declined to ad-

Page 9

opt strict products liability because of a policy aimed at protecting its resident defendants from liability, Ortho would be outside of that protected class as a foreign corporation. See Turcotte v. Ford Motor Co., 494 F.2d 173 (1st Cir.1974). In this case, Arizona's policy concerns clearly supersede any competing North Carolina policy. Cf. Trahan v. E.R. Squibb & Sons, Inc., 567 F.Supp. 505 (M.D.Tenn.1983) (applying Tennessee products liability law rather than North Carolina negligence law).

Similarly, a consideration of the relevant policies of New Jersey and the basic policies underlying its tort law reinforces Arizona's significant interest. Because New Jersey has virtually the same relevant law, its policies are not disrupted by holding its resident corporation Ortho liable under Arizona law. Application of Arizona law also promotes the basic policies underlying all tort law: to compensate victims and to deter future misconduct. See Gordon v. Kramer, 124 Ariz. 442, 604 P.2d 1153 (App.1979).

The § 6 considerations of "protection of justified expectations" and "certainty, predictability, and uniformity of result" are largely irrelevant in this analysis for several reasons. First, because Ortho does business in all 50 states, it can expect to be subject to liability in those states that have adopted strict products liability. Second, Ortho has not indicated that it altered its business activity in North Carolina in reliance on that law. See Trahan, 567 F.Supp. at 510 ("[A] large national corporation doing business in all states does not make its marketing decisions on the basis of whether a state has or has not adopted § 402A"). Third, because an outbreak of TSS cases in diaphragm users is hardly a planned occurrence, predictability and uniformity are not important considerations. See Gordon.

Finally, we find that an Arizona jury could apply either Arizona products liability law or North Carolina negligence law with equal ease.

Our § 6 analysis compels the conclusion that Arizona is the state with the most significant interest.

C. Section 146. Applying § 145 and § 6 principles to the specific rule in § 146, we hold that Arizona's significant relationship to the occurrence and the parties justifies the application of Arizona law as the exception to the rule that the local law of the state where the injury occurs generally applies.

We thus conclude that the trial court properly applied Arizona law in this case.

3. Causation

Ortho next contends that the trial court erred in denying its motions for directed verdict and judgment notwithstanding the verdict because plaintiffs presented insufficient evidence that the diaphragm caused TSS. Plaintiffs' sole evidence of causation, Ortho argues, was based on the "occlusion theory," which is not a "generally accepted" scientific principle. Plaintiffs respond that the trial court properly denied Ortho's post-trial motions because plaintiffs showed by substantial evidence that the diaphragm caused Roberta's TSS.

We will not reverse the trial court's denial of a motion for directed verdict unless no evidence was presented upon which a reasonable juror would be justified in returning a verdict for the other party. See Fridena v. Evans, 127 Ariz. 516, 520, 622 P.2d 463, 467 (1980). For the following reasons, we reject Ortho's argument that plaintiffs did not present sufficient evidence of causation to submit the case to the jury.

**581 *581 [3] The "occlusion theory" was explained at trial by Bruce A. Hanna, Ph.D., a microbiologist:

[T]he function of the diaphragm is to occlude or to block off parts of the cervix and in so doing it will collect secretions. Some of these secretions can be from the upper genito-urinary on one side of the diaphragm and other secretions may be vaginal or seminal fluid on the other side.... [t]hese are all factors which bacteria such as staph [S. aureus, which causes the toxin that results in

Page 10

TSS] like to grow upon. In my opinion, it [the diaphragm] not only provided the physical substrate but provided the drawing together of the nutrient supplies for the organisms [S. aureus] to utilize.

٠..

The analogy is very much the same between a tampon occluding the vaginal opening and blocking the outflow of secretions as well as with a diaphragm. I would not find that there should be a distinction between them.

The basis of Ortho's argument is that the occlusion theory does not meet the test of "general acceptance" required for admission of scientific expert testimony. This test was first articulated in *Frye v. United States*, 293 F. 1013, 1014 (D.C.Cir.1923):

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.

(Emphasis added.) The *Frye* test has been applied in Arizona in some contexts but not in others. *Compare Scales v. City Court*, 122 Ariz. 231, 594 P.2d 97 (1979) (breathalyzer) *and State v. Valdez*, 91 Ariz. 274, 371 P.2d 894 (1962) (polygraph) *with State v. Roscoe*, 145 Ariz. 212, 700 P.2d 1312 (1984) (dog tracking). The Arizona Supreme Court has concluded that, when it applies,

[T]he Frye test is satisfied when the court is able to conclude that disinterested and impartial experts, knowledgeable in the scientific specialty which deals with and uses such procedures or techniques, have come to recognize the methodology as having sufficient scientific basis to produce

reasonably uniform and reliable results that will contribute materially to the ascertainment of the truth.

State ex rel. Collins v. Superior Court, 132 Ariz. 180, 199, 644 P.2d 1266, 1285 (1982).

Here, the occlusion theory, advanced at trial as a basis for several of the experts' opinions that the diaphragm caused TSS, is not the sort of "procedure" or "technique" to which the "general acceptance" test of *Frye* is usually applied, but rather is a scientific hypothesis of causation.

[4] However, assuming arguendo that the Frye test is relevant, we do not find that plaintiffs failed to meet their burden to show a scientific consensus supporting the occlusion theory. See Collins, 132 Ariz. at 199, 644 P.2d at 1285. Plaintiffs showed through testimony of a cross-section of medical experts and through published writings in scholarly treatises and journals that the occlusion theory is one accepted scientific hypothesis to explain the causal relation between diaphragms and TSS.

Besides the testimony of Dr. Hanna, plaintiffs provided the following testimony supporting the "general acceptance" of the occlusion theory:

- (1) Perry Harmon, M.D., a physician board-certified in obstetrics and gynecology, testified that "recent articles" tend to relate diaphragms, along with other things that occlude the vagina, with toxic shock. So its-it's one of the number of potential causes of Toxic Shock Syndrome."
- (2) Peter McKeller, M.D., a physician board-certified in internal medicine with a subspecialty in infectious diseases, testified that "the diaphragm was quite likely**582 *582 the causation of the Toxic Shock Syndrome. Realize that toxic shock comes from a toxin produced by this bacteria [S. aureus], and that the diaphragm much like a tampon acts as an impediment to the externalization or drainage of this bacteria."
- (3) Claire Wilson, M.D., a pediatrician specializing

Page 11

in adolescent medicine, testified that "based on my understanding of the literature, anything that occludes secretions of the vaginal area might be possibly a setup for overgrowth of [S. aureus, which releases the toxins that cause TSS]."

(4) William Paul Dillon, M.D., a physician board-certified in ob/gyn and subspecializing in maternal-fetal medicine, testified that he utilized the occlusion theory in his study of whether prolonged retention of a diaphragm contributed to the growth of existing *S. aureus* bacteria, "based on what was reported" in the scientific literature. His study revealed that "large numbers of *S. aureus* were present in the lower genital tract in some women, noticeably after prolonged retention of diaphragms." Bachler, Dillon, Dryja & Neter, *The Effects of Prolonged Retention of Diaphragms on Colonization by Staphylococcus aureus of the Lower Genital Tract*, J. Fertility & Sterility 162 (Feb. 1983).

From the following testimony Ortho was unable to establish at trial that the occlusion theory is not generally accepted:

- (1) Only one defense expert, Harry Pine, M.D., Director of Medical Research for Johnson & Johnson, the parent corporation of Ortho, testified "I believe that it's [the occlusion theory] lost acceptance." Dr. Pine admitted, however, that occlusion is "nonetheless considered to be one factor that is common to a number of at least the vaginal TSS cases."
- (2) Patrick M. Schlievert, Ph.D., a microbiologist who has researched TSS, admitted "I have heard that [the occlusion theory] quite awhile in the past as a theory, but not very recently." He testified he would agree with a statement describing the occlusion theory "if that is a viable theory and if these conditions are met." Dr. Schlievert also concluded that diaphragms or tampons, alone, do not cause TSS.
- (3) Kenneth S. Kraskin, Ph.D., a bacteriologist em-

ployed by Johnson & Johnson, admitted that there is "no real consensus" as to what risk factors contribute to TSS; that "any hypothesis remains a hypothesis until information is found to the contrary"; that the occlusion theory is one such hypothesis; and that this hypothesis "has not been disproven."

On the basis of this testimony, we cannot concur with Ortho's argument that the occlusion theory is not "generally accepted."

Furthermore, plaintiffs presented additional testimony on causation that was not based on the occlusion theory. Albert O. Davies, M.D., director of the intensive care unit where Roberta Baroldy was extensively hospitalized, based his conclusion that the diaphragm caused her TSS on "the absence of any other reasonable explanation," and on the time relationship between her prolonged use of the diaphragm and the onset of the disease. Dr. Hanna based his opinion on other evidence as well. He testified that "by July of 1982 there were certainly sufficient [medical] cases that had been described and reported to come to the conclusion that there was an association between diaphragm use and toxic shock." The evidence at trial and the opinions expressed by these experts reasonably support the verdict of the jury. The jury could conclude that prolonged use of the diaphragm caused an accumulation of S. aureus and that S. aureus caused TSS. Causa causae est causa causati.

In sum, Ortho has not convinced us that the *Frye* test of "general acceptance" should act as a bar to the sufficiency of plaintiffs' expert testimony on causation. Even if that test is applicable to this hypothesis, plaintiffs have shown that a wide cross-section of experts has accepted the occlusion the-ory.

[5][6][7] Plaintiffs needed only to show that the occlusion theory embodies one generally accepted scientific hypothesis of causation to render it admissible; they did not **583 *583 need to establish that occlusion is the only theory of causation or that

Page 12

it commands universal acceptance. Ortho's expert witnesses have not disproven the theory but have merely created a conflict in the medical testimony that goes to the weight rather than the sufficiency of the evidence, and is properly resolved by the jury. See Borja v. Phoenix Gen. Hosp., 151 Ariz. 302, 306, 727 P.2d 355, 359 (App.1986). Ortho's additional argument that the occlusion theory is not supported by any "significant statistical study" also fails because plaintiffs need not provide an existing scientific study showing a statistical correlation between the product and the injury to establish a causal relation in a products liability action. See, e.g., Wells v. Ortho Pharmaceutical Corp., 788 F.2d 741, 745 (11th Cir.), cert. denied, 479 U.S. 950, 107 S.Ct. 437, 93 L.Ed.2d 386 (1986); Ferebee v. Chevron Chem. Co., 736 F.2d 1529 (D.C.Cir.1984). Finally, Ortho's argument fails because plaintiffs presented other evidence of causation that did not rely on the occlusion theory. The trial court therefore properly denied Ortho's motions for directed verdict and for judgment notwithstanding the verdict.

4. Jury Instruction on Notice to Ortho Through its Agent

[8] Ortho also challenges as erroneous and prejudicial the trial court's following instruction to the jury:

You must presume that an agent of a corporation will communicate to the corporation whatever knowledge or notice he or she receives in relation to his or her agency which is necessary for the protection of the interests of the corporation.

Ortho argues that "[t]he Court recognized that this charge was directed *solely* to Dr. Dillon's testimony concerning his conversation with an *unidentified* Ortho sales representative at his hospital in Buffalo, N.Y." (Emphasis added.) Dr. Dillon testified that he was supplied the diaphragms for his study by an Ortho salesperson, that his study showed that the use of a diaphragm "causes" an increase in the

growth of the bacteria that causes TSS, and that he told the salesperson about the results of his study, explaining to her "that I didn't know who to contact at Ortho, and that if she did or maybe if she wanted to contact them, to feel free to do that." Ortho stipulated in the Pretrial Statement that it provided the diaphragms for Dr. Dillon's study "through one of its sales representatives." Ortho contends that this testimony is insufficient to support the jury instruction on imputed knowledge of the corporation because the agent was not identified with sufficient certainty to ascertain whether there was an agency relationship with Ortho.

If we were to agree with Ortho's contention that this instruction was directed *solely* at Dr. Dillon's testimony, we would address the question whether the evidence is sufficient to support the instruction. However, we must interpret a jury instruction by viewing the evidence "in the strongest manner supporting the theory of the party requesting the instruction;" if *any* evidence establishes that theory, the instruction should be given. *Hallmark v. Allied Products Corp.*, 132 Ariz. 434, 443, 646 P.2d 319, 328 (App.1982).

Our review of the record indicates the instruction on notice to the corporation through an agent was amply supported by evidence *other* than Dr. Dillon's testimony about notice to the unidentified salesperson. Dr. Wilson testified that she wrote to an Ortho agent on February 8, 1982 about the possible dangerous relationship between TSS and diaphragm use. She felt Ortho "[s]hould be notified of a side effect of a product of theirs."

In that letter, Dr. Wilson notified Ortho that her patient had acquired TSS after diaphragm use:

I would like to alert you to a possible connection between useage of the All-Flex Arching Spring Diaphragm made by Ortho and toxic shock syndrome.... I am reporting this to you because of my concerns that in your instruction booklet on the use of the diaphragm it is stated, "It is safe to let it remain in position for 24 hours." It may be

760 P.2d 574

157 Ariz. 574, 760 P.2d 574, Prod.Liab.Rep. (CCH) P 11,732

(Cite as: 157 Ariz. 574, 760 P.2d 574)

what is in Tampon boxes.

worthwhile to include on your list of "consult your physician" instructions a seventh item and **584 *584 those warnings would be similar to

On March 15, 1982, Arnold Yeardon, M.D., Ortho's Director of Medical Services, acknowledged Ortho's receipt of Dr. Wilson's information and requested that she complete a drug experience report (DER) on her patient who had developed TSS after diaphragm use. Dr. Yeardon's letter clearly established Ortho's knowledge, through an identified agent, of previously published reports about TSS and diaphragm use in the following passages:

Thank you for your interesting letter dated February 8, 1982 in which you report a case of toxic shock syndrome in a young lady who was also using an Ortho diaphragm.

We are of course, aware of the other two cases which were reported in the New England Journal of Medicine December 24, 1981 and of a third reported in the Lancet January 23, 1982. In all three of these cases the diaphragm had been left in situ for considerably longer than 24 hours. However, in line with our policy of constantly monitoring the performance of our products and revising labeling both patient and physician, in light of the newly available evidence, we are considering amending our patient instruction booklet along the lines which you have suggested.

After Dr. Wilson returned the DER to Ortho, Dr. Yeardon again acknowledged Ortho's receipt of that information by letter dated April 13, 1982.

Plaintiffs' closing argument further convinces us that the agency instruction was not directed "solely" at Dr. Dillon's testimony about the unidentified salesperson. Immediately after reading the quoted instruction to the jury, counsel for plaintiffs argued as follows:

We know there were a couple DER's that were provided directly to Ortho, and we know that Dr. Claire Wilson wrote Ortho and said, "I have got a

Page 13

patient up here, 15 years old, ... using a diaphragm, and she's got Toxic Shock Syndrome. And I think your label is misleading, and I think you ought to consider changing it and putting the TSS warning in that exists on your tampons."

...

What they did is Dr. Yeardon writes a letter back saying, "We're considering doing that," but they didn't do it.... Dr. Yeardon sat on his duff, if you will, back at corporate headquarters, and let the information come in to him and didn't do anything with it.

. . . .

[Dr.] Dillon's study was completed using Ortho diaphragms through an Ortho salesman in December of 1981. You may recall that Dillon published an article in Lancet, ... which deals with contraceptive use, diaphragms... But Yeardon, Dr. Yeardon, sits on his duff back at the headquarters and continues to monitor the literature.

Ortho did not argue at trial or on appeal that Dr. Yeardon was not its agent. This evidence clearly supports an instruction of the corporation's notice or knowledge through its agent based on evidence other than Dr. Dillon's statement about the Ortho salesperson. Therefore, we find that the jury instruction was not erroneous. Additionally, the instruction was a correct statement of Arizona law. See Fridena v. Evans, 127 Ariz. 516, 519, 622 P.2d 463, 466 (1980).

The trial court therefore correctly instructed the jury.

- 5. Admission of Subsequent Remedial Measures and Articles
- [9] Ortho argues that the trial court erred in admitting the following into evidence: (1) Ortho's two subsequent revisions of its PIB in July 1982 and

Page 14

May 1983; (2) the "Dear Doctor" letter Ortho sent to physicians in July 1983; and (3) articles, reports, and medical records published after July 11, 1982. Ortho maintains that admission of this evidence violated rule 407 ^{FN5}, Arizona Rules of Evidence, and **585*585A.R.S. § 12-686.FN6

FN5. Rule 407 provides:

Subsequent Remedial Measures

When, after an event, measures are taken, which if taken previously, would have made the event less likely to occur, evidence of the subsequent measures is not admissible to prove negligence or culpable conduct in connection with the event. This rule does not require the exclusion of evidence of subsequent measures when offered for another purpose, such as proving ownership, control, or feasibility of precautionary measures, if controverted, or impeachment.

FN6. A.R.S. § 12-686 provides:

Inadmissible evidence; state of the art; modification

In any product liability action, the following shall not be admissible as direct evidence of a defect:

2. Evidence of any change made in the design or methods of manufacturing or testing the product or any similar product subsequent to the time the product was first sold by the defendant.

The trial court granted Ortho's pretrial motion *in limine* to preclude the above evidence. The trial court qualified its ruling by stating:

However, if the Defendant denies or contests that its diaphragm caused Plaintiff's injuries, claims

that precautionary measures, such as changes in the literature warnings, were not feasible or necessary, then the Plaintiff may, pursuant to the "for another purpose" clause of Rule 407, offer evidence of Defendant's revisions of its [Patient] Information Booklet and literature in July, 1982 and May, 1983, the "Dear Doctor" letter sent to physicians in July, 1983, and other TSS studies and developments subsequent to 7/10/82 to impeach such claims. ... If such evidence is admitted, the Court, if requested and tendered an instruction, will give an instruction limiting the purpose for which the jury can consider this evidence.

Because Ortho contested that its diaphragm caused plaintiff's injuries, the trial court admitted the disputed evidence. During jury instructions, the court told the jury, "This evidence has been admitted and should be considered by you only on the issue of whether it contradicts or impeaches Ortho's claim that its diaphragm was not a cause of Roberta Baroldy's injuries."

The Arizona Supreme Court recently addressed rule 407 and A.R.S. § 12-686 in the context of post-sale changes by a power shovel manufacturer. *Readenour v. Marion Power Shovel*, 149 Ariz. 442, 719 P.2d 1058 (1986). The court concluded:

[T]he mere fact that the evidence ultimately may tend to prove culpable conduct or product quality does not render it *ipso facto* inadmissible. Rule 407"does not require the exclusion of evidence of subsequent measures when offered for another purpose", and under our construction of A.R.S. § 12-686 evidence of remedial measures or post-sale modifications is not "direct" evidence of defect when it is relevant to and offered for other purposes.

149 Ariz. at 447, 719 P.2d at 1063.

In *Readenour*, the court pointed to three "other purposes" for which the plaintiff could use the evidence of subsequent changes. These purposes were

Page 15

to show: (1) the knowledge and recognition of the danger, (2) the feasibility of taking steps to obviate the danger, and (3) punitive damages. However, the court made clear that "[o]ther uses for the evidence were also possible." *Readenour*, 149 Ariz. at 448, 719 P.2d at 1064. Included in the "other purposes" is evidence offered for impeachment purposes. Annotation, *Admissibility of Evidence of Subsequent Repairs or Other Remedial Measures in Products Liability Cases*, 74 A.L.R.3d 1001, 1022 (1976).

In conjunction with its conclusion that evidence of subsequent remedial measures is admissible for some purposes and not for others, the *Readenour* court held that a rule 105 FN7 limiting instruction is mandatory when such an instruction is requested. 149 Ariz. at 450, 719 P.2d at 1066. The court reasoned, "This requirement stems from the principle that the 'better practice is to **586 *586 admit relevant evidence, relying upon the limiting instructions authorized by this Rule [105], if requested." 149 Ariz. at 450, 719 P.2d at 1066, quoting 1 Weinstein & Berger, *Weinstein's Evidence* ¶ 105 [1] at 105-5 (1985).

FN7. Rule 105 states:

Limited Admissibility

When evidence which is admissible as to one party or for one purpose but not admissible as to another party or for another purpose is admitted, the court, upon request, shall restrict the evidence to its proper scope and instruct the jury accordingly.

The trial court's admission of Ortho's two subsequent revisions of its PIB, the "Dear Doctor" letter, and other scientific developments subsequent to July 10, 1982, for the limited purpose of impeaching Ortho's claim that its diaphragm did not cause plaintiff's injuries was proper in light of *Readenour*. If anything, the trial court's order *in limine* precluding the evidence was too narrow to the extent that it limited the use of subsequent scientific information.

The use of such information is not precluded by either A.R.S. § 12-686 or rule 407. Furthermore, the trial court's limiting instruction was in accordance with the rule 105 policy discussion set out in *Readenour*.

Ortho argues that the admission of the subsequent revisions of its PIB was improper because the revisions did not impeach Ortho's denial of a causal relationship between diaphragm use and TSS. The first revision of the PIB in July 1982 changed the second sentence of the previous PIB statement

It is safe to let it remain in position for 24 hours.

to read:

The diaphragm should not be worn continuously for more than 24 hours.

The second revision of the PIB in May 1983 changed that warning as follows:

IMPORTANT-For contraceptive effectiveness, the diaphragm should remain in place for six hours after intercourse and should be removed as soon as possible thereafter. Continuous wearing of a contraceptive diaphragm for more than twenty-four hours is not recommended. Removal of the diaphragm before six hours may increase the risk of becoming pregnant. Retention of the diaphragm for prolonged periods may encourage the growth of certain bacteria in the vaginal tract. It has been suggested that under certain as yet unestablished conditions, overgrowth of these bacteria may lead to symptoms of toxic shock syndrome. Primary symptoms of TSS are sudden high fever (usually 102°>> or more), and vomiting, diahrrea, fainting or near fainting when standing up, dizziness or a rash that looks like a sunburn. There may also be other signs of TSS such as aching of muscles and joints, redness of the eyes, sore throat and weakness. If you have sudden high fever and one or more of the other symptoms, remove your diaphragm and consult your physician immediately.

(Emphasis in original and added.) In addition to the

760 P.2d 574

157 Ariz. 574, 760 P.2d 574, Prod.Liab.Rep. (CCH) P 11,732

(Cite as: 157 Ariz. 574, 760 P.2d 574)

Page 16

above paragraph, the PIB contained a warning entitled "IMPORTANT PATIENT INFORMATION," which stated:

Although an association has not been established between diaphragm use and toxic shock syndrome (TSS), symptoms of this condition have been reported in a few women using diaphragms. In most of these cases, the women wore a diaphragm continuously for more than 24 hours. Therefore, continuous wearing of the diaphragm for more than 24 hours is not recommended.

The trial court's decision to admit the subsequent PIBs for impeachment purposes should not be disturbed absent an abuse of discretion. See State v. Hallman, 137 Ariz. 31, 36, 668 P.2d 874, 879 (1983). Although the warnings do not explicitly admit that diaphragm use does cause TSS, they do attenuate Ortho's claim that its diaphragm cannot cause TSS to the extent the warnings suggest a possibility of a causal relationship between diaphragm use and TSS. One Ortho witness acknowledged that the Dillon study was the most important factor in adding TSS language to the 1983 PIB changes and "Dear Doctor" letter.

In arguing that the admissibility of subsequent revisions is dependent upon whether or not the revisions actually impeach their denial of a causal relationship between diaphragm use and TSS, Ortho fails to consider the limiting instruction given to the jury. The trial court instructed the jury to consider the subsequent revisions **587 *587 only with regard to whether they impeached Ortho on the causation issue. This court must presume that the jury followed the instructions given by the trial court. See Jimenez v. Starkey, 85 Ariz. 194, 196, 335 P.2d 83, 84 (1959). If the revisions did not impeach Ortho on the causation issue, the jury would have so found and the evidence would not have been used for any other purpose. Whether or not the subsequent revisions of the PIBs impeached Ortho was a factual issue for the jury-not one for this court to decide on appeal.

Ortho further argues that the limiting instruction

given by the trial court was "erroneous on its face." However, Ortho does not elucidate exactly what the error is. In any event, although Ortho frequently objected in the trial court to the admission of the disputed evidence, it did not object to the content of the limiting instruction or suggest alternatives. We therefore treat any objection to the instruction as waived. Seerule 51(a), Arizona Rules of Civil Procedure.

Ortho points to three instances when plaintiffs used the subsequent revisions improperly to show that "Ortho 'knew or should have known' before Mrs. Baroldy's illness that diaphragms caused TSS and, therefore, should have warned her of it." Only one of the three examples involved argument made in the presence of the jury. In that example, Ortho claims that during closing argument, plaintiffs' counsel used subsequent changes to show Ortho had reason to foresee association of diaphragm use and TSS. In the portion of the closing argument to which Ortho points, plaintiff's counsel stated the following:

Did the diaphragm play a role? You have got all the medical literature that pre-existed Mrs. Baroldy going to the hospital, and then the Judge let in other literature and subsequent events after she was in the hospital on the question of well, Ortho says the diaphragm didn't have anything to do with it. Does any of this literature, these exhibits suggest it does.

These statements clearly go to the issue of impeachment and are therefore not an instance of plaintiffs misusing the subsequent revisions.

6. Expert Testimony

[10] A. *Microbiologist*. Ortho argues that the trial court erred in permitting plaintiff's microbiologist, Dr. Hanna, to give medical opinions regarding diagnosis, causation, and the significance of certain medical records when he was not qualified as an expert in medicine. Ortho claims that only physi-

Page 17

cians can qualify as diagnostic experts concerning a medical condition.

Ortho's position is untenable in view of *Madison Granite Co. v. Industrial Commission*, 138 Ariz. 573, 676 P.2d 1 (App.1983). In *Madison*, this court held that in compensation hearings, an expert witness who is not a medical doctor may testify about medical causation if the witness has the qualifications required by the standards of rule 702, Arizona Rules of Evidence, and by the facts of the particular case. 138 Ariz. at 577-78, 676 P.2d at 5-6. Rule 702 provides:

Testimony by Experts

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

In explaining this rule, the *Madison* court explained that "[t]he rule speaks to the 'knowledge, skill, experience, training or education' of the witness not his title or pedigree." 138 Ariz, at 576, 676 P.2d at 4.

Significantly, the expert who was permitted to testify in *Madison* was also a microbiologist. He testified, among other things, about whether the industrial injury medically caused the claimant's subsequent tuberculosis.

Although *Madison* was a workers' compensation case, its discussion of rule 702 applies here. Dr. Hanna's testimony was permissible if his expertise was applicable to the subject about which he testified. If Dr. Hanna was qualified as an expert, it was permissible for him to testify as to **588 *588 diagnosis, causation, and the significance of particular medical records. Whether Dr. Hanna was competent to testify as an expert was a matter primarily for the trial court to decide; we will not overrule the trial judge's decision in this regard unless there is a

clear abuse of discretion. Englehart v. Jeep Corp., 122 Ariz. 256, 258, 594 P.2d 510, 512 (1979).

A brief look at Dr. Hanna's qualifications shows that the trial judge did not abuse his discretion by allowing Dr. Hanna's testimony. Dr. Hanna has a doctoral degree in microbiology, specializes in staphylococcal disease, and has done research on TSS since 1981. He is an associate professor of pathology at the New York University School of Medicine and is the director of the clinical microbiology laboratory at Bellevue Hospital in New York. Moreover, Dr. Hanna has published 30 articles, including a recent article entitled "In Vitro Amplification of TSS Toxin-1 by Intravaginal Devices."

- [11] A non-medical doctor such as Dr. Hanna is not precluded from testifying as to diagnosis and causation solely because he is not a medical doctor. *See Madison*. In view of Dr. Hanna's background, the trial judge did not abuse his discretion by allowing him to give expert testimony.
- [12] B. Labeling Expert. Ortho also argues that the trial court abused its discretion by allowing Charles J. O'Connor to testify on subjects not within his expertise. As discussed above, this court will not overrule the trial judge's decision to admit expert testimony unless a clear abuse of discretion exists. Englehart, 122 Ariz. at 258, 594 P.2d at 512. An expert may be qualified to give an opinion by reason of actual experience or careful study. Godwin v. Farmers Ins. Co., 129 Ariz. 416, 420, 631 P.2d 571, 575 (App.1981).
- [13] O'Connor is a labeling consultant who spent 18 years as director of labeling and hazard assessment for a chemical company that produced, among other things, some pharmaceutical products. In this position, O'Connor established labeling policies, including decisions regarding advance reports about company products. O'Connor testified that he had been involved with the labeling of the Dalkon Shield. In addition, O'Connor edited a book entitled *Handbook of Chemical Industry Labeling* and was in the process of writing an article entitled *Labeling*, *Hu*-

Page 18

man Factors and the Duty to Warn.

In view of O'Connor's qualifications, the trial judge found that O'Connor was adequately qualified to testify about the labeling standard of care in the pharmaceutical industry. The trial judge allowed O'Connor to testify that Ortho had a duty to warn on the basis of pharmaceutical industry standards and Ortho's information regarding the association of diaphragm use and TSS. O'Connor was also allowed to testify about the factors that must be considered in composing a warning. However, the trial judge granted Ortho's motion to strike portions of O'Connor's testimony and instructed the jury as follows:

I'm ... instructing you to disregard his [O'Connor's] opinion regarding the adequacy and the contents of the warnings. That is an issue that is solely for the jury to decide, and you are not to consider any opinion that has been testified to up to this point on the adequacy of the warnings by Mr. O'Connor. So, you're to disregard that information and not consider it in any deliberations.

(Emphasis added.)

[14][15] Rule 702, Arizona Rules of Evidence, allows expert testimony if it will assist the trier of fact to understand the evidence or to determine a fact in issue. State v. Chapple, 135 Ariz. 281, 292, 660 P.2d 1208, 1219 (1983). An issue in this case was whether Ortho had a duty to warn about the dangers of TSS relating to diaphragm use. See generally Prosser & Keeton, Law of Torts § 99 at 697 (5th ed. 1984). Arizona law requires the manufacturer of a product in a strict liability case to be treated as having the skill of an expert concerning its product. Tucson Indus., Inc. v. Schwartz, 108 Ariz. 464, 468, 501 P.2d 936, 940 (1972). Therefore, it was entirely appropriate for O'Connor to testify about whether Ortho had a duty to warn in **589 *589 light of the industry practice of giving warnings. Such testimony related to subject matter that was not within the knowledge and experience of the average juror. SeeRule 704, Arizona Rules of Evidence; *Pincock v. Dupnik*, 146 Ariz. 91, 96, 703 P.2d 1240, 1245 (App.1985). The average juror does not know when a pharmaceutical company should provide a warning. *Cf. Rabe v. Cut and Curl of Plaza 75, Inc.*, 148 Ariz. 552, 715 P.2d 1240 (App.1986) (whether a baby crawling on the floor of a beauty salon creates a hazard to customers is within the knowledge and expertise of jurors and should not be the subject of expert testimony); *Pincock* (expert testimony is not appropriate where its purpose is to educate the jury on the reasonableness of a high speed chase).

In this case, O'Connor's testimony went to whether a warning was necessary as opposed to the adequacy of the warning. As already mentioned, O'Connor's testimony about the adequacy of the warnings was stricken by the judge.

[16] Ortho relies on *Elledge v. Brand*, 102 Ariz. 338, 339, 429 P.2d 450, 451 (1967), to argue that the trial judge's instructions could not adequately cure the prejudice and that a new trial is required. Because *Elledge* was a criminal case featuring several instances of attorney misconduct and the introduction of evidence that had no bearing on the alleged crime, we do not find its holding persuasive in this context. Rather, we find that any prejudice arising from O'Connor's testimony about the contents of Ortho's warnings was cured when the trial judge struck O'Connor's testimony as to the adequacy of the warnings. *See Godwin*, 129 Ariz. at 421-22, 631 P.2d at 576-77.

[17] C. Duty to Revise. Finally, Ortho argues that the trial court erred in precluding Dr. Schlievert from testifying that Ortho did not have a duty to revise its literature in light of its admission of O'Connor's testimony. Dr. Schlievert, like Dr. Hanna, was a microbiologist. Because the trial court did not allow either microbiologist to testify about Ortho's duty to revise its PIBs, we find no abuse of discretion. We again endorse the principle that the decision to admit expert testimony lies within the trial court's sound discretion. E.g., Bliss v. Treece, 134 Ariz. 516, 518, 658 P.2d 169, 171

Page 19

(1983).

The judgment is affirmed.

JACOBSON and BROOKS, JJ., concur. Ariz.App.,1988. Baroldy v. Ortho Pharmaceutical Corp. 157 Ariz. 574, 760 P.2d 574, Prod.Liab.Rep. (CCH) P 11,732

END OF DOCUMENT