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REPETITIVE STRESS INJURIES AND THE COMPUTER KEYBOARD: IF THERE STILL IS NO CAUSAL RELATIONSHIP BETWEEN USE AND INJURY, IS IT WISE TO Warn?

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I. INTRODUCTION

In today's modern workplace, computer monitors and keyboards are as common as the copy or fax machine.¹ It is therefore not surprising to learn that the fastest growing category of workplace personal injury claims is coming from an epidemic of repetitive stress injuries ("RSIs").² Repeated, long-term trauma to the hands and wrists through the use of a computer keyboard, for example, allegedly cause RSI.³ Office workers and journalists who seek to tie the frequent and regular use of their computer keyboards to a variety of debilitating hand and wrist disorders, such as tendinitis and carpal tunnel syndrome, are the primary plaintiffs bringing such claims.⁴ According to the U.S. Bureau of Labor Statistics, RSIs account for three-fifths of all occupational injuries.⁵

At first, computer users alleging repetitive stress-type disorders filed lawsuits directly against their employer under the applicable work-
ers' compensation laws.\(^6\) Recognizing a deeper financial pocket than what the workers' compensation laws provided and the possible stigma associated with lawsuits against one's employer, computer users experiencing repetitive stress-related problems are now suing computer manufacturers and sellers. The focal issue in the approximately 2,000 pending RSI computer keyboard cases is whether the manufacturer warned the individual using the computer about the possibilities of developing certain hand and wrist disorders.\(^7\) Personal computer manufacturing giant, Compaq Computer Corp., has begun to warn its users of the potential for injury by putting warning labels on its computer keyboards.\(^8\)

At the present time, it is unclear whether there is a causal association between the use of computer keyboards and RSIs. The National Institute for Occupational Safety and Health (NIOSH) has strongly stated that no such causative link exists between keyboard use and the development of injury.\(^9\) Even the judicial system is skeptical about RSI litigation becoming a legitimate new area of law.\(^10\) Without reliable medical or scientific evidence showing a causal association between computer keyboard use and RSI, the question arises, is it necessary for computer manufacturers to begin placing warning labels on their keyboards urging customers to pay more attention to their safety and comfort?

This article discusses the general law associated with the popular "failure to warn" claims. The recent RSI case law in this growing area of litigation is examined to see where RSI claims are likely to head in the near future. Finally, this article determines whether computer manufacturers who place warning labels on their computer keyboards are, in essence, admitting that the use of their keyboards can cause repetitive-type injuries or whether computer manufacturers and sellers need to protect themselves in anticipation of a possible wave of lawsuits.

\(^7\) Kim Komando, Hand, Wrist Injuries Tied To Keyboard Use Over Extended Period, ARIZONA BUSINESS GAZETTE, Sept. 15, 1994, at 8.
\(^9\) Lawrence Chesler, Repetitive Motion Injury and Cumulative Trauma Disorder, 65 N.Y. St. B.J. 12 (Dec. 1993). The National Institute for Occupational Safety and Health (NIOSH) found no positive relationship between the number of hours spent working, the number of hours spent at the computer terminal, the total number of key strokes a day and the occurrence of RSI. \textit{Id.} at 14.
\(^10\) \textit{Id.} at 15-16.
II. THE FAILURE TO WARN THEORY

Claims based on a negligent failure to warn of potential RSIs associated with computer keyboards are regularly brought by plaintiffs alleging that they have been injured at work as a result of years of typing on their computer.\(^{11}\) A failure to warn claim can result from a failure to adequately warn, or as is more common in the RSI/computer keyboard cases today, from a complete lack of any warning.\(^{12}\) A failure to warn claim will, for the most part, be based not only on a negligence theory of recovery, but also upon strict liability and breach of warranty.\(^{13}\) At least in theory, the focus of a strict liability claim is the product itself.\(^{14}\) A failure to warn claim, on the other hand, focuses primarily on the knowledge of the parties.\(^{15}\) Regardless of whether the suit is based in negligence, strict liability or warranty, there is a striking similarity between the scope of the defendant's duty to warn and the plaintiff's burden of proof as to the adequacy of a particular warning.\(^{16}\) As one court has stated:

[C]lauseation in a failure to warn case [under strict liability principles] involves two separate requirements. First, the plaintiffs' injuries must be caused by the product from which the warning is missing... Second, plaintiffs must show that a warning would have altered the behavior of the individuals involved in the accident.\(^{17}\)

When someone is supposedly injured by the regular use of personal computers and word processors, and the injury could have been avoided if a proper warning was issued with the product, the law is clear that the injured person will be allowed to sue on a theory that the computer key-

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\(^{11}\) See supra note 7 and accompanying text.

\(^{12}\) See, e.g., LaPlante v. American Honda Motor Co., Inc., 27 F.3d 731, 739 (1st Cir. 1994) (holding that a defendant has a duty to warn if he knew or should have known about the product's potential dangerous propensities which caused plaintiff's injuries, and that a defendant's motive for its action or inaction is generally immaterial to the question of whether the defendant acted negligently).

\(^{13}\) Lawrence G. Cetrulo, Toxic Torts, Binder 1 at § 2:5 (Clark, Boardman & Callaghan 1993).

\(^{14}\) See Woodill v. Parke Davis & Co., 402 N.E.2d 194, 198 (Ill. 1980) (explaining that strict liability claims focus on the nature of the product and adequacy of the warning, rather than the manufacturer's or seller's conduct).

\(^{15}\) Id.


\(^{17}\) Arnold v. Ingersoll-Rand Co., 834 S.W.2d 192, 194 (Mo. 1992).
board manufacturer failed to warn of the product's danger. The purpose of a warning is to apprise a person of a danger to which he is not aware, and thus enable the person to protect himself against it. If the injured person would not have altered his conduct, then no liability can be attributed to the manufacturer. In other words, the failure to warn must be the proximate cause of the injury. Most important of all, however, is that there is no duty to warn when a product is not defectively designed or manufactured.

The manufacturer's knowledge of its product's potential danger is determined by the level of scientific knowledge which existed at the time the product was manufactured or sold, not as of the date of trial. A manufacturer is generally held to the degree of knowledge and skill of an expert. Regardless of which theory is pursued, a manufacturer has a duty to warn the buyer and the user of only the reasonably foreseeable dangers of the product. There is generally no continuing duty to warn against a hazard discovered after the product leaves the manufacturer's control unless the manufacturer knew or should have known of the defect at the time of sale or distribution. On the other hand, even though a product supplier knows that the product is dangerous, in most instances the supplier will escape liability and the law will not require a warning unless the supplier knew or should have known that the purchaser will not receive the manufacturer's warning.

20. Arnold, 834 S.W.2d at 194.
21. Determining proximate causation in a failure to warn case is a matter of determining whether the failure to warn was a substantial factor in bringing about the injury. Cipollone v. Liggett Group, Inc., 893 F.2d 541 (3d Cir. 1990) (applying N.J. law); Royal v. Safety Coatings, Inc., No. 1921715 (Sup. Ct. Ala. Sept. 30, 1994) (WESTLAW, Allstates library). It is not required that the injury would have not occurred but for a claimed failure to warn. Id.
22. Kelly v. Academy Broadway Corp., 615 N.Y.S.2d 123, 124 (1994) (holding that "manufacturer has no duty to so design his product as to render it wholly incapable of producing injury or make it accident proof").
27. Greenlee v. Imperial Homes Corp., No. 91C-01-021 (Sup. Ct. Del. July 19, 1994) (Westlaw, Allstates library) (stating that "in formulating this rule, the court stressed that a
III. COMPAQ COMPUTER DECIDES TO ISSUE WARNING LABELS AFTER A SUCCESSFUL JURY TRIAL

In the first ever jury verdict case for a plaintiff claiming a RSI, Compaq Computer Corporation recently won a lawsuit brought by a secretary who claimed that she suffered injuries as a result of keyboard use which, consequently, left her unable to work. The suit claimed that Compaq should have known that its products caused injuries and, therefore, should have warned people who bought them. The plaintiff brought a strict liability, negligence, and breach of warranty claim against Compaq Computer, asserting that she incurred over $800,000 in compensatory damages.

The plaintiff worked as a legal secretary at a Houston law firm for about 20 years. In 1988, the plaintiff’s employer purchased a 286 Compaq Deskpro computer for her to use. The following year, the plaintiff began experiencing pain in her wrists and was eventually diagnosed with carpal tunnel syndrome in both wrists. The plaintiff claimed she was unable to type more than 15 minutes at a time before having to let her hands and wrists rest. The plaintiff further alleged that she eventually became unable to work at her present job, consequently becoming unmarketable in her field. According to the plaintiff, this occurred despite undergoing several surgeries for her condition.

In order to fill in the legal gaps of her case due to the lack of medical causation evidence present between keyboard use and the development of RSIs, the plaintiff relied on expert testimony from her treating physician, as well as testimony from an industrial engineer from a local university. The plaintiff’s experts attempted to link her injuries to her occupational keyboard use, drawing only upon their own opinions and

supplied should normally be able to rely on a purchaser's knowledge of the hazards associated with the product"). See also Anderson v. Shaughnessy, 519 N.W.2d 229 (1994).
28. See supra note 8 and accompanying text.
30. Id.
33. Id.
34. Id.
35. Id.
36. Id.
38. Id.
However, they were unable to rely on established scientific or medical evidence on this issue. Compaq’s experts argued that when Compaq sold its computer keyboard to the plaintiff’s employer in 1988, there was no credible medical or scientific evidence at that time, let alone at the present time, showing a link between computer keyboards and the development of carpal tunnel syndrome. Compaq also argued that the plaintiff’s other health conditions, including stress and significant weight changes, were the real causes of her present condition. The jury found that since Compaq did not know at the time it manufactured or sold its computer keyboard that its personal computers could be harmful, it could not liable for any damages.

Shortly after the completion of the trial, Compaq announced that it would begin to place warning labels directly onto its computer keyboards. The warning will read as follows:

“WARNING! TO REDUCE RISK OF SERIOUS INJURY TO HANDS, WRISTS OR OTHER JOINTS, READ SAFETY & COMFORT GUIDE.”

Additionally, Compaq has included a Safety and Comfort Guide with every computer it has sold since 1991. This safety booklet specifies how to set up a safe working environment with the computer. Compaq is the first and only computer manufacturer to place such a warning label directly onto its computers.

Although Compaq announced that its decision to warn of possible repetitive stress-related complications had nothing to do with the recent lawsuit, it should be noted that since that case, any lack of knowledge concerning the potential for RSI caused by using a computer keyboard may be a tougher defense for Compaq to plead in the future. Although credible scientific studies have not shown a causal link between keyboard use and RSIs, Compaq acknowledged that “in recent years, numerous press articles have suggested that long periods of typing at computer keyboards, particularly in awkward positions, may contribute to various medical disorders.” Now that it has been directly confronted with the issue, one might assume that Compaq’s decision to warn may have been motivated by the distinct possibility that a jury could someday infer

39. Id.
40. Id.
41. Id.
42. Expert Testimony, Alternative Causes, Stop Plaintiff in Keyboard Trial, 8 INSIDE LITIG. at 4.
43. Id.
44. See supra note 8 and accompanying text.
45. Id.
46. Id.
47. Id.
48. Id.
"causation" from these non-scientific studies and numerous press articles showing a causative connection between keyboard overuse and RsIs.

IV. RECENT RSI DEVELOPMENTS IN THE COURTS

The shape of RSI products liability litigation has begun to emerge, and there have been many recent developments in this area of litigation. Plaintiffs alleging repetitive stress disorders or injuries certainly have an uphill battle in order to successfully prove their cases. For instance, besides the lack of credible medical causation evidence present at this time, plaintiffs are unable to show the juries their physical injuries which they contend are related to years of typing on their computer keyboards. In addition, gathering the necessary causative evidence is very expensive for an individual plaintiff, since causation in these cases can only be proven through expert testimony. The following cases, all of which allege in part that the manufacturer failed to warn the computer user of potential RSI's based on strict liability or negligence principles, illustrate the majority of courts' continuing reluctance to fully accept the theory that an individual was more likely than not injured by using a computer keyboard.

A. Urbanski v. International Business Machines

In only the second RSI case to be decided by a jury, the first district court of Minnesota in Urbanski v. International Business Machines ("IBM") held that the defendant had no legal obligation to issue warnings to the plaintiff that its computer keyboard had the propensity to cause RSI-related injuries. IBM won the case despite being ordered by the court to produce internal company records indicating that it was aware that its own employees had developed wrist, back and neck injuries in the 1980's, supposedly from using IBM computer keyboards.

The thirty-year old plaintiff worked as a high school secretary from


51. Felsenthal, at B10. Apple Computer was also named a defendant in the case, but settled with the plaintiff before the case was sent to the jury. Amy Kuebelbeck, Apple Settles Its Part Of Repetitive Stress Injury Suit, CHICAGO DAILY LAW BULLETIN, Feb. 27, 1995, at 1. Apparently, Apple Computer supplied its counsel with internal company documents which were damaging to Apple's defense. Id. As a result, Apple was faced with court sanctions because it failed to produce those documents before trial. See Felsenthal, supra note 50.
June, 1989 until August, 1991. Her job duties required her to type for long periods of time on both IBM and Apple computers. After undergoing numerous unsuccessful medical treatments for her injuries, the plaintiff was unable to find another suitable job within the school and, consequently, was terminated by her employer. The plaintiff's suit alleged that the defendants failed to provide any warnings to computer keyboard users of the potential for injury caused by keyboard overuse. She sought compensatory damages in excess of $40,000, as well as punitive damages from the defendants. After deliberating for only a couple of hours, the jury found in favor of IBM and concluded that IBM should not be required to warn computer keyboard users of the potential for injury, especially since there is no scientific evidence drawing a conclusive link between such use and injury. The jury also ruled that IBM's keyboards were not defectively designed.

B. **In re Repetitive Stress Injury Litigation**

In a decision which severely hinders plaintiffs' hopes to pursue RSI claims as part of a large class action, the United States Court of Appeals for the Second Circuit in *In re Repetitive Stress Injury Litigation* vacated the district court's order which previously consolidated 44 cases against numerous manufacturers of office equipment, including computer keyboard manufacturers. These suits were brought by workers in various occupations alleging a multitude of RSIs. The court stated that "a party moving for consolidation must bear the burden of showing the commonality of factual and legal issues in different actions, and the district court must examine the special underly-

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53. See Kuelbelbeck, *supra* note 51.
54. *Id.* The plaintiff claimed her injuries included "physical pain and suffering, physical disabilities, mental anguish, loss of enjoyment of life's pleasures, inability to participate in her usual employment and activities, loss of income, loss of earning capacity, medical expenses, and other economic loss." Summons at 3.
55. Summons at 5. See also Kuelbebeck, *supra* note 51.
56. Summons at 6. See also Kuelbebeck, *supra* note 51.
57. Kuelbebeck, *supra* note 51. Despite settling the case before the conclusion of the trial, the jury found that Apple also did not have to warn consumers of potential RSI injuries and did not design their keyboards improperly. See Felsenthal, *supra* note 50. See also Special Verdict Form, Urbanski v. International Business Machines (1st. Dist. Mn., filed Mar. 9, 1995) (No. 19-C2-93-8285) [hereinafter "Special Verdict"].
58. Felsenthal, *supra* note 50. See also Special Verdict.
59. 11 F.3d 368 (2d Cir. 1993).
60. *Id.*
61. *Id.*
ing facts with close attention before ordering consolidation." The court of appeals found insufficient facts to support the lower court's conclusion that the 44 cases were sufficiently related to warrant consolidation. Since discovery had not begun in any one case, there was nothing in the allegations of the complaints to justify consolidation. The court further pointed out that the factual issues in each of the cases were vastly different. For instance, the plaintiffs were employed at different worksites and in different occupations, ranging from word processors, to key punchers, to stenographers. Each of the plaintiffs' alleged injuries may also have had a cause other than the tortious conduct of an individual defendant. All of these factors far outweighed the plaintiffs' argument that they all alleged various injuries that could fall under the RSI category of claims. In addition, the court was not persuaded by the fact that the majority of the plaintiffs were represented by the same counsel.

C. **Mastalski v. International Business Machines**

In *Mastalski v. International Business Machines*, the Court of Appeals for the Fourth Circuit found that the federal district court had properly granted summary judgment to defendant IBM. IBM's motion for summary judgment was directed at the plaintiff's strict liability and negligence claims. IBM contended that there was an absence of any causal link between the alleged defects and the alleged injury.

The plaintiff in *Mastalski* alleged that she suffered permanent injury to her arms from using the defendant's data entry machine while employed as a data processor. The plaintiff's sole expert on the issue of causation stated that the alleged defects in the defendant's product required the plaintiff to maintain an awkward position which compressed her ulnar nerve at the elbow. The expert concluded that these defects

62. Id. at 373.
63. Id.
64. *In re Repetitive Stress Injury Litigation*, 11 F.3d 368, 373 (2nd Cir. 1993).
65. Id.
66. Id.
67. Id.
68. Id.
69. *In re Repetitive Stress Injury Litigation*, 11 F.3d 368, 373 (2nd Cir. 1993).
71. Id. at slip op. 1.
72. Id.
73. Id.
74. Id.
were a substantial factor in the plaintiff's injuries. The plaintiff also argued that IBM's motion for summary judgment should be denied because the plaintiff believed that additional scientific research showing the necessary causal link would become available by the time of trial.

IBM lashed back by pointing out that the plaintiff's expert's opinions were not grounded in fact and lacked any scientific data to be viewed as acceptable evidence by the court. The court agreed that the plaintiff's expert could not identify a single study or any clinical data which drew a link between the design of the machine, the position that plaintiff maintained while working on the machine, or the specific injury she had alleged. The court, therefore, found as a matter of law that IBM's keyboard was neither defective nor unreasonably dangerous, nor did IBM need to warn the plaintiff of any potential unknown dangers from its product.

D. Ramirez v. Computer Consoles, Inc.

In Ramirez v. Computer Consoles, Inc., the federal district court dismissed 17 plaintiffs' RSI products liability claims with prejudice as being barred by the state two-year statute of limitations. The defendants pointed out that the plaintiffs had previously filed workers' compensation claims alleging RSIs against their employer. The defendants argued that when the plaintiffs filed their RSI workers' compensation claims against their employer over two years prior to their filing of their personal injury suits, they already knew everything they needed to know in order to prosecute a claim for personal injury damages against the defendants. The court agreed and barred the plaintiffs' claims.

E. Ward v. Westinghouse Canada, Inc.

In contrast to Ramirez, the federal court of appeals in Ward v. Westinghouse Canada, Inc. reached a surprisingly different result on the

75. Mastalski, 974 F.2d at slip op. 2. The plaintiff's expert could not identify a single study or any clinical data between the design of defendant's keyboard and the plaintiff's alleged injury. Id. at slip op. 6.
76. Id. at slip op. 2.
77. Id. at slip op. 1.
78. Id. at slip op. 5.
79. Id.
81. Chesler, at 12.
82. Id.
83. Id.
84. Id.
85. 32 F.3d 1405 (9th Cir. 1994).
same issue. An airline reservations agent spent approximately seven hours a day entering reservations into a computer terminal. The agent alleged that he developed severe tendinitis as a result of using the defendant’s computer keyboard. Requesting coverage in relation to his workers’ compensation claim, the plaintiff told his physician on October 4, 1989 that he was having problems with his wrist and arm from using a computer too much. The company doctor reported to the plaintiff’s employer on October 16, 1989 that the plaintiff’s injury was work-related and compatible with a “repetitive overuse phenomenon.” In March 1990, the plaintiff’s physical therapist told him that the computer keyboard might be the cause of his injuries. The plaintiff then filed his personal injury suit against the computer keyboard manufacturer on October 16, 1990.

The computer manufacturer was granted summary judgment in the lower court. The court concluded that the plaintiff knew or should have known that his injuries were allegedly related to his computer keyboard use when he requested coverage for his workers’ compensation claim against his employer over one year prior to the filing of his personal injury suit. On appeal, the defendant argued that the plaintiff’s claims were time-barred by the one-year statute of limitations because the plaintiff had suspected on October 4, 1989 that the computer was the source of his injury and, therefore, would reasonably have been on notice of the defendant’s alleged wrongdoing.

The court of appeals found that the plaintiff’s request for coverage alone was not prima facie evidence to indicate knowledge or suspicion of wrongdoing. The court pointed out that his statement to his physician merely indicated that he only “suspected the cause of his injury was computer overuse.” Thus, the limitations period did not begin to run until the plaintiff’s physical therapist told him of the possible association between his injuries and the computer keyboard. According to the court, “a jury could find that a reasonable person in plaintiff’s position would

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86. Id. at 1406.
87. Id.
88. Id.
89. Id.
90. Ward, 32 F.3d 1405, 1406 (9th Cir. 1994).
91. Id. at 1407.
93. Id.
94. Ward, 32 F.3d 1405, 1408 (9th Cir. 1994).
95. Id.
96. Id.
97. Id. In California, the statute of limitations does not begin to run until the “plaintiff suspects or should suspect that her injury was caused by wrongdoing.” Id. It is not enough that the plaintiff only knows of the injury and its factual cause. Id. at 1407.
not have suspected a third party's wrongdoing caused his pain and injury. 98 Therefore, the court reversed the lower court’s entry of summary judgment on behalf of the defendant. 99

V. CONCLUSION AND RECOMMENDATION

The shape of RSI litigation is definitely emerging, and it is showing no visible signs of going away at this time. Even without any established medical or scientific studies showing a causal relationship between RSIs and keyboard overuse, there have been numerous non-scientific reports suggesting the necessary causal association. Some computer keyboard manufacturers are even altering the design of their keyboards so they are more comfortable to the user. 100 Federal and state governments are proposing new ergonomic standards in the workplace aimed at curbing RSIs. 101 Moreover, there is now ergonomic furniture available on the market, consisting of adjustable chairs and desks, computer wrist rests, lumbar supports and copy holders. 102 With all of these recent developments suggesting a causative link, either perceived or real, between use and injury, it would be unwise for manufacturers to ignore these developments and claim ignorance of the overall issue.

The wave of RSI litigation will continue to gather momentum in the coming years. However, to maintain this momentum, it will be incumbent upon plaintiffs to consolidate similar-type cases in order to offset the high costs of proving the causation factor. As we have seen, the courts have not taken kindly to such consolidation attempts, nor have the courts been willing to fully accept the RSI proposition. Therefore, the key to consolidation is causation, which is a difficult task at best.

In the meantime, it is a good idea, both from a legal and business standpoint, for computer manufacturers and sellers to begin warning computer users of the potential risks associated with keyboard overuse and RSIs. This warning should also instruct the user to follow the computer's operations manual which is included with every computer. The manual should remind the user to maintain overall typing comfort to

98. Id. at 1408.
99. Ward, 32 F.3d at 1408.
101. See supra note 4 and accompanying text. The Occupational Health and Safety Administration ("OSHA") recently published a "draft" proposal addressing RSIs in the workplace. Asra Nomani, White House Circulates Draft of Rules By OSHA on Repetitive-Stress Injuries, WALL ST. J., Mar. 21, 1995, at B6. Admitting that the draft proposal was more conservative than previously expected in setting RSI standards, OSHA's draft only concerns worksites with "signal risks" in which the worker repeats the same motion on a frequent basis for an extended period of time (as much as two hours at a time). Id.
102. See supra note 3 and accompanying text.
prevent any hand, wrist and arm injuries. By issuing a warning at this time, it may be possible to begin building a future defense against product liability through labeling. If the customer ignored the warning or failed to follow the information contained in the warning, then the user, not the manufacturer, could be at fault. Unlike potentially toxic products where even a minimal use of the product by an unaware consumer may be enough to cause the problem, an individual must use the computer keyboard in a particular manner and on an extended basis for an injury to occur. Therefore, warning the consumer keyboard user places him on notice that it is within his control to avoid any problems which might be caused by using a computer keyboard. It is unlikely that there has ever been a lawsuit in which merely issuing information resulted in greater liability; the problem has always been the failure to communicate and warn of the problem.