IN THE SUPREME COURT OF TENNESSEE AT KNOXVILLE

Assigned on Briefs September 11, 2008

CLARENCE TROSPER v. ARMSTRONG WOOD PRODUCTS, INC.

Chancery Court for Scott County
No. 9446 Billy Joe White, Chancellor

No. E2007-00816-SC-WCM-WC - Filed December 30, 2008

WILLIAM C. KOCH, JR., J., dissenting.

The Court in this case has reversed the holding of the Special Workers' Compensation Appeals Panel that Mr. Trosper failed to prove that his preexisting osteoarthritis was permanently worsened by work he performed in the winter of 1997-1998. Based on a selective review of the evidence, the Court has concluded that Mr. Trosper is entitled to workers' compensation benefits because his work "advanced the severity" of his osteoarthritis. I respectfully disagree that Mr. Trosper has carried his burden of proof in this case.

I.

Mr. Trosper went to work for Armstrong Wood Products in 1993 when he was approximately fifty-one years old. At that time, he had osteoarthritis in his hands, feet, back, and knees, although he apparently did not know it because the disease was asymptomatic. In the winter of 1997-1998, Mr. Trosper was assigned to work outdoors moving heavy boards by hand. This work activity caused him to experience pain in both hands at the base of his thumbs. He asked to be moved to another job, and, in the spring of 1998, his employer moved him to another job inside the plant that involved less stress on his hands.

Mr. Trosper was able to perform his new job and did not experience any further difficulty with his hands or seek any medical treatment for his hands. He was moved to another job inside the plant in 2000 or 2001. Mr. Trosper characterized his new job as "easier," even though it required him to lift between seven and twelve heavy buckets of material during his shift and to pour the contents of the buckets into a hopper. He was apparently able to perform this job without difficulty until June 2004. Within a month or two after returning to work following a recovery from an unrelated injury to his knee, Mr. Trosper began to experience pain in his hands when he lifted the buckets of material.

¹A fall from a forklift required Mr. Trosper to undergo knee replacement surgery.

Dr. Cletus McMahon examined Mr. Trosper and diagnosed him with bilateral carpometacarpal osteoarthritis in both hands at the base of his thumbs. In October 2004, Dr. McMahon performed a surgical fusion of the joint at the base of Mr. Trosper's right thumb. Mr. Trosper returned to work; however, he experienced similar pain in his left hand. Accordingly, Dr. McMahon performed a surgical fusion on Mr. Trosper's left thumb in June 2005. Mr. Trosper retired following the second surgery.

In July 2005, Mr. Trosper filed a complaint in the Chancery Court for Scott County seeking workers' compensation benefits. He alleged that the "repetitive nature of handling lumber and wood products" in the winter of 1997-1998 caused work-related injuries that necessitated the 2004 and 2005 surgeries on his hands. Mr. Trosper did not rely on Dr. McMahon, his treating physician, to substantiate his claim. Instead, he retained Dr. William E. Kennedy to provide the necessary expert opinion that Mr. Trosper's work-related activities caused his disability. Dr. Kennedy examined Mr. Trosper for the first time in March 2006, almost eight years after the onset of his symptoms and one year after Mr. Trosper's last wrist surgery, and concluded that Mr. Trosper's condition was caused by his work. On March 20, 2007, the trial court, relying on Dr. Kennedy's testimony, determined that Mr. Trosper had sustained a compensable injury resulting in a forty percent vocational disability in each hand.

Armstrong Wood Products appealed, and we assigned the case to the Special Workers' Compensation Appeals Panel. Armstrong Wood Products took issue with the trial court's conclusion that Mr. Trosper's work had aggravated his preexisting osteoarthritis. It also challenged the award for temporary total disability benefits and insisted that the forty percent vocational disability award was excessive. On May 9, 2008, the Appeals Panel unanimously reversed the trial court. The Appeals Panel explained:

Our examination of this evidence leads us to the conclusion that Mr. Trosper failed to carry his burden of proof in this matter. All of the doctors agreed that the underlying condition was not caused by his [Mr. Trosper's] employment. They also agreed that the condition was progressive. There was a six-year gap between the events alleged to have caused a compensable aggravation of Mr. Trosper's arthritis and his initial report to Armstrong. Dr. Kennedy's examination, upon which the trial court relied, occurred two years after that. There were no medical records or other supporting evidence concerning Mr. Trosper's arthritis during the period of time between 1998 and 2004. This combination of factors renders Dr. Kennedy's opinion speculative, at best.

Dr. Kennedy's opinion, which the Appeals Panel characterized as "speculative, at best" has become the cornerstone of this Court's opinion.

Arthritis is not a single disease. It is actually an umbrella term used for a group of more than one hundred medical conditions that collectively affect nearly forty-six million adults and three hundred thousand children in America alone.² While the common symptoms of these conditions are pain on motion, stiffness and swelling in one or more joints,³ each condition has different causes, prognoses, and treatments. Judicial decisions regarding arthritic conditions are very fact-sensitive.

Osteoarthritis (also known as degenerative arthritis) is the most common form of arthritis.⁴ It afflicts nearly twenty-seven million Americans each year.⁵ It is a chronic, inflammatory condition of the joints that is characterized by destruction of cartilage,⁶ overgrowth of bone, and impaired function.⁷

The onset of osteoarthritis tends to be gradual, beginning with short-lived periods of stiffness in its early stages. Later, persons with osteoarthritis experience pain when moving the affected joint. This pain worsens with prolonged activity and is relieved with rest.⁸ The prognosis for persons with osteoarthritis is variable, depending on the extent and location of the disease.⁹ In his deposition filed in this case, Dr. Ronald J. Fadel explained that arthritis

can be static for long periods of time, followed by acute inflammatory or periods of inflammation, and highly symptomatic, followed then by remission. But generally, over the course of a lifetime, and the longer someone lives and the more likely this is, they tend to slowly get -- get worse.

²Arthritis Foundation, *What is Arthritis?*, *available at* http://www.arthritis.org/what-is-arthritis.php (last visited Dec. 15, 2008).

³13 Roscoe N. Gray & Louise J. Gordy, *Attorneys' Textbook of Medicine* ¶ 176.31 (3d ed. 2001) ("Attorneys' Textbook of Medicine").

⁴13 Attorneys' Textbook of Medicine ¶ 176.31(2).

⁵Charles G. Helmick et al., Estimates of the Prevalence of Arthritis and Other Rheumatic Conditions in the United States, Pt. II, 58 Arthritis & Rheumatism 15-25 (Jan. 2008).

⁶13 Attorneys' Textbook of Medicine ¶ 176.31(2); see also Cunningham v. Goodyear Tire & Rubber Co., 811 S.W.2d 888, 892 (Tenn. 1991) (Daughtrey, J., dissenting) (summarizing a testifying rheumatologist's description of osteoarthritis as "a form of arthritis, the cause of which is unknown, but is manifested primarily by a deterioration of the cartilages in the joints to the extent that the cartilages lose their ability to properly cushion or pad the joint").

⁷6 Attorneys' Textbook of Medicine ¶ 19B.00.

⁸13 Attorneys' Textbook of Medicine ¶ 176.31(2).

⁹6 Attorneys' Textbook of Medicine ¶ 19B.70.

None of the other testifying physicians disagreed with Dr. Fadel's description of the usual course of osteoarthritis.¹⁰

Because "arthritis" is not one but many conditions that have different causes, prognoses, and treatments, decisions regarding one type of arthritis cannot necessarily be generalized to apply to other types of arthritis. These cases are highly fact-sensitive, and thus lay persons, like judges and lawyers, should guard against making over-broad generalizations that lack specific support from medical experts with regard to a specific arthritic condition.

III.

Pain is the most common symptom that patients report to healthcare providers.¹¹ In today's medical and legal context, pain is "first and foremost a bodily sensation"¹² caused by injury or illness.¹³ Medical clinicians and researchers frequently define "pain" as "[a]n unpleasant and emotional experience associated with actual or potential tissue damage or described in terms of such damage."¹⁴ Pain functions as a warning symptom alerting the injured person to take notice and to properly care for an injury or illness.¹⁵ A "symptom" is any deviation from normal form, function, or appearance experienced by a person and thought to indicate some underlying injury or illness.¹⁶

¹⁰Another text explains that "[t]he onset of osteoarthritis tends to be gradual, beginning with short-lived periods of stiffness in the early stages. Later, patients experience pain when moving the affected joint, made worse by prolonged activity and relieved with rest. Limitation of motion is common, and bony enlargement may be prominent. Systemic symptoms, as in rheumatoid arthritis, are absent, as is ankylosis (fixation or stiffening of a joint). Diagnosis is by x-ray, which may show shrunken joints, calcification at the ends of bones, and bone spurs." 13 Attorneys' Textbook of Medicine ¶ 176.31(2).

¹¹Taber's Cyclopedic Medical Dictionary 1566 (20th ed 2005) ("Taber's Cyclopedic Medical Dictionary"); Jyotsna Nagda & Zahid H. Bajwa, *Definitions and Classification of Pain*, in Carol A. Warfield & Zahid H. Bajwa, *Principles and Practice of Pain Medicine* 51 (2d ed. 2004).

¹²Shai J. Lavi, *The Problem of Pain and the Right to Die*, in *Pain, Death and the Law* 145 (Austin Sarat ed., 2004).

¹³II The Oxford Companion to Medicine 991 (John Walton et al. eds., 1986); Jose Kuri et al., *The Spine at Trial: Practical Medicolegal Concepts About the Spine* 107 (2002).

¹⁴John D. Loeser & Rolf-Detlef Treede, *The Kyoto Protocol of ISAP Basic Pain Terminology*, 137 Pain 473, 475 (2008) ("Loeser & Treede"). The International Association for the Study of Pain ("IASP") is a group of clinicians and researchers that is widely considered to be a leader in pain and pain management. Martin V. Totaro, Note, *Modernizing the Critique of Per Diem Pain and Suffering Damages*, 92 Va. L. Rev. 289, 304-05 (2006).

¹⁵¹³ Attorneys' Textbook of Medicine ¶ 176.00; 3 Dan J. Tennenhouse, Attorneys' Medical Deskbook § 22:1 (3d ed. 1993) ("Attorneys' Medical Deskbook") (pain is a "message that something is wrong"); Carol A. Warfield & Zahid H. Bajwa, Principles and Practice of Pain Medicine, Preface, at xxi (2d ed. 2004).

¹⁶John D. Loeser, *Pain as a Disease*, 81 Handbook on Clinical Neurology 11, 15 (Fernando Cervero & T.S. Jensen eds, 2006). While not disagreeing that pain may be characterized as a symptom of injury or illness, the IASP (continued...)

Pain is a complex interaction of sensory, emotional, and behavioral factors.¹⁷ It is a personal, subjective experience.¹⁸ Individuals experience pain differently because of significant differences in their pain thresholds and tolerance to pain, their response to medications, and their susceptibility to clinical pain syndrome.¹⁹ Many factors influence a person's experience of pain, including: (1) the nature of the person's injury or illness, (2) the person's physical and emotional health, (3) the acuity or chronicity of the person's symptoms, (4) the person's social milieu or cultural upbringing, (5) the person's neurochemistry, (6) the person's memory, and (7) the person's personality.²⁰

IV.

The courts have not devised a crystal clear test for determining whether an employee's work-related activities have contributed to the permanent acceleration or worsening of the employee's disability. This inquiry has proved to be particularly difficult in cases where the employee's preexisting condition is some type of arthritis. Because of the progressively debilitating nature of this disease, it is difficult to articulate objective rules for determining whether the condition for which the employee seeks workers' compensation benefits was caused by the natural progression of the arthritis or whether the employee's work-related activities accelerated or substantially contributed to the employee's condition.

Employees are not entitled to workers' compensation benefits for the effects of the aging process or for the progression of illnesses or diseases that are not work-related. *Jose v. Equifax, Inc.*, 556 S.W.2d 82, 84 (Tenn. 1977). The right to receive workers' compensation benefits arises only when the employee has sustained a "personal injury . . . by accident arising out of and in the course of employment." Tenn. Code Ann. § 50-6-103(a) (2008); see also Curtis v. G.E. Capital Modular Space, 155 S.W.3d 877, 882 (Tenn. 2005); W.S. Dickey Mfg. Co. v. Moore, 208 Tenn. 576, 581, 347 S.W.2d 493, 495 (1961). By statute, a "personal injury" is an "injury by accident . . . that causes

¹⁶(...continued) currently endorses the concept that, in some circumstances, chronic pain (sometimes referred to as "chronic pain syndrome") should itself be considered to be a disease. Loeser & Treede, 137 Pain at 473, 475.

¹⁷13 Attorneys' Textbook of Medicine ¶ 176.00; Herta Flor & Dennis C. Turk, Cognitive and Learning Aspects, in Wall and Melzack's Textbook of Pain 241 (Stephen McMahan & Martin Koltzenburg eds., 2005) ("Wall and Melzack's Textbook of Pain").

¹⁸Ronald Melzack & Patrick D. Wall, *The Challenge of Pain* 27-28, 99 (1982); Ronald Melzack & Joel Katz, *Pain Assessment in Adult Patients*, in *Wall and Melzack's Textbook of Pain*, at 291; Int'l Ass'n for the Study of Pain, *Pain Terms: A List with Definitions and Notes on Usage*, 6 Pain 247, 249-52 (1979); 3 *Attorneys' Medical Deskbook* § 22:6.

¹⁹Jeffrey S. Mogil & Mitchell B. Bax, The Genetics of Pain, in Wall and Melzack's Textbook of Pain, at 159.

²⁰Taber's Cyclopedic Medical Dictionary 1566.

²¹This case does not involve the work-related death of an employee.

disablement . . . of an employee," including "occupational diseases" and "mental injuries." Tenn. Code Ann. § 50-6-102(12). This Court has characterized a compensable workers' compensation injury as "whatever lesion or change in any part of the system that produces harm or pain or lessened facility of the natural use of any bodily activity or capacity." *Fritts v. State Nat'l Casualty Corp.*, 163 S.W.3d 673, 680 (Tenn. 2005); *Brown Shoe Co. v. Reed*, 209 Tenn. 106, 113, 350 S.W.2d 65, 69 (1961); *see also Fink v. Caudle*, 856 S.W.2d 952, 958 (Tenn. Workers' Comp. Panel 1993). 23

The factual complexity engendered by a workers' compensation claim that involves preexisting conditions has provided analytical challenges for the courts. Professor Larson characterizes these types of cases as "mixed risk" cases – ones in which a personal cause and an employment-related cause combine to produce an injury. 1 *Larson's Workers' Compensation Law* § 4.04.²⁴ In circumstances involving mixed risks, Professor Larson states that "[t]he law does not weigh the relative importance of the two causes, nor does it look for primary or secondary causes, it merely inquires whether the employment was a contributing factor. If it was, the concurrence of the personal cause will not defeat compensability." 1 *Larson's Workers' Compensation Law* § 4.04; *Fink v. Caudle*, 856 S.W.2d at 958 (holding that "an injury is compensable, even though the claimant may be suffering from a preexisting condition or disability, if a work-connected accident can be fairly said to be a contributing cause of such injury").

Analysis of a mixed risk case rests on the principle that for the purpose of workers' compensation benefits, an employer takes its employees as it finds them. *Fritts v. Safety Nat'l Casualty Corp.*, 163 S.W.3d at 679; *Hollingsworth v. S & W Pallet Co.*, 74 S.W.3d 347, 357 (Tenn. 2002). Thus, this Court has long recognized that an employee is entitled to workers' compensation benefits if the employee's work causes an actual progression or advances²⁵ a preexisting condition or disease. *Barrett v. Milan Seating Sys.*, 215 S.W.3d 828, 835 (Tenn. 2007); *Fritts v. Safety Nat'l Casualty Corp.*, 163 S.W.3d at 679; *Hill v. Eagle Bend Mfg., Inc.*, 942 S.W.2d 483, 488 (Tenn. 1992); *Talley v. Virginia Ins. Reciprocal*, 775 S.W.2d 587, 591 (Tenn. 1989); *Baxter v. Smith*, 211

²²"Mental injuries" are defined in Tenn. Code Ann. § 50-6-102(15).

²³In more modern parlance, a "personal injury" for the purpose of a workers' compensation claim "includes any harmful change in the body. It need not involve physical trauma, but may include such injuries as disease, sunstroke, nervous collapse, traumatic neurosis, hysterical paralysis, and neurasthenia." 3 Arthur Larson & Lex K. Larson, *Larson's Workers' Compensation Law* ch. 55, Scope (2008) ("*Larson's Workers' Compensation Law*").

²⁴Professor Larson's treatise points out that the "most common example [of a mixed risk] is that of a person with a weak heart who dies because of strain occasioned by employment." 1 *Larson's Workers' Compensation Law* § 4.04. In that vain, this Court has upheld a workers' compensation award to an employee with a preexisting heart condition who experienced a heart attack precipitated by physical exertion or strain at work. *Clark v. Nashville Mach. Elevator Co.*, 129 S.W.3d 42, 47 (Tenn. 2004).

²⁵In its holdings on this subject, this Court has employed other verbs such as "aggravate," "accelerate," "exacerbate," and "excite." *Thomas v. Aetna Life & Casualty Co.*, 812 S.W.2d 278, 284 (Tenn. 1991); *Swift & Co. v. Howard*, 186 Tenn. 584, 591-92, 212 S.W.2d 388, 391-92 (1948).

Tenn. 347, 361, 364 S.W.2d 936, 942-43 (1962). However, since the earliest days, this Court has also recognized that compensability under the workers' compensation statutes must be based on changes in the employee's underlying condition, not changes in the symptoms of the employee's underlying condition.

Tennessee's courts have consistently viewed pain as a symptom of an underlying condition, rather than as a condition itself.²⁷ Accordingly, as early as 1969, this Court declined to award workers' compensation benefits to an employee whose work activities "aggravated" the pain of her preexisting cervical neuritis and degenerative arthritis. The Court held that "making the pain [of a preexisting condition] worse" is not a compensable accident. *Boling v. Raytheon Co.*, 223 Tenn. 528, 534, 448 S.W.2d 405, 408 (1969).

We employed the same reasoning seventeen years later when we declined to award workers' compensation benefits to an employee whose work caused increased pain from her congenital thoracic outlet syndrome. Citing *Boling v. Raytheon Company*, we noted that the employee's work activities "aggravated her preexisting condition by making the pain worse but it did not otherwise injure or advance the severity of her thoracic outlet syndrome or result in another disabling condition." *Smith v. Smith's Transfer Corp.*, 735 S.W.2d at 225-26.

With some inconsequential differences in wording, Tennessee courts have consistently continued to recognize that an increase in pain with no actual progression or advancement of the underlying condition is not compensable. *Barnett v. Milan Seating Sys.*, 215 S.W.3d 828, 835 (Tenn. 2007); *Tobitt v. Bridgestone/Firestone, Inc.*, 59 S.W.3d 57, 62 (Tenn. 2001); *Hill v. Eagle Bend Mfg., Inc.*, 942 S.W.2d 483, 488 n.1. (Tenn. 1997); *Townsend v. State*, 826 S.W.2d at 436; *Cunningham v. Goodyear Tire & Rubber Co.*, 811 S.W.2d 888, 891 (Tenn. 1991); *Mathenia v. Milan Seating Sys.*, 254 S.W.3d 313, 319 (Tenn. Workers' Comp. Panel 2007); *Sweat v. Superior Indus., Inc.*, 966 S.W.2d 31, 32-33 (Tenn. Workers' Comp. Panel 1998). However, we have also continued to recognize that an employer is required to pay workers' compensation benefits if any

²⁶We have also held that an employee is entitled to workers' compensation benefits when his work-related activities aggravate a pre-existing condition that causes another disabling condition. *Townsend v. State*, 826 S.W.2d 434, 436 (Tenn. 1992); *Smith v. Smith's Transfer Corp.*, 735 S.W.2d 221, 225-26 (Tenn. 1987). A Maryland treatise on workers' compensation law illustrates this circumstance as follows: "[I]f an employee previously fractured their wrist and developed arthritis as a result, then aggravates the arthritis by writing a treatise on workers' compensation, the aggravation is not compensable. However, if the employee develops carpal tunnel syndrome from constant and prolonged keyboard use, that: (1) is aggravated by the preexisting arthritis; or (2) aggravates the preexisting arthritis[,] the carpal tunnel syndrome may well be compensable if the hazards of it exist in the employment." 1 Clifford B. Sobin, *Maryland Practice: Workers' Compensation* § 7:6 (2008).

²⁷On two occasions, a Tennessee court has awarded workers' compensation benefits to an employee diagnosed with chronic pain syndrome. *Fritts v. Safety Nat'l Casualty Corp.*, 163 S.W.3d at 681; *Russell v. Thyssenkrupp Elevator Mfg., Inc.*, No. W 2004-01472-SC-WCM-CV, 2005 WL 3201034, at *5 (Tenn. Workers Comp. Panel Nov. 29, 2005). In another case, an employee with chronic pain syndrome was denied workers' compensation benefits because it was not caused by a work-related injury. *Osborne v. State Indus., Inc.*, No. M 2001-01288-WC-R3-CV, 2002 WL 1284466, at *4 (Tenn. Workers' Comp. Panel June 12, 2002). This case does not involve an employee who has been diagnosed with chronic pain syndrome.

employee's work activities cause an actual, progression, advancement, or acceleration of a preexisting condition that results in disabling pain. *White v. Werthan Indus.*, 824 S.W.2d 158, 160-61 (Tenn. 1992); *Talley v. Virginia Ins. Reciprocal*, 775 S.W.2d at 592; *Fink v. Caudle*, 856 S.W.2d at 958-59.

Evidence that a preexisting condition has progressed, advanced, or accelerated may take different forms. One of the most common ways to prove the progression of an preexisting condition is to present competent evidence of a physical or anatomical change. *See, e.g., Kroger Co. v. Johnson*, 221 Tenn. 649, 651, 430 S.W.2d 130, 131 (1967) (denying workers' compensation benefits to an employee who could not prove an "actual physical change in his feet"). However, we have never held that proving the existence of an anatomical or physical change is the only way to establish that work-related activities caused a progression in an employee's preexisting condition. To the contrary, we have stated consistently that employees are entitled to workers' compensation benefits when they prove that their work-related activities caused a disability either by producing an anatomic or physical change in the employee or by causing a preexisting condition to get worse (that is, to progress, advance, or accelerate). *Fritts v. Safety Nat'l Casualty Corp.*, 163 S.W.3d at 679; *Tobitt v. Bridgestone/Firestone, Inc.*, 59 S.W.3d at 62; *Cunningham v. Goodyear Tire & Rubber Co.*, 811 S.W.2d at 890; *Smith v. Smith's Transfer Corp.*, 735 S.W.2d at 224-26.²⁸

Thus, Tennessee law, as it currently stands, recognizes an important factual distinction when an employee seeks workers' compensation benefits based on pain caused by working. An employee whose disabling pain is caused by a work-related injury is entitled to workers' compensation benefits. However, an employee whose work-related activities caused his or her preexisting condition to be more painful is not entitled to workers' compensation benefits without proof that the employee's work-related activities caused the employee's underlying condition to progress, advance, or accelerate.²⁹

²⁸The complexity of these cases is often increased by the difficulty of explaining medical diagnoses or opinions in a way that lawyers and judges can understand them. As one physician testifying in a workers' compensation case observed, "it's easy to explain to myself medically what happened. It is not nearly so easy to explain to you legally what happened." White v. Werthan Indus., 824 S.W.2d at 160. The ability of courts to reach a fair and just result is also hindered when medical experts are asked for an opinion but are not asked to provide a precise explanation regarding the basis for their opinion.

²⁹In several cases, physicians have circumvented the necessity of demonstrating that there has been a progression, advancement, or acceleration of a preexisting condition by testifying that the pain itself is evidence of an anatomical or physical change, even though they could not explain what that change was. *See, e.g., Mathenia v. Milan Seating Sys.*, 254 S.W.3d at 319 (the physician testified "that to have increased pain, something has to change anatomically to cause that pain if we have got a stable person who is not faking"); *Denny v. Norwalk Furniture Corp.*, No. M2004-02661-WC-R3-CV, 2005 WL 2381886, at *5 (Tenn. Workers' Comp. Panel Sept. 28, 2005) (the physician testified that "if he was not having any pain prior to [the 2002 incidents] and was having severe pain afterwards that there had to be some kind of change, be it microscopic, hormonal, chemical, that would produce increased symptomology"). This sort of tautological testimony regarding increased symptomology without testimony about its cause is simply too speculative to provide a basis for an opinion regarding the causation of a compensable disabling condition.

The determinative question in this case is whether Mr. Trosper has presented sufficient competent evidence to establish that the work he was performing during the winter of 1997-1998 caused an aggravation or advancement of his preexisting osteoarthritis. The foundation of Mr. Trosper's case is Dr. Kennedy's testimony. Like the judges on the Special Workers' Compensation Appeals Panel, I have concluded that Dr. Kennedy's testimony regarding the causal relationship between Mr. Trosper's work activities in the winter of 1997-1998 and his current disability is simply too speculative and imprecise to support an award of workers' compensation benefits.

A.

Employees seeking workers' compensation benefits have the burden of proving every element of their claim by a preponderance of the evidence. *Fitzgerald v. BTR Sealing Sys. N. Am. - Tenn. Operations*, 205 S.W.3d 400, 404 (Tenn. 2006); *Vinson v. United Parcel Serv.*, 92 S.W.3d 380, 385 (Tenn. 2002). Except in the most obvious cases, they must present expert medical evidence to establish that their injury was caused by their work-related activities. *Glisson v. Mohon Int'l, Inc./Campbell Ray*, 185 S.W.3d 348, 354 (Tenn. 2006); *Fritts v. Safety Nat'l Casualty Corp.*, 163 S.W.3d at 678. However, the expert evidence need not be considered in a vacuum. It may be considered in light of relevant lay testimony, *White v. Werthan Indus.*, 824 S.W.2d at 159, including the employee's testimony. *Eads v. GuideOne Mut. Ins. Co.*, 197 S.W.3d 737, 741 (Tenn. 2006); *Smith v. Empire Pencil Co.*, 781 833, 835 (Tenn. 1989).

Medical experts testifying in workers' compensation cases are not required to render their opinions with absolute medical certainty. *Glisson v. Mohon Int'l, Inc./Campbell Ray*, 185 S.W.3d at 354; *Saylor v. Lakeway Trucking, Inc.*, 181 S.W.3d 314, 320 (Tenn. 2005); *Orman v. Williams Sonoma, Inc.*, 803 S.W.2d 672, 676 (Tenn. 1991). Reasonable doubts should be resolved in the employee's favor. *Clark v. Nashville Mach. Elevator Co.*, 129 S.W.3d 42, 47 (Tenn. 2004); *Hill v. Eagle Bend Mfg., Inc.*, 942 S.W.2d at 487. However, an expert's opinion regarding causation cannot be so speculative or equivocal that attributing the employee's injury to his or her employment would be an arbitrary determination or a mere possibility. *Tobitt v. Bridgestone/Firestone, Inc.*, 59 S.W.3d at 61; *Woodlawn Mem'l Park, Inc. v. Keith*, 70 S.W.3d 691, 695-96 (Tenn. 2002) (quoting *Tindall v. Waring Park Ass'n*, 725 S.W.2d 935, 937 (Tenn. 1987)).

As with other non-jury civil cases, reviewing courts must defer to a trial court's determination of the weight of the testimony of experts who testify in person. *Gray v. Cullom Mach. Tool & Die, Inc.*, 152 S.W.3d 439, 442 (Tenn. 2004); *Carter v. First Source Furniture Group*, 92 S.W.3d 367, 370 (Tenn. 2002). However, they should not afford the same deference with regard to a trial court's conclusions with regard to the weight of an expert's deposition testimony. *Barron v. State Dep't of Human Servs.*, 184 S.W.3d 219, 221 (Tenn. 2006). In that circumstance, the reviewing court should review the record de novo, make its own assessment of the medical proof, and draw its own conclusions regarding the weight and credibility of the expert's opinions. *Fritts*

v. Safety Nat'l Casualty Corp., 163 S.W.3d at 679; Conner Bros. Excavating Co. v. Long, 98 S.W.3d 656, 660 (Tenn. 2003).

В.

Because all the expert medical testimony in this case was introduced through depositions, we must review the record independently, and we must reach our own conclusions regarding the weight and sufficiency of Dr. Kennedy's causation testimony. To do so, we must first ascertain precisely what Dr. Kennedy's testimony was. Despite the ambiguity of the Court's opinion on this point, the record presents Dr. Kennedy's opinion in clear, understandable terms.

In both his deposition testimony and in the written report of his independent medical evaluation, Dr. Kennedy states that the event that triggered Mr. Trosper's claim for workers' compensation benefits occurred during the winter of 1997-1998 while Mr. Trosper was working as a lumber stacker. Consistent with the allegations in Mr. Trosper's complaint, he testified that the work as a lumber stacker during the winter of 1997 and spermanently aggravated and advanced the preexisting underlying carpometacarpal osteoarthritis in both thumbs and caused the painful instability of those joints which ultimately necessitated the surgery performed by Dr. Cletus McMahon [in 2004 and 2005]. Dr. Kennedy also concluded that between 1998 and 2004, the aggravation of the injury sustained in the winter of 1997-1998 was "intermittent rather than constant or continuous." Based on these findings, Dr. Kennedy opined: "[m]ore likely than not, had it not been for the cumulative trauma of his work at Triangle Pacific, he [Mr. Trosper] would not have required surgery, and his arthritis, with its subluxation, would not have been advanced or aggravated to the extent it was."

Dr. Kennedy's testimony that Mr. Trosper's disabling condition in 2005 was caused by this work activities rather than by the natural advancement of his preexisting osteoarthritis is undermined by three concessions that Dr. Kennedy himself made. First, Dr. Kennedy, conceded that he had never treated Mr. Trosper and that he had not reviewed medical records or x-rays taken prior to 2004. Accordingly, Dr. Kennedy was unable to ascertain the extent of the osteoarthritis in Mr. Trosper's wrists at the time he experienced the first onset of pain during the winter of 1997-1998 and had no basis to opine how much Mr. Trosper's osteoarthritis progressed between the winter of 1997-1998 and 2004.

³⁰In his written report dated March 20, 2006, Dr. Kennedy stated that Mr. Trosper's onset of symptoms ("pain in and subluxation of the carpometecarpal joints in both thumbs") occurred while working as a lumber stacker during the winter of 1997-1998. Dr. Kennedy repeated this conclusion in his deposition testimony when he testified: "[h]e [Mr. Trosper] told me that those symptoms occurred after he had been working for several weeks as a [sic] outdoor lumber stacker."

³¹For the purposes of this case, the parties and the trial court treated Triangle Pacific and Armstrong Wood Products as the same entity.

³²"Subluxation" refers to the displacement of a bone within a joint where the bone is still touching the joint surface but is no longer in its normal anatomic relationship. 2 Attorneys' Medical Deskbook § 16:5.

Second, Dr. Kennedy acknowledged that Mr. Trosper had continued to work for approximately six years after the onset of the pain in his wrists without reporting continuing pain or seeking medical treatment. This extended period without reports of pain calls into question the disabling nature or the permanency of any injury that Mr. Trosper might have sustained during the winter of 1997-1998. Third, Dr. Kennedy conceded on cross-examination that, in the final analysis, he was unable to differentiate between the effects on Mr. Trosper's condition in 2005 of his naturally progressing osteoarthritis and the "cumulative trauma" of his work.³³

The Court has chosen not to address the significance of Dr. Kennedy's concession that he could not distinguish between the effects of the cumulative trauma of Mr. Trosper's job and the effect of Mr. Trosper's naturally progressing osteoarthritis.³⁴ In my mind, however, the concession renders Dr. Kennedy's opinion regarding the causation of Mr. Trosper's disability equivocal and speculative. Even viewing the evidence in the light most favorable to Mr. Trosper, Dr. Kennedy's testimony cannot provide the foundation of a principled decision to award Mr. Trosper workers' compensation benefits. Accordingly, I concur with the Special Workers' Compensation Panel's conclusion that Dr. Kennedy's opinion was "speculative, at best" and, therefore, that Mr. Trosper failed to carry his burden of proof.

WILLIAM C. KOCH, JR., JUSTICE

We really cannot distinguish in most cases between the post-traumatic changes resulting in cumulative trauma and the disease process itself, other than by understanding the history, as in this case, and understanding the ways that the particular tasks involved would, with reasonable medical certainty, have caused extraordinary or unusually severe forces to be conducted repeatedly through the thumb. We really cannot distinguish between the post-traumatic aspects of cumulative trauma or the results of cumulative trauma and the disease process itself.

³³Dr. Kennedy testified:

³⁴The Court instead places great reliance on Mr. Trosper's testimony regarding the nature of his symptoms from and after 2004. It is obvious that Mr. Trosper is not qualified to address the question regarding whether his work-related activities caused his pre-existing osteoarthritis to permanently worsen. Thus, his truthful testimony regarding his symptoms does little to shore up the analytical shortcomings in Dr. Kennedy's testimony.