IN THE SUPREME COURT OF TENNESSEE AT JACKSON

November 5, 2014 Session

ORVILLE LAMBDIN v. GOODYEAR TIRE & RUBBER COMPANY

Appeal from the Chancery Court for Obion County No. 28805 W. Michael Maloan, Chancellor

No. W2013-01597-SC-WCO-WC - Filed January 29, 2015

During his thirty-seven years working for the employer, the employee suffered a gradual loss of hearing, especially at frequency levels of sound above 3000 hertz. Shortly after his retirement, he made a claim for workers' compensation benefits. After hearing the proof, the trial court ultimately found that the AMA Guides did not cover hearing losses at the higher frequencies and awarded a 30% vocational disability, not only for the anatomical impairment between 2000 and 3000 hertz but also for the impairment between 3000 and 4000 hertz. The employer appealed, asserting that the AMA Guides did not consider as an impairment hearing losses at levels higher than 3000 hertz and objecting to the method used by the employee's physician to ascertain anatomical impairment above that level. Because the evidence clearly established a hearing impairment above 3000 hertz and there was evidentiary support for the trial court's determination that expert testimony established an "appropriate" method for rating the impairment in a manner "used and accepted by the medical community," the judgment is affirmed.

Tenn. Sup. Ct. R. 51, § 2; Judgment of the Trial Court Affirmed

GARY R. WADE, J., delivered the opinion of the Court, in which SHARON G. LEE, C.J., and CORNELIA A. CLARK, JEFFREY S. BIVINS, and HOLLY KIRBY, JJ., joined.

Randy N. Chism, Union City, Tennessee, for the appellant, Goodyear Tire & Rubber Company.

Jeffrey P. Boyd, Jackson, Tennessee, for the appellee, Orville Lambdin.

OPINION

I. Facts and Procedural History

Orville Lambdin (the "Employee") was employed by Goodyear Tire & Rubber Company (the "Employer") from 1972 until 2009, when he elected to retire pursuant to a

voluntary buyout plan. Shortly after his retirement, the Employee sought workers' compensation benefits based upon hearing loss. When a benefit review conference did not resolve the claim, the Employee filed suit in the Obion County Chancery Court. The primary dispute at trial was the applicability of the Sixth Edition of the American Medical Association's Guides to the Evaluation of Permanent Impairment ("AMA Guides") to the high-frequency, noise-induced hearing loss sustained by the Employee. The AMA Guides provide an impairment rating formula for hearing loss in the ranges of 500, 1000, 2000, and up to 3000 hertz, but do not address hearing losses at frequencies higher than 3000 even though humans can typically hear at levels well over 10,000 hertz. A significant portion of the Employee's hearing loss is at frequencies beyond the 3000 hertz range, and the medical testimony offered on behalf of the Employee included an impairment assessment up to 4000 hertz.²

At trial, the evidence established that the Employee, fifty-nine years of age at the time, had a high school diploma and was working as a school janitor for \$7.64 per hour. Employed as a tire builder by the Employer in 1972, the Employee initially worked at a location in Jackson, Michigan. In 1983, he moved to Tennessee to work at the Employer's plant in Union City. At the time of his retirement in 2009, he earned \$23.00 per hour. The Employer did not initially provide hearing protection for its workers. When the Employer first offered the protection, apparently at some point during the mid-1980s, the Employee chose to wear the device at all times. His tire-building duties included feeding raw material into a machine with "self-activating turn-up bags, which . . . squeal[ed] terribly," according to the Employee. A standard level of production for a tire builder approximates 200 tires in an eight-hour day and 300 tires on those occasions involving a twelve-hour shift. The Employee testified that gas-powered trucks, which regularly carried supplies to his work location, also produced high levels of noise. He recalled that he worked "in the middle of two aisles" such that he was subjected to traffic noise on both sides, as well as loud noise from a "jammer" operated by another worker across the aisle on his "left-hand side." He was also regularly subjected to loud tire-bladder blowouts. The Employee estimated that he was exposed to significant noise for all but forty minutes of a regular eight-hour day.

He further testified that in the last year and a half before his retirement, he changed from a manual tire builder to the operator of a G3 mechanism, which "built most of the tire."

¹ The "hertz" is the standard unit "used to measure the frequency of vibrations and waves, such as sound waves One hertz is equal to one cycle per second." <u>The American Heritage Science Dictionary</u> 293 (Houghton Mifflin Harcourt Publ'g Co. 2008).

² The Occupational Safety and Health Administration ("OSHA") addresses hearing impairment up to 4000 hertz.

He described his new work environment as also "very noisy" because of the "self-activating tire bag[s]" used to run the G3s. The Employee complained that the ringing in his ears and his hearing loss was such that he was required to turn up the television and car radio to "real loud" levels in order to hear. He further stated that he was unable to hear normal conversation when there was background noise. Although he was regularly tested for hearing loss by the Employer, the Employee claimed that he was never notified of the results. The Employer's records indicated a gradual decline in the Employee's hearing during his years of service.

Dr. Karl Studtmann, a surgeon with a specialty in otolaryngology, first treated the Employee in November of 2009. After reviewing the periodic audiograms administered by the Employer beginning in 1986 and continuing until the Employee's retirement, Dr. Studtmann conducted his own examination, concluding that the Employee had developed "a downsloping, high-frequency sensorineural hearing loss in a checkmark pattern" and "interrelated" tinnitus—noise or ringing in the ears. He described the hearing loss as typically induced by noisy environments like that of the Employer, which was consistent with the Employee's complaint that at the end of each work day his ears felt "stopped up" from the loud noises and did not clear up until the next morning. In his opinion, the Employee's condition had worsened over time and would continue to do so; the Employee would eventually be required to use hearing aids based upon the noise exposure, which would inevitably be exacerbated by presbycusis—the natural loss of hearing through the aging process. Dr. Studtmann opined that based solely upon the rating formula provided by the AMA Guides, the Employee had no impairment in his right ear and 5.6% impairment in his left ear. These findings, in his view, warranted a binaural hearing impairment of .9% by the exclusive use of the AMA Guides. He further stated, however, that the formula in the AMA Guides for determining medical impairment inadequately addressed the effects of the Employee's high-frequency hearing loss. While explaining that the AMA Guides included ratings at 500, 1000, 2000, and up to 3000 hertz, Dr. Studtmann pointed out that the AMA Guides failed to address impairment for hearing losses at higher than 3000 hertz, even though ordinary speech frequencies ranged as high as 6000 hertz. Using a cap of 4000 hertz and considering that the Employee's documented hearing loss began at 2000 hertz, Dr. Studtmann described his hearing loss to be in the top 50% of speech frequencies.

Based upon his determination that the AMA Guides did not cover the full range of sound frequencies in normal conversation, Dr. Studtmann used an alternative method to calculate the Employee's level of hearing impairment between 3000 and 4000 hertz. He pointed to research showing that a significant amount of the information contained in speech occurs in the high-frequency ranges, including the sounds made by the letters "F," "S," and "Th." In a quiet environment, our brains are able to use information contained in the low-frequency speech ranges to "fill in" any information that we may miss in the high-

frequency ranges. For someone with high-frequency hearing loss, however, the presence of background noise eliminates these low-frequency cues. Dr. Studtmann explained the consequence of this phenomenon as follows: "[S]uddenly, instead of having a little bit of disability, you fall off a cliff. Your hearing understanding drops off dramatically. So it's actually more similar to a flat hearing loss at your worst hearing" To determine the level of disability in this situation, Dr. Studtmann's method of calculating hearing loss accounts for a person's inability in a noisy environment to perceive information contained in the high-frequency range.

Using existing research, Dr. Studtmann catalogued the sounds contained at the 3000 to 4000 hertz range and calculated how often those sounds appear on average in everyday speech. Then, Dr. Studtmann determined the Employee's hearing loss at the 3000 to 4000 hertz range and applied it to the lower frequencies. In other words, he took the "worst hearing" at the high-frequency range and applied it "all the way across" the Employee's audiogram. By his calculations, the Employee had a fifty-decibel loss in his left ear, a "moderate" hearing loss, and a thirty-five-decibel loss in his right ear, a "mild" hearing loss. Based upon these findings, Dr. Studtmann concluded that the Employee had a 20%, rather than a .9%, binaural hearing impairment. He indicated that his method was "based on studies that have been . . . peer reviewed," and that his particular conclusions in this instance were "based on the audiogram findings that [he obtained] from the [Employee]." Although Dr. Studtmann conceded that his methodology could result in an overestimation of hearing loss, he opined that it was much more accurate than the methodology of the AMA Guides, which also depended upon estimations and failed altogether to account for high-frequency hearing loss.³

Dr. Leonard Wright, a physician specializing in otolaryngology, testified by deposition on behalf of the Employer. After reviewing the audiograms the Employer had performed over the years, Dr. Wright concluded that the Employee had progressive hearing loss with periodic "hissing and roaring tinnitus." During the course of his examination, Dr. Wright learned that the Employee had been exposed to machinery, air noise, and traffic during his thirty-seven years of employment with the Employer and, as a consequence, was required to be within arm's length in order to understand normal conversation. According to Dr. Wright, the Employee claimed that he did not hunt, listen to loud music, or use heavy equipment such as a chainsaw or farm machinery. He further reported that he always used hearing protection when exposed to small-engine noises, motorcycle sounds, and .22 rifle shots. Dr. Wright added that if some of the Employee's hearing loss was caused by firing a rifle, there could

³ Although the Employer sought to exclude the testimony of Dr. Studtmann's impairment rating at frequencies higher than 3000 hertz, the trial court, by hearing the testimony and ultimately making use of Dr. Studtmann's opinion in assessing disability, considered the evidence.

be greater loss in the left ear for a right-handed person because the right ear was turned away from the recoil of the gun. Although the Employee had diabetes and high cholesterol, Dr. Wright testified that these conditions had no effect on his hearing.

After reviewing the results of an auditory brainstem response test performed on the Employee, Dr. Wright also determined that pursuant to the AMA Guides' formula addressing 500 to 3000 hertz, the Employee had sustained a 5.6% impairment to the left ear and a 0% impairment to the right ear, which resulted in a binaural impairment of .9%. Similar to Dr. Studtmann, he described the Employee's hearing loss as more significant at frequencies beyond 3000 hertz, "down to 50 decibels in the right ear at 4000 [hertz] from 65 [decibels] at 3000 [hertz]." Dr. Wright acknowledged that the Employee had hearing loss in both ears at the higher frequencies and conceded that it was reasonable to infer that the noise levels at his workplace contributed to his hearing loss. Dr. Wright stated that the length of time of exposure to high noise levels was by far "the most significant factor" in hearing loss, and that the amount of sound, such as riding motorcycles, mowing lawns, or shooting were "not that significant." Because there were spikes in the noise levels at the Employee's workplace, Dr. Wright further opined that some damage could have occurred even when the Employee wore protective hearing devices.

Dr. Marilyn Gresham, an audiologist who tests, evaluates, and treats hearing disorders, also testified by deposition on behalf of the Employer. Working with Dr. Wright, she actually conducted the auditory brainstem response test that he relied upon in his examination. Dr. Gresham, who described the test as objective in that the "electrodes measure the electrical information generated by the cochlear nerve," emphasized that the patient had no control over the results. She agreed that under the AMA Guides the Employee had a 5.6% impairment rating in the left ear, 0% in the right, and a resulting binaural impairment of .9%, but she also acknowledged that the AMA Guides did not rate the level of impairment for hearing losses over 3000 hertz. Dr. Gresham confirmed that her test demonstrated that the hearing loss experienced by the Employee was most significant at frequencies above 3000 hertz. When questioned about other possible contributors to hearing loss, Dr. Gresham described a .22 rifle as between 140 and 158 decibels, a motorcycle at 90 to 110 decibels, and a tractor at 90 to 115 decibels. Her opinion was that these sources of noise, in addition to those associated with his occupation, could have been factors in the hearing loss experienced by the Employee.

Dr. Robert Thayer Sataloff, an otolaryngologist specializing in disorders of the ear and voice, also testified by deposition. As chairman of the committee that developed the hearing-loss section of the Sixth Edition of the AMA Guides, Dr. Sataloff provided a historical perspective of the rating impairment formula. As the author of over 3000 publications related to occupational hearing loss, he explained that the 1959 Edition of the AMA Guides

included hearing loss on levels of 500, 1000, and 2000 hertz, but pointed out that studies since that time indicated that the 2000 level, while indicative of how well individuals could hear under quieter circumstances, was inadequate at noisier, everyday settings. He explained that the Second Edition of the AMA Guides, which was published in 1979, was the first to include impairment ratings for hearing losses at 3000 hertz. Dr. Sataloff asserted that additional studies since 1979 were in conflict, with some of the research suggesting that 3000 hertz was too high to consider as an impairment, while other studies indicated that impairment ratings were warranted at 4000 hertz "and even 6000 and 8000 hertz." In an effort to explain higher frequency sounds, Dr. Sataloff pointed out that the highest note on the piano is 4100 hertz. In his opinion, a range of 500 to 3000 hertz provided a "good, reasonable, and consistent . . . approximation of the effect of hearing loss on every day function," and he saw no reason to consider losses at the higher frequency in the assessment of an impairment.

Dr. Sataloff, who reviewed the medical records of the Employee but did not actually see or treat him, conceded that high-frequency noises such as those at the Employer's workplace could result in permanent hearing loss at levels higher than 3000 hertz. He noted, however, that he did not recall any employees "who were not involved with attorneys" complaining of an inability to hear at normal speech levels and seek benefits for their highfrequency hearing impairment. Dr. Sataloff explained that the ultimate goal of every hearing test was to ascertain "the ability to function on an everyday basis and particularly to hear speech in everyday situations." As did the other physicians, Dr. Sataloff found that the Employee's hearing loss warranted a .9% binaural impairment rating under the AMA Guides. In his opinion, however, the formula provided "a full and complete statement of impairment from hearing loss," and that hearing loss at frequencies beyond 3000 hertz "did not affect function in everyday situations." Further, Dr. Sataloff disagreed with each of the other physicians who had examined the Employee in that he believed that the Employee's hearing loss was not related to his work. In his view, "diabetes," "dirt bikes," and "firearms" usage were the causes of the Employee's hearing loss, and, because "all the damage that will occur occurs within the first fifteen years . . . of noise exposure," and because the Employee wore hearing protection in the latter years of his work, "[a]ny loss after that [period of time] cannot have been causally related [to his occupation]." He opined that the greater hearing loss in the left ear further suggested that shooting firearms, rather than job noise, may have been the cause.

After reading and considering Dr. Sataloff's testimony, Dr. Studtmann submitted to another deposition. In a position paper on "Occupational Noise Induced Hearing Loss," he again expressed the view that the AMA Guides, which are based upon testing performed in a quiet environment, failed to take into account background noise in the evaluation of hearing loss at high-frequency levels. Dr. Studtmann cited nineteen published medical research

studies that he believed supported his contention that the AMA Guides failed to adequately address the subject of high-frequency impairment, all of which were made exhibits to the record. In particular, he referenced a study indicating that workers with high-frequency hearing loss had "an increased risk of industrial accidents due to reduced ability to respond to auditory warnings" and specifically challenged Dr. Sataloff's claim that a gradual, noiseinduced hearing loss stopped after fifteen years. He stated that studies consistently indicated that hearing loss from occupational noise gradually got worse over an indefinite period of time and, after extensive research on the subject, contended that he was unable to find a single study demonstrating the accuracy of Dr. Sataloff's statement that hearing loss from exposure to loud noises ended after fifteen years. According to Dr. Studtmann, "[n]either the old nor the new data . . . supported that [theory]." In his opinion, there was not, at the time the AMA Guides were developed, "a good way to consistently measure somebody's understanding of normal speech in a noisy environment, . . . but there are [now] research studies [to]...do that, [even though] they're... challenging to do." Dr. Studtmann further contended that "not only do[] the AMA [Guides] not adequately cover the high[-]frequency hearing loss, the disability is far worse than they suggest." Dr. Studtmann cited an article from The Journal of the American Medical Association as an authoritative source for his measurement of higher frequency impairment and described each of the studies he had relied upon as having been subjected to peer review.

At the conclusion of the evidence, the trial court did not initially take into account hearing loss at the frequencies higher than 3000 hertz and ruled that the Employee was entitled to a 10% permanent partial disability based upon the .9% binaural impairment established by the Sixth Edition of the AMA Guides. Afterward, the Employee filed a motion to alter or amend based upon an opinion by a Workers' Compensation Panel of this Court in Perry v. Lennox Hearth Products, No. W2011-02389-SC-WCM-WC, 2013 WL 1461482 (Tenn. Workers' Comp. Panel Apr. 11, 2013). After considering the ruling in Perry, the trial court granted the Employee's motion, utilized Dr. Studtmann's 20% impairment rating by virtue of the Employee's hearing loss both below and above 3000 hertz, and increased from 10% to 30% the award of permanent partial vocational disability.

In this appeal, the Employer first argues that under these circumstances, the AMA Guides, which serve as the basis for a permanent disability award in workers' compensation cases, are the exclusive methodology for calculation of the medical impairment rating. Therefore, according to the Employer, Dr. Studtmann's testimony as to any other impairment rating not calculated pursuant to the AMA Guides should have been excluded from the evidence. In related arguments, the Employer further contends that even if the calculation of high-frequency hearing loss is not adequately covered by the AMA Guides, the alternative method used by Dr. Studtmann to assign a greater impairment rating has not been "used and

accepted by the medical community" and, therefore, that the trial court erred by granting the motion to alter or amend.

II. Standard of Review

A trial court's findings of fact in a workers' compensation case are reviewed de novo, accompanied by a presumption of correctness, unless the preponderance of the evidence is otherwise. Tenn. Code Ann. § 50-6-225(e)(2) (2008); see also Tenn. R. App. P. 13(d). "This standard of review requires us to examine, in depth, a trial court's factual findings and conclusions." Williamson v. Baptist Hosp. of Cocke Cnty., Inc., 361 S.W.3d 483, 487 (Tenn. 2012) (quoting Galloway v. Memphis Drum Serv., 822 S.W.2d 584, 586 (Tenn. 1991)). When the trial court has seen and heard the witnesses, considerable deference must be afforded to the trial court's findings of credibility and the weight that it assessed to those witnesses' testimony. Tryon v. Saturn Corp., 254 S.W.3d 321, 327 (Tenn. 2008) (citing Whirlpool Corp. v. Nakhoneinh, 69 S.W.3d 164, 167 (Tenn. 2002)).

"When the issues involve expert medical testimony that is contained in the record by deposition, determination of the weight and credibility of the evidence necessarily must be drawn from the contents of the depositions, and the reviewing court may draw its own conclusions with regard to those issues." Foreman v. Automatic Sys., Inc., 272 S.W.3d 560, 571 (Tenn. 2008) (citing Orrick v. Bestway Trucking, Inc., 184 S.W.3d 211, 216 (Tenn. 2006)). In this regard, we may make our own assessment of the evidence to determine where the preponderance of the evidence lies. Crew v. First Source Furniture Grp., 259 S.W.3d 656, 665 (Tenn. 2008); Wilhelm v. Krogers, 235 S.W.3d 122, 127 (Tenn. 2007). Further, on questions of law, our standard of review is de novo with no presumption of correctness. Wilhelm, 235 S.W.3d at 126 (citing Perrin v. Gaylord Entm't Co., 120 S.W.3d 823, 826 (Tenn. 2003)).

III. Analysis A. Causation

Initially, in order to qualify for workers' compensation benefits, an injury must both "arise out of" and occur "in the course of" employment:

The phrase "in the course of" refers to time, place, and circumstances, and "arising out of" refers to cause or origin. "[A]n injury by accident to an employee is in the course of employment if it occurred while he was performing a duty he was employed to do; and it is an injury arising out of employment if caused by a hazard incident to such employment." Generally, an injury arises out of and is in the course and scope of employment if it has a rational connection to the work and occurs while the employee is engaged in the duties of his employment.

Orman v. Williams Sonoma, Inc., 803 S.W.2d 672, 676 (Tenn. 1991) (alteration in original) (citations omitted). "Except in the most obvious, simple and routine cases," a claimant must demonstrate by expert medical evidence a causal relationship between the claimed injury and the employment activity. Id. That relationship must be established by the preponderance of the expert medical testimony, as supplemented by the lay evidence. Trosper v. Armstrong Wood Prods., Inc., 273 S.W.3d 598, 604, 609 (Tenn. 2008). "Although causation in a workers' compensation case cannot be based upon speculative or conjectural proof, absolute certainty is not required because medical proof can rarely be certain " Clark v. Nashville Mach. Elevator Co., 129 S.W.3d 42, 47 (Tenn. 2004); see also Glisson v. Mohon Int'l, Inc./Campbell Ray, 185 S.W.3d 348, 354 (Tenn. 2006). All reasonable doubts as to the causation of an injury and whether the injury arose out of the employment should be resolved in favor of the employee. Phillips v. A&H Constr. Co., 134 S.W.3d 145, 150 (Tenn. 2004). Our statutory scheme recognizes that a worker may recover benefits for a gradual injury caused by continual exposure to the conditions of employment. Cloyd v. Hartco Flooring Co., 274 S.W.3d 638, 643 (Tenn. 2008). "Unlike some other jurisdictions, there is no requirement in this state that the injury be traceable to a definite moment in time or triggering event in order to be compensable." Id. at 643-44.

In this instance, the trial court accredited the testimony of the Employee that his hearing loss was the result of being exposed to a significant level of noise at his workplace over an extended period of time. The Employee denied that any other activity could have contributed to his hearing loss, asserting that he used hearing protection on those occasions when he fired a rifle or used a lawnmower. The audiogram records maintained by the Employer indicated a gradual decline in the Employee's ability to hear over his term of employment. Dr. Studtmann, Dr. Wright, and Dr. Gresham all described the Employer's noisy workplace as the likely cause of the Employee's hearing loss.

Of course, live testimony by a lay witness may influence the trier of fact in the consideration of expert medical proof by depositions. See Thomas v. Aetna Life & Cas. Co., 812 S.W.2d 278, 283 (Tenn. 1991). That appears to be the case here. Having had the opportunity to observe the demeanor of a witness, the trial court is entitled to deference on the issue of credibility and weight of the evidence. Madden v. Holland Grp. of Tenn., Inc., 277 S.W.3d 896, 900 (Tenn. 2009). Moreover, even though we review deposition testimony de novo, Dr. Sataloff acknowledged that he did not treat the Employee, did not perform any of the tests, and had not experienced the noise levels at the Employee's workplace. Thus, the evidence does not preponderate against the trial court's ruling that the Employee's hearing impairment qualified as arising out of and in the course of his employment.

B. Vocational Disability

The essence of this appeal is the measure of anatomical impairment as it relates to vocational disability. At the time of the Employee's claim, Tennessee Code Annotated section 50-6-204(d)(3), which sets forth a standard for the assessment of anatomical impairment and guidelines for the assessment of benefits, provided as follows:

- (A) To provide uniformity and fairness for all parties in determining the degree of anatomical impairment sustained by the employee, a physician, chiropractor or medical practitioner who is permitted to give expert testimony in a Tennessee court of law and who has provided medical treatment to an employee or who has examined or evaluated an employee seeking workers' compensation benefits shall utilize the applicable edition of the AMA Guides as established in § 50-6-102 or, in cases not covered by the AMA Guides, an impairment rating by any appropriate method used and accepted by the medical community.
- (B) No anatomical impairment or impairment rating, whether contained in a medical record, medical report, including a medical report pursuant to § 50-6-235(c), deposition or oral expert opinion testimony shall be accepted during a benefit review conference or be admissible into evidence at the trial of a workers' compensation matter unless the impairment is based on the applicable edition of the AMA Guides or, in cases not covered by the AMA Guides, an impairment rating by any appropriate method used and accepted by the medical community.

Tenn. Code Ann. § 50-6-204(d)(3)(A)–(B) (2008) (emphasis added). Relying upon the language in this statute, the Employer argues that regardless of any hearing loss suffered by the Employee at the higher frequencies, the AMA Guides preclude any impairment rating for hearing loss at levels higher than 3000 hertz. The Employer further contends that even if the loss of hearing at a higher frequency is not "covered by the AMA Guides," the alternative method utilized by Dr. Studtmann, which was the basis for increasing the level of impairment from .9% to 20%, does not qualify as an "appropriate method used and accepted by the medical community." For these reasons, the Employer submits that the trial court erred by granting the motion to alter and amend the award of benefits.

The amended judgment increasing the level of benefits from 10% vocational disability, which was based only upon hearing loss at 3000 hertz and below, to 30% vocational disability, was largely the result of the Panel ruling in <u>Perry</u>, which, as conceded by the Employer, presented an identical "covered by the Guides" issue except for the testimony of Dr. Sataloff. In <u>Perry</u>, an opinion authored by Justice Janice M. Holder, Dr.

Studtmann testified that Perry, who had worked in a loud environment for twenty-seven years and experienced a gradual decrease in his hearing, had sustained 0% hearing loss in the right ear and 7.5% in the left ear, resulting in a binaural impairment of 1.3%, as calculated pursuant to the AMA Guides. 2013 WL 1461482, at *1. Dr. Studtmann further testified, however, that the AMA Guides provided no basis to assess the impairment for hearing loss at the higher frequencies of sound, and that hearing loss at these levels can have a "significant effect" on a person's ability to function. Id. at *2. Because the Sixth Edition of the AMA Guides did not address frequency levels of hearing loss above 3000 hertz and Perry had a demonstrated hearing loss at the higher frequencies, Dr. Studtmann found a 20% binaural impairment based upon his examination of Perry and audiogram results. Id. Dr. Mitchell Schwaber, a witness for Perry's employer, explained that the AMA Guides were limited to a range between 500 and 3000 hertz because "most day-to-day activities and normal speech occur within those frequencies." Id. He acknowledged, however, that "the AMA Guides were not intended to determine a person's work disability and that it was possible for a person to have a work disability more significant than the percentage outlined in the AMA Guides." Id. Based upon this medical testimony, the trial court found that Perry had a 40% vocational disability. Id. at *3. The Panel, recognizing that the trial court had the authority to consider Dr. Studtmann's rating of impairment for hearing loss at frequencies higher than 3000 hertz, was unable to conclude that the evidence preponderated against the judgment and, therefore, affirmed. Id. at *6.

There is precedent for permanent disability awards in the absence of an impairment rating pursuant to the AMA Guides. For example, in <u>Walker v. Saturn Corp.</u>, this Court held that "[a]n anatomical impairment rating is not always indispensable to a trial court's finding of a permanent vocational impairment." 986 S.W.2d 204, 207 (Tenn. 1998). In <u>Corcoran v. Foster Auto GMC</u>, Inc., this Court observed as follows:

While an anatomical disability rating . . . is preferable and ordinarily, if not uniformly, part of the proof offered by either or both parties, the ultimate issue is not the extent of anatomical disability but that of vocational disability, the percentage of which does not definitively depend on the medical proof regarding a percentage of anatomical disability.

746 S.W.2d 452, 457 (Tenn. 1988) (emphasis added); see also Hill v. Royal Ins. Co., 937 S.W.2d 873, 876 (Tenn. Workers' Comp. Panel 1996). More recently, in Morris v. Jackson Clinic Professional Ass'n, a Panel upheld an award for an impairment rating that included "additional components not contained in the AMA Guides." No. W2010-01475-SC-WCM-WC, 2011 Tenn. LEXIS 615, at *13 (Tenn. Workers' Comp. Panel July 15, 2011). Likewise, this Court has consistently held that "it 'is simply not true' that workers whose injuries are not covered by the AMA Guides receive no benefits. . . . [T]he medical impairment rating

of workers whose medical problems are not recognized by the AMA Guides may be determined by any appropriate method used and accepted by the medical community." Lynch v. City of Jellico, 205 S.W.3d 384, 398 (Tenn. 2006) (quoting Brown v. Campbell Cnty. Bd. of Educ., 915 S.W.2d 407, 416 (Tenn. 1995)) (citing Tenn. Code Ann. § 50-6-204(d)(3)(A)).⁴

Other Panels have rejected impairment ratings outside the AMA Guides. See, e.g., Kirby v. Memphis Jewish Nursing Home, No. W2010-02261-WC-R3-WC, 2011 Tenn. LEXIS 1135 (Tenn. Workers' Comp. Panel Dec. 1, 2011); Jackson v. Goodyear Tire & Rubber Co., No. W1999-01691-WC-R3-CV, 2001 WL 303508 (Tenn. Workers' Comp. Panel Mar. 29, 2001); Lindbloom v. Metro 8 Sheet Metal, Inc., No. E1998-00495-WC-R3-CV, 2000 WL 233290 (Tenn. Workers' Comp. Panel Feb. 28, 2000). Although the Employer has cited Lindbloom, Jackson, and Kirby as supportive of its

Impairment rating enables the physician to render a quantitative estimate of losses to the individual as a result of their health condition, disorder, or disease. <u>Impairment ratings are defined by anatomic, structural, functional, and diagnostic criteria; physicians are generally familiar with these criteria, based on their broader training and clinical experience.</u>

. . . .

The relationship between impairment and disability remains both complex and difficult, if not impossible, to predict. . . . Disability may be influenced by physical, psychological, and psychosocial factors that can change over time.

The [AMA Guides are] not intended to be used for direct estimates of work participation restrictions. Impairment percentages derived according to the [AMA Guides'] criteria do not directly measure work participation restrictions. . . .

In disability evaluation, the impairment rating is one of several determinants of disablement. Impairment rating is the determinant most amenable to physician assessment; it must be further integrated with contextual information typically provided by nonphysician sources regarding psychological, social, vocational, and avocational issues.

Am. Med. Ass'n, <u>Guides to the Evaluation of Permanent Impairment</u> § 1.3d (Robert D. Rondinelli ed., 6th ed. 2008) (emphasis added).

⁴ The Court in <u>Lynch</u> also relied upon a general disclaimer contained in the Fifth Edition of the AMA Guides, noting "that the AMA Guides themselves indicate that in situations where impairment ratings are not provided, physicians are to use their clinical judgment based upon the physician's experience, training, and skill, in arriving at an impairment rating." <u>Id.</u> at 398 n.10 (citing Am. Med. Ass'n, <u>Guides to the Evaluation of Permanent Impairment</u> § 1.5 (Gunnar B.J. Andersson & Linda Cocchiarella eds., 5th ed. 2000)). A similar disclaimer now appears in the Sixth Edition:

position, all are distinguishable from the circumstances here. In Lindbloom, although the Panel rejected the impairment rating by the treating physician because he had not relied upon the AMA Guides, the Panel acknowledged that "[h]ad the medical expert been in a position to testify that although his rating was not based on the AMA Guides, he used some other appropriate method which was generally accepted in the medical community . . . , his rating would have been acceptable." 2000 WL 233290, at *3. Based upon this language, it is clear that the Panel would have accepted the rating by the treating physician if he had testified to an alternative method, as Dr. Studtmann did in this case. In Jackson, although the Panel rejected the impairment rating of a physician who did not rely upon the AMA Guides, that decision was based upon a prior version of Tennessee Code Annotated section 50-6-204(d)(3), which did not allow for assessments by any method other than the AMA Guides or the Manual for Orthopedic Surgeons in Evaluating Permanent Physical Impairment. 2001 WL 303508, at *3; see Tenn. Code Ann. § 50-6-204(d)(3) (Supp. 2000). The Jackson Panel noted that while it was bound by the clear guidelines of the statute, "[i]t may be that the statutory procedure by which physicians are required to determine anatomical impairments should be changed. However, if so, it is a matter for the legislature and not this Panel." 2001 WL 303508, at *3. Indeed, section 50-6-204(d)(3) has since been amended and now allows for impairment ratings that are based upon "other appropriate method(s)," which were testified to by Dr. Studtmann. Finally, the Employer relies upon Kirby, in which the trial court and the Panel rejected the anatomical rating by a physician who assigned additional impairment outside the formula set forth in the AMA Guides. 2011 Tenn. LEXIS 1135, at *4-5, *15-16. Unlike Dr. Studtmann, however, the physician in Kirby had calculated the additional impairment "using an incorrect method." Id. at *14. In consequence, none of these decisions provide a basis for rejecting the impairment rating by Dr. Studtmann.

Moreover, the <u>Lindbloom</u> and <u>Jackson</u> Panels, despite their rejection of impairment ratings outside the AMA Guides, nevertheless affirmed awards of vocational disability based upon the principles announced by this Court in <u>Walker</u>, 986 S.W.2d at 207. This is because in the assessment of vocational disability, trial courts may consider, in addition to an anatomical impairment rating, the employee's skills and training, education, age, local job opportunities, capacity to work, and the kinds of employment available under any physical limitations. <u>Worthington v. Modine Mfg. Co.</u>, 798 S.W.2d 232, 234 (Tenn. 1990). A permanent vocational disability is a question of fact. <u>Id.</u> The testimony of the employee as to his or her physical limitations must always be taken into consideration. <u>Uptain Constr. Co. v. McClain</u>, 526 S.W.2d 458, 459 (Tenn. 1975). Further, the trial court is not required to accept physicians' opinions as to the extent of the employee's impairment level, but must consider all of the evidence, including lay testimony, to decide the extent of vocational disability. <u>Hinson v. Wal-Mart Stores</u>, Inc., 654 S.W.2d 675, 677 (Tenn. 1983).

As indicated, the evidence in this record does not preponderate against the trial court's conclusion that the Employee sustained both a permanent anatomical impairment and a permanent vocational disability as a result of high levels of noise at his place of occupation. During many of the Employee's work years, the Employer did not provide any hearing protection. All physicians who testified, including Dr. Sataloff, agreed that the Employee had suffered a permanent hearing loss not only below but also above 3000 hertz. All further acknowledged that the Employee had a more significant hearing loss at frequencies higher than 3000 hertz. The AMA Guides do not make any mention of hearing losses at levels exceeding 3000 hertz, not even to say that there should be a zero increase in the impairment rating at levels higher than 3000. In that regard, the AMA Guides do not "cover" this type of injury. The evidence at trial demonstrates that the medical profession recognizes hearing losses not only in frequencies of ordinary speech, but also within the higher ranges of sound discernible by the human ear. The fact that the AMA Guides fail to address the impact of high-frequency hearing loss on everyday activities, even if there is none at all, suggests no definitive position on the subject.

As we stated, only Dr. Sataloff concluded that the Employee's hearing loss at the higher frequencies had no effect upon his ability to engage in normal conversation and, therefore, had no effect upon his ability to find gainful employment. Dr. Studtmann provided testimony, unrefuted as it turned out, that the component parts of his method of calculating impairment had been subjected to peer review and had a level of acceptance among members of the medical profession. He presented published studies indicating that the higher frequency hearing losses tended to increase the number of accidents at the workplace and explained his method of assessment. In particular, a number of the studies indicated that impairment ratings are warranted at the higher levels of frequency beyond 3000 hertz. Exhibits made a part of the record support this methodology. Of importance, we note that the higher impairment rating by Dr. Studtmann, while not calculated pursuant to the AMA Guides, was based upon objective test results obtained during the treatment of the Employee. The Employer has made no objection to the use of audiograms or an auditory brainstem response test as acceptable methods of evaluating hearing loss. Dr. Studtmann simply extended the application of these standard tests to estimate the extent of the Employee's disability above the 3000 hertz level—the type of high-frequency hearing loss that is not covered by the AMA Guides, even though ordinary speech frequencies range as high as 6000 hertz.

As indicated, the trial court ultimately accepted the method Dr. Studtmann used to ascertain hearing impairment at the higher frequencies. Further, the trial court approved Dr. Studtmann's calculations of additional impairment as used and accepted in the medical community. Because the trial court accepted the Employee's testimony that his hearing loss, documented by objective testing to be more significant at levels above 3000 hertz, affected

his ability to hear normal, everyday speech, and considered all other applicable factors in determining vocational disability, there is sufficient evidence in the record to support the amended award.

IV. Conclusion

Although the AMA Guides do not address the effect of hearing loss at levels higher than 3000 hertz, there was evidentiary support for the trial court's determination that expert testimony established a viable means to do so. Because the evidence clearly established a hearing impairment above 3000 hertz, the judgment of the trial court is affirmed. Costs of this appeal are assessed to Goodyear Tire & Rubber Company and its surety, for which execution may issue if necessary.

GARY R. WADE, JUSTICE