IN THE SUPREME COURT OF APPEALS OF WEST VIRGINIA

September 1991 Term

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No. 20142

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JAMES BILBREY,
Appellant,

v.

WORKERS' COMPENSATION COMMISSIONER AND
RANGER FUEL CORPORATION,
Appellees

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No. 20244

_____

RANGER FUEL CORPORATION,
Appellant,

v.

WORKERS' COMPENSATION COMMISSIONER AND
JAMES O. BILBREY,
Appellees

_____

No. 20180

_____

GRANVILLE GREGORY
Appellant,

v.

WORKERS' COMPENSATION COMMISSIONER AND
KAISER ALUMINUM & CHEMICAL CORPORATION,
Appellees

No. 20190

BILLIE LAFFERTY,
Appellant,

v.

WORKERS' COMPENSATION COMMISSIONER AND
MILBURN COLLIERY COMPANY,
Appellees

Appeal from the Workers' Compensation Appeal Board

REMANDED

Submitted: October 1, 1991
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JUSTICE BROTHERTON delivered the Opinion of the Court.

SYLLABUS BY THE COURT

1. In order to rule out conductive losses due to injuries to the external and middle ear, bone conduction testing should be performed routinely.

2. If a conductive loss exists, the four frequency total should be adjusted by the physician to deduct the amount of the conductive loss from the total used to estimate wholeman impairment.

3. Speech discrimination testing is valuable, except where it is performed at an improper decibel level. Thus, all speech discrimination testing must be performed at the same decibel level in order to be considered valid. Unless the Health Care Advisory Panel reaches a different conclusion, we believe the 75 decibel level identified by the Craddock committee should be used as the uniform testing level.

4. At the time the Commissioner rules the claim compensable, the order should identify whether it is to be considered under the Craddock standard or the post-Craddock 1986 amendments.

5. Only physicians who are qualified otologists or otolaryngologists are permitted to interpret the results of the

audiograms. Interpretation by non-expert physicians will be given little weight and will be considered secondary to expert opinion.

6. In referring a claimant to a physician for a hearing loss examination, the Commissioner should inform the physician what tests the physician is to conduct, at what decibel level, the standards to be used in making a rating, and any other specifics necessary for the Commissioner to reach an informed decision. Failure to do as requested will result in the physician not being compensated for the testing and report.

Brotherton, Justice:

This case involves four consolidated appeals from decisions of the Workers' Compensation Appeal Board and the Workers' Compensation Commissioner dealing with hearing loss. The consolidation grows out of the confusion that confronts this Court by the records on appeal for hearing loss awards. Uniform testing is not something that is routinely found in the cases which come before us. The lack of standardized hearing loss testing creates utter confusion for the claimants, employers, lawyers, and most certainly for this Court when we consider the record on appeal. While we realize the Commissioner is creating a Health Care Advisory Panel (Panel) to study the problem of uniform testing, we are, by this opinion, setting forth certain criteria that we find necessary for a proper review of the cases which come before us. These new standards are to be used from this time forward and lay a foundation for the Panel to use in writing standard testing requirements for hearing loss.

I. & II.

The first case involves an appeal by James Bilbrey from a decision of the Workers' Compensation Appeal Board and Commissioner. The employer, Ranger Fuel Corporation, also files an appeal from the decision of the Appeal Board and Commissioner. The claimant, James Bilbrey, filed a petition for hearing loss benefits on October

17, 1985. Dr. A. J. Paine completed the physician's section and diagnosed a sensorineural hearing loss. The claim was ruled compensable, and on April 22, 1986, the Commissioner granted the claimant a 17.75% permanent partial disability (PPD) award based upon Dr. P. C. Corro's report dated March 17, 1986. However, Dr. Corro's report estimated only a 13.4375% PPD due to hearing loss. Thus, Ranger Fuel protested the April 22, 1986, award.

The claimant filed a supplemental report prepared by Dr. Paine dated May 7, 1986, in which he calculated Dr. Corro's audiogram to equate to a 21.75% hearing loss. Dr. Paine also calculated his first audiogram from the initial application to equal 20.0625% PPD.

By letter dated June 12, 1986, Ranger Fuel filed medical records from Dr. George Miller, which included audiograms from December 1, 1972, and June 15, 1976. The records indicated a history of external ear infections and sinus problems.

Dr. Corro testified on October 21, 1987. At that time, Dr. Corro stated that based upon Dr. Miller's notes, the claimant had a long standing sinus problem which would affect his hearing as a conductive component and noted that he found a conductive component in both his audiogram and Dr. Paine's audiogram. Thus, he stated that the conductive component should be factored out of the total audiogram results to determine the hearing loss due solely to noise

exposure. Thus, by supplemental report dated October 21, 1987, Dr. Corro stated that the claimant was entitled to a 12.65% PPD award based upon only the non-conductive portion of the audiogram.

On December 14, 1987, the claimant was examined by Sherman Hatfield, M.D. Dr. Hatfield found that, based upon the Craddock standards, the claimant was entitled to a 9.5% PPD award. Shortly thereafter, the claimant filed the report of Dr. Robert Miller dated January 12, 1988, in which the claimant's hearing loss was identified as 27.65%.

On July 13, 1989, Dr. Miller testified that the best results obtained after the noise exposure is terminated should be used in demonstrating the amount of hearing loss due to noise exposure. That amount, he admitted, was Dr. Hatfield's 9.5% impairment.

However, by order dated October 3, 1989, the Commissioner affirmed the prior order awarding the claimant a 17.75% PPD award. On December 21, 1990, the Appeal Board affirmed the Commissioner's order of October 3, 1989, which granted the claimant a 17.75% PPD award for noise-induced hearing loss arising out of his employment. Both parties appeal from that ruling, the claimant arguing that he is entitled to a greater PPD award, while Ranger Fuel claims that the claimant is entitled to 9.5% PPD award as demonstrated by Dr. Hatfield's audiogram and Dr. Miller's testimony.

III.

The next case involves the appeal of Billie Lafferty from a decision of the Workers' Compensation Appeal Board. The claimant filed for occupational hearing loss benefits on October 20, 1986. The Commissioner ruled the claim compensable and referred the claimant to Dr. William C. Morgan for an evaluation. Dr. Morgan noted that the audiogram revealed low tone loss that was "very possibly" not due to noise. Without correction, Dr. Morgan stated that the audiogram revealed a 2.9% wholeman impairment. With correction in the low frequencies, the claimant was entitled to a .46% wholeman impairment. However, it was subsequently noted that Dr. Morgan was incorrectly using the Craddock standards, which were not applicable in this case, since the case was filed after April 7, 1986. Thus, the Commissioner recomputed the results from the audiogram and issued an order dated May 29, 1987, which held the claimant had no permanent partial disability. The claimant protested this ruling.

In support of his protest, the claimant introduced an audiogram from Ms. N. J. Woody, an audiologist, dated July 23, 1987. The audiogram demonstrated a full frequency loss of 120 dB in the right ear and 125 dB in the left ear. That audiogram calculated out to a 2.3% wholeman impairment.

On September 26, 1989, the Commissioner affirmed the compensability ruling, but set aside the May 29, 1987, order holding the claimant had no permanent partial disability. Instead, the Commissioner granted the claimant a .50% PPD award on the basis of Dr. Morgan's findings and, strangely enough, stated that "the April 21, 1987, report of Dr. William C. Morgan most accurately indicates the true extent of the claimant's noise-induced hearing loss.

By corrected order dated March 13, 1991, the Appeal Board affirmed the Commissioner's final order granting a .50% PPD award. This proceeding is the employer's appeal from that final ruling.

IV.

The fourth appeal involves a claimant, Granville Gregory, who filed his application for hearing loss benefits on June 27, 1988. Dr. Viall completed the physician's portion of the application and diagnosed a noise-induced hearing loss. The claim was ruled compensable and the claimant was examined by Dr. James L. Bryant at the request of the Commissioner. Dr. Bryant stated that much of the claimant's hearing loss was due to presbycusis and noise exposure. Following the audiogram, Dr. Bryant stated the claimant had only a 1.10% wholeman impairment related to noise exposure after he reduced the four frequency total of 185 in the right ear to 110, and 190 in the left ear to 115. He stated that "this reduction is to approach a hearing pattern that I feel is directly related to noise exposure." However, by order dated November 18, 1988, the Commissioner granted the claimant a 14.50% PPD award. Both parties protested this ruling.

The employer submitted a report of Dr. R. A. Wallace dated May 12, 1989. Dr. Wallace stated that the initial audiogram on the claimant's application by Dr. Viall was insufficient in that no bone conduction testing was performed. He also stated that the claimant had a significant ascending low-frequency hearing loss which was incompatible with noise-induced hearing loss. Thus, Dr. Wallace corrected the lower frequencies to factor out the non-occupational

element of the claimant's hearing loss and stated that the claimant had a 1.28% PPD related to noise-induced hearing loss.

The employer also submitted a report of Dr. Corro dated July 14, 1989. Dr. Corro noted that only 50% of the claimant's hearing loss could be attributed to noise exposure and thus, recommended a 6.5% PPD award due to noise at work.

By final order dated June 12, 1989, the Commissioner affirmed the prior rulings granting the claimant a 14.5% PPD award. The employer appealed to the Workers' Compensation Appeal Board and, on February 15, 1991, the Appeal Board set aside the Commissioner's order and directed the Commissioner to enter an order granting the claimant a 6.5% PPD award. This proceeding is the claimant's appeal from that final ruling.

V.

These cases were consolidated by this Court in a joint appeal in order to address an issue which has plagued both this Court and the workers' compensation system. As illustrated by the cases described above, there is little or no consistency in the manner in which the Commissioner grants permanent partial disability awards for noise-induced hearing impairment or in the tests that are required in order to determine what percentage of loss is actually due to noise.

Unlike other types of compensable injuries, the area of hearing loss lends itself to a structured approach in determining the amount of wholeman impairment due to noise exposure. Experts agree on several crucial facts regarding the etiology and progression of sensorineural hearing losses. First, a hearing loss is visually demonstrated on an audiogram, which can record two types of results: air conduction and bone conduction.[1] Air conduction scores measure the response to sound traveling through the outer, middle, and into the inner ear. Bone conduction measures the sound which reaches the inner ear by placing a vibrating device behind the ear to transmit the sound, bypassing the middle ear. The audiogram can show losses in both the high and low frequencies. Losses in the high frequencies are generally due to noise exposure, such as those which occur at work. However, losses in the lower frequencies generally are not due to noise exposure and are often caused by damage to the external or middle ear. A loss due to external or middle ear damage is known as a conductive loss. A conductive component can be identified on the audiogram and should be factored out of the equation when the amount of the sensorineural hearing loss is being calculated.[2]

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[1]See American Medical Association Guides to the Evaluation of Permanent Impairment (2d ed. 1984).

[2]The amount of wholeman impairment is calculated by adding the results given for 500, 1000, 2000, and 3000 hertz. This four frequency total should be adjusted to reflect the amount of any conductive loss identified on the audiogram.

Second, without discussing the anatomy of the ear in great depth, it is also well accepted by experts that once exposure to noise ceases, hearing loss existing at that time must also cease any progression, unless other factors are involved in creating the hearing loss. Damage can be caused by many different factors other than noise, including, but not limited to, diabetes, hypertension and vascular diseases, otosclerosis, medications, hereditary problems, acoustic trauma, aging (presbycusis), and surgery.[3] We should also note that the audiogram is a subjective test, as it measures a subject's response to noise. Thus, the reliability of the test and the validity of the results are important factors.

Third, experts have pointed out that if there is a fluctuation in the hearing loss between audiograms which is greater than the margin of error, then the audiogram which shows the least amount of hearing loss should be used to determine the hearing loss due to noise exposure. The reasoning behind this rule is complicated, but important. As we noted above, once noise exposure stops, so does the progression of the hearing loss unless other factors are involved. Damage to hearing is permanent: Once the hair cells in the cochlea are destroyed, the cells cannot be rejuvenated. Thus, once the damage is done, one's hearing can get neither better nor worse because of

[3]See W. Clark, Ph.D., W. C. Morgan, M.D., S. J. Wetmore, M.D., Charleston Area Medical Center, West Virginia University Health Sciences Center, Seminar on the Evaluation of Hearing Loss for Workers Compensation (1991).

noise exposure, but it can get worse because of a secondary condition, such as the conditions listed above. Thus, if one audiogram shows a substantially worse four frequency total than a second audiogram, the expert must work with the premise that since a noise-induced loss is static, some other factor must be responsible for the difference between the two audiograms, such as a sinus or eustachian tube problem. Accordingly, the better audiogram of the two should be used as the audiogram most representative of the sensorineural loss, since the difference between the best and the worst audiograms must be caused by something other than noise.[4]

During oral argument, counsel for the Commissioner informed this Court that a Health Care Advisory Panel has been formed within the Workers' Compensation office, in which protocols for testing are being established for the various occupational diseases and injuries which are subject to dispute before the Workers' Compensation Fund. Unfortunately, the Panel is not due to address this issue for several months. In the meantime, we believe the Workers' Compensation Commissioner needs direction in developing a uniform manner of determining the percentage of impairment. While we do not claim to be specialists in the field of otolaryngology, we are aware, from the numerous cases and briefs which have come before us, that certain

[4]If the claimant is still exposed to noise on the job, then the expert must consider the temporary threshold shift in hearing which occurs when a person leaves a noisy environment for a quieter one.

tests are necessary for this Court to make an accurate review of the record, and thus, must be necessary for the Commissioner to reach an informed decision.

This Court has previously found it necessary to identify certain requirements in hearing loss cases. Craddock v. Lewis, No. 16420 (W.Va., October 3, 1984), involved an agreed order in which we directed the Commissioner to adopt a new formula for evaluating hearing loss claims based upon the recommendations of a committee of experts. The Commissioner later adopted new standards known as the Craddock standards based upon the recommendation of the Court and committee. The Craddock standards required that only certified audiologists perform the audiogram and set forth a standard for assessing the degree of hearing impairment. It also provided a table for determining the degree of impairment in speech discrimination, allowed an award for tinnitus, set the high and low boundaries of decibel hearing loss to be used in assessing impairment, and discussed the use of the treating physician's report in assessing a claimant's hearing loss. Although the Legislature subsequently amended Craddock in 1986, this Court has clearly demonstrated its obligation to require certain standards when none exist below.[5]

[5]In 1986, the Legislature amended W.Va. Code § 23-4-6, the Code section dealing with hearing loss, after careful consideration of this Court's opinion in Craddock. The new post-Craddock standard, among other things, recalculated the table for disability ratings for pure-tone loss, provided a new table for determining the impairment due to speech discrimination, reduced the rating for total loss of

The cases now before us are no exception. From our review, we believe that certain tests are required in all hearing loss claims in order for the Commissioner to reach a consistent result. However, our opinion today does not instruct the physicians how to perform the tests discussed, but instead, advises as to what tests must be performed in order for this Court to reach an informed decision on appeal. First, air conduction testing, which is always performed as part of an audiogram, is but half the picture. In order to rule out conductive losses due to injuries to the external and middle ear, bone conduction testing should also be performed routinely. Second, if a conductive loss exists, the four frequency total should be adjusted by the physician to deduct the amount of the conductive loss from the total used to estimate wholeman impairment. Speech discrimination testing is valuable, except when it is performed at an improper decibel level. Thus, all speech discrimination testing must be performed at the same decibel level to be considered valid. Unless the Panel reaches a different conclusion, we believe the 75 decibel level identified by the Craddock committee should be used as the uniform testing level. Third, at the time the Commissioner rules the claim compensable, the order should identify whether it is to be considered under the Craddock standard or the post-Craddock 1986 amendments. Next, as we have pointed out before, the

(..continued)
hearing in one and both ears, and did away with benefits for tinnitus, psychogenic loss, recruitment, and loss above 3000 hertz.

determination of the percentage of sensorineural hearing impairment is a complex issue. Thus, only physicians who are qualified otologists or otolaryngologists are permitted to interpret the results of audiograms. Interpretation by non-expert physicians will be given little weight and will be considered secondary to expert opinion. Finally, in referring a claimant to a physician for a hearing loss examination, the Commissioner should inform the physician what tests the physician is to conduct, at what decibel level, the standards to be used in making a rating, and any other specifics necessary for the Commissioner to reach an informed decision. Failure to do as requested will result in the physician not being compensated for the testing and report.

Although each of the cases listed above involve expert opinion, bone conduction was not performed in all the cases, nor was the amount of the conductive loss, if identified, deducted from the four frequency totals. Further, the necessary standards, whether Craddock or post-Craddock, were not identified and resulted in much confusion. Accordingly, we remand these cases to the Commissioner to be examined in light of this opinion set forth today.

Remanded.