

IN THE COURT OF CRIMINAL APPEALS OF TENNESSEE
AT NASHVILLE
February 12, 2003 Session

STATE OF TENNESSEE v. CHRISTOPHER G. GREENWOOD

**Direct Appeal from the Circuit Court for Williamson County
No. I-139-901 Donald P. Harris, Judge**

No. M2002-01349-CCA-R3-CD - Filed March 21, 2003

The defendant was convicted of driving under the influence of an intoxicant with a blood alcohol content of .10% or more, third offense. On appeal, he contends: (1) the trial court erred in denying his motion for a mistrial after the jury heard evidence of other crimes committed by the defendant; (2) the trial court erred in barring testimony of the arresting officer that he opined the defendant's blood alcohol content was rising at the time of the blood withdrawal; and (3) the evidence was insufficient to support the conviction because the state presented no evidence extrapolating his .12% test result back to the time he was driving. We affirm the judgment of the trial court.

Tenn. R. App. P. 3 Appeal as of Right; Judgment of the Criminal Court Affirmed

JOE G. RILEY, J., delivered the opinion of the court, in which JOSEPH M. TIPTON and THOMAS T. WOODALL, JJ., joined.

Kenneth Quillen, Nashville, Tennessee, for the appellant, Christopher G. Greenwood.

Paul G. Summers, Attorney General and Reporter; Jennifer L. Bledsoe, Assistant Attorney General; Ronald L. Davis, District Attorney General; and Georgia B. Felner, Assistant District Attorney General, for the appellee, State of Tennessee.

OPINION

At 3:34 a.m. on March 9, 2001, Highway Patrolman Richard Cash was working radar on Interstate 65 in Williamson County. He clocked the defendant traveling eighty miles per hour and stopped the vehicle. Upon approaching the defendant, Trooper Cash noticed a strong odor of alcohol. The defendant's speech was so slurred the trooper had difficulty understanding him. The defendant stated he had consumed two beers. The defendant stumbled as he was getting out of his vehicle and performed poorly on two field sobriety tests. Based upon Trooper Cash's observations, he believed that the defendant was definitely intoxicated. Trooper Cash took the defendant to the Medical Center where the defendant consented to withdrawal of his blood. The blood was drawn at approximately 4:30 a.m. and subsequently analyzed to have .12% blood alcohol content.

The defendant did not testify at trial and offered no proof. The jury convicted the defendant of DUI *per se*, driving while his blood alcohol content was .10% or more.¹ *See* Tenn. Code Ann. § 55-10-401(a)(2) (1998). The trial court found this was the defendant's third DUI offense.

EVIDENCE OF OTHER CRIMES

The defendant contends the trial court erroneously admitted statements on the videotape of the stop indicating the defendant's vehicle would be seized. The videotape of a portion of the stop was played to the jury. The videotape contained a question by Trooper Cash asking the defendant the identity of the "lienholder" on his vehicle and a statement which mentioned a "seizure" of the vehicle. The defendant contends this conveyed to the jury that this was a second or subsequent DUI because seizure and forfeiture of the vehicle are authorized for second or subsequent offenders. *See* Tenn. Code Ann. § 55-10-403(k)(1) (1998). Specifically, the defendant contends this is evidence of other crimes which is prohibited by Tennessee Rule of Evidence 404(b), and the trial court erred in refusing to grant his request for a mistrial.

The determination of whether to grant a mistrial rests within the sound discretion of the trial court. State v. Smith, 871 S.W.2d 667, 672 (Tenn. 1994). The reviewing court should not overturn that decision absent an abuse of discretion. State v. Reid, 91 S.W.3d 247, 279 (Tenn. 2002). The burden of establishing the necessity for mistrial lies with the party seeking it. State v. Williams, 929 S.W.2d 385, 388 (Tenn. Crim. App. 1996). No abstract formula should be mechanically applied in making this determination, and all circumstances should be taken into account. State v. Mounce, 859 S.W.2d 319, 322 (Tenn. 1993).

The trial court found this information was not so prejudicial as to require a mistrial. We are unable to conclude the jury would have been aware that this was a second or subsequent DUI based upon this information. The trial court did not abuse its discretion in denying the request for a mistrial. Regardless, it was harmless, especially since the defendant was convicted of DUI *per se*. *See* Tenn. R. App. P. 36(b). This issue lacks merit.

OFFICER'S OPINION TESTIMONY

The defendant contends the trial court erred in prohibiting Trooper Cash from opining that the defendant's blood alcohol content was rising at the time of the withdrawal of his blood. We disagree.

During the defendant's cross-examination of Trooper Cash, defense counsel sought to ask the trooper's opinion as to whether the defendant's blood alcohol content was rising or falling at the time of the withdrawal of his blood. Defense counsel further sought to introduce evidence of the

¹The defendant was charged in Count 1 of the indictment with DUI by impairment. *See* Tenn. Code Ann. § 55-10-401(a)(1) (1998). The defendant was charged in Count 2 of the indictment with DUI *per se*. *See id.* § 55-10-401(a)(2). The jury was charged to first consider Count 1 and to consider Count 2 if the jury found the defendant not guilty of Count 1. The verdict form was blank as to Count 1 and guilty as to Count 2. Thus, there was an implied acquittal as to Count 1. The judgment form on Count 1 erroneously indicates a dismissal by operation of law rather than an acquittal.

trooper's statement at the preliminary hearing in which he stated he "assumed that it was rising because he had an open beer in the vehicle with him, but I don't know." Upon objection by the state, the trial court concluded the witness was not qualified as an expert to answer this inquiry.

A witness qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise, provided the scientific, technical, or other specialized knowledge will substantially assist the trier of fact to understand the evidence or to determine a fact in issue. Tenn. R. Evid. 702. An expert may base his or her opinion upon facts or data imparted to or perceived by the expert prior to or at a hearing; the facts or data need not be admissible if they are the type of facts or data reasonably relied upon by experts. Tenn. R. Evid. 703. Evidence and expert testimony regarding scientific theory must be both relevant and reliable before it may be admitted. McDaniel v. CSX Transportation, Inc., 955 S.W.2d 257, 265 (Tenn. 1997).

The trial court has broad discretion in resolving questions concerning the qualifications, admissibility, relevance, and competency of expert testimony. State v. Stevens, 78 S.W.3d 817, 832 (Tenn. 2002). An appellate court should not overturn a trial court's decision in admitting or excluding a proposed expert's testimony unless it finds the trial court abused its discretion. State v. Ballard, 855 S.W.2d 557, 562 (Tenn. 1993).

The defendant has not shown that Trooper Cash had sufficient expertise to qualify him to give such an opinion. Nor do we believe that such testimony would qualify as proper opinion testimony by a lay witness. *See* Tenn. R. Evid. 701(a). In addition, the trooper's ultimate response was that he did not know whether the blood alcohol content was rising or falling. Even if the trooper were qualified to give such an opinion, there is no indication that the trooper was provided with sufficient information in order for him to opine as to whether the defendant's blood alcohol content was rising or falling at the time of the blood test. Although the defendant contends the preliminary hearing testimony would be an exception to the hearsay rule, it is still inadmissible as improper expert testimony. The trial court did not abuse its discretion in prohibiting this testimony.

SUFFICIENCY OF THE EVIDENCE

The defendant contends the evidence was insufficient to establish beyond a reasonable doubt that, at the time of the stop, he was driving while his blood alcohol content was .10% or more. Specifically, he contends that his blood was drawn approximately fifty-five minutes after the stop and that the state was unable to extrapolate his .12% reading to what it would have been at the time of the stop.

Where sufficiency of the evidence is challenged, the relevant question for an appellate court is whether, after viewing the evidence in the light most favorable to the prosecution, any rational trier of fact could have found the essential elements of the crime or crimes beyond a reasonable doubt. Tenn. R. App. P. 13(e); Jackson v. Virginia, 443 U.S. 307, 319, 99 S. Ct. 2781, 2789, 61 L. Ed. 2d 560 (1979); State v. Abrams, 935 S.W.2d 399, 401 (Tenn. 1996). In this case, the state had to establish beyond a reasonable doubt that the defendant drove while the alcohol concentration in his blood was .10% or more. *See* Tenn. Code Ann. § 55-10-401(a)(2) (1998).

The defendant first contends that the margin of error of the blood analysis was five percent, thereby making it possible that his blood alcohol level was as low as .114%. However, even this amount exceeds the statutory limit of .10%.

Furthermore, we reject the defendant's argument that the state's failure to extrapolate the .12% reading back to the time of the stop renders the evidence insufficient. In essence, the defendant contends the state has the obligation to prove beyond a reasonable doubt that the defendant's blood alcohol content, at the time it was tested, had not risen from below .10% at the time the defendant was driving.

Extrapolation involves the use of scientific evidence to relate the blood alcohol level at the time of testing back to the time of operation of the vehicle. E. John Wherry, Jr., *The Rush to Convict DWI Offenders: The Unintended Unconstitutional Consequences*, 19 Dayton L. Rev. 429, 449 (1994). In the context of the Tennessee DUI statute, the issue is whether the state is required to introduce scientific extrapolation evidence to prove that the blood alcohol level at the time of testing establishes beyond a reasonable doubt that the defendant had a blood alcohol level of at least .10% at an earlier time when the defendant was driving. See Tenn. Code Ann. § 55-10-401(a)(2).

The scientific community is divided on whether extrapolation evidence is sufficiently reliable. See Mark Montgomery & Mark Reasor, *Retrograde Extrapolation of Blood Alcohol Data: An Applied Approach*, 36 J. Toxicology and Environmental Health 281-292 (1992). Some believe that extrapolation can be accurate, provided the expert has the proper background information. *Id.* at 288. Others are more skeptical that it is sufficiently reliable because of the many variables. See P.R. Jackson, et al., *Back-tracking Booze with Bayes - The Retrospective Interpretation of Blood Alcohol Data*, 31 British J. of Clinical Pharmacology 55, 61 (1991).

One court has summarized the rising and falling process of alcohol in the blood as follows:

As alcohol is consumed, it passes from the stomach and intestines into the blood, a process referred to as absorption. When the alcohol reaches the brain and nervous system, the characteristic signs of intoxication begin to show. The length of time necessary for the alcohol to be absorbed depends on a variety of factors, including the presence and type of food in the stomach, the person's gender, the person's weight, the person's age, the person's mental state, the drinking pattern, the type of beverage consumed, the amount consumed, and the time period of alcohol consumption. At some point after drinking has ceased, the person's BAC will reach a peak. After the peak, the BAC will begin to fall as alcohol is eliminated from the person's body. The body eliminates alcohol through the liver at a slow but consistent rate.

Mata v. State, 46 S.W.3d 902, 909 (Tex. Crim. App. 2001) (footnotes and citations to numerous scientific and legal authorities omitted). It is apparent that, at the very least, an accurate extrapolation of blood alcohol from the time of testing to the time of driving would require an expert opinion based upon an analysis of many factors.

Not only is the scientific community divided on the reliability of extrapolation evidence, but the courts are also divided as to whether expert extrapolation testimony is required to convict a defendant under the DUI statutes. The majority view appears to be that expert testimony on extrapolation is not required. *See, e.g., Mireles v. Texas Department of Public Safety*, 9 S.W.3d 128 (Tex. 1999); *Commonwealth v. Wirth*, 936 S.W.2d 78 (Ky. 1996); *Haas v. State*, 597 So.2d 770 (Fla. 1992); *State v. Kubik*, 456 N.W.2d 487 (Neb. 1990). On the other hand, a minority of courts suggest that expert extrapolation testimony is necessary. *See, e.g., State v. Ladwig*, 434 N.W.2d 594 (S.D. 1989); *Desmond v. Superior Court*, 779 P.2d 1261 (Ariz. 1989).

We believe the majority view of not requiring expert extrapolation evidence is preferable for a number of reasons. The absorption rate of alcohol depends upon a number of variable factors. To require the state to accurately extrapolate would place an impossible burden on the state. *Kubick*, 456 N.W.2d at 495. Even if we assume extrapolation evidence can be sufficiently reliable, the necessary variables may not be within the knowledge of the state and are singularly within the knowledge of the defendant; thus, the state will be unable to acquire the necessary information. For example, only the defendant may know when and how much he or she last ate, as well as when, how much, and how fast he or she last consumed alcohol. In short, the necessary extrapolation evidence could only be obtained with reliable information furnished by the defendant. *See Wirth*, 936 S.W.2d at 84.

Further, we recognize that our legislature has set forth various requirements for blood alcohol testing in DUI cases. *See* Tenn. Code Ann. § 55-10-406. When read in conjunction with the prohibition against driving with a blood alcohol content of .10% or more, it is apparent our legislature has acknowledged the reliability of such tests. *See Wirth*, 936 S.W.2d at 84. A literal interpretation of the DUI *per se* statute would require instantaneous testing to establish the blood alcohol level and effectively abolish the statute. We are not at liberty to reach such a conclusion. The legislature obviously knew a blood alcohol test could not be conducted while the defendant was driving. We do not believe it intended to place upon the state the impossible burden of extrapolation in order to prove DUI. *Haas*, 597 So.2d at 774.

Accordingly, we conclude that expert extrapolation testing is not required in a DUI prosecution. Certainly, this does not preclude a defendant from introducing evidence and proper expert testimony relating to whether the alcohol content in his or her blood was rising or falling. We further conclude that evidence of the defendant's physical condition at the time of arrest or at the time of administration of the test is relevant to the issue of blood alcohol content. *See State v. Stacy R. Dowell*, No. E2002-01918-CCA-R3-CD, 2003 Tenn. Crim. App. LEXIS 155, at *12 (Tenn. Crim. App. Feb. 24, 2003, at Knoxville); *State v. Clark*, 593 P.2d 123, 129 (Ore. 1979); *contra State v. Boyd*, 479 N.E.2d 850, 851 (Ohio 1985). However a proper blood alcohol test administered at a reasonable time after the defendant has been driving, which reflects a blood alcohol content of .10% or higher, constitutes circumstantial evidence upon which the trier of fact may, but is not required to, convict the defendant of DUI. *Haas*, 597 So.2d at 774. Any delay between driving and testing may be considered by the trier of fact as to the weight to be given the test. Regardless, the defendant is at liberty to endeavor to establish through proper evidence that the test result does not accurately reflect the blood alcohol level at the time the defendant was driving the vehicle.

We acknowledge that we have stated the withdrawal of blood must be administered at a “reasonable time” after the defendant was driving. We are unable to set a bright line rule based upon the record before us. *Cf. State v. Sensing*, 843 S.W.2d 412, 417 (Tenn. 1992) (requiring an observation period of at least twenty minutes before administration of a breath alcohol test); *see also Wirth*, 936 S.W.2d at 84 (noting that the lapse of time between driving and testing may be so great as to prevent a rational trier of fact from determining guilt, but declining to formulate a bright line rule). However, we do conclude that (1) the blood withdrawal approximately fifty-five minutes after the stop in this case was reasonable, and (2) the .12% result justified the jury’s conclusion that the defendant had a blood alcohol content of .10% or more at the time he was driving.

We affirm the judgment of the trial court.

JOE G. RILEY, JUDGE