Law & Science

CONTENTS

WHITAKER NEWSLETTERS INC.
Publishers
e-Mail: dwijournal@verizon.net
Donna Kay Whitaker, Publisher
PO Box 224
Spencerville, MD 20868-0224

Volume 23, No. 11 November 2008

The Alcohol Breath Test is Biased against Individuals with Smaller Lung Volume

By Michael P. Hlastala[1,2]
Seattle, WA

Law enforcement continues its aggressive focus on the apprehension, arrest and conviction of drunk drivers. Alcohol breath tests (ABT) are ubiquitous throughout the Country, and are often used as an important or even sole piece of evidence to support the state's case. Thus there is an interest by everyone involved in maintaining the reliability and integrity of the ABT results.

Inherent in the justification of the ABT is the presumed equality between end-exhaled alcohol concentration and alveolar alcohol concentration that is directly related to the blood alcohol concentration (BAC). Thus the ABT has been viewed as an accurate indirect measure of BAC. However, recent literature has shown that such a relationship between breath and blood is not necessarily identical for all individuals.

An assumption used in the development of the ABT is that the last part of the exhaled breath has a concentration that is equal to that in the alveolar gas. This long-held assumption is the basis for justifying the ABT as an accurate measure of BAC. However, it has recently been shown that end-exhaled alcohol concentration (EEAC) is less than alveolar alcohol concentration (AAC) due to the exchange of alcohol in the airways with the bronchial circulation during both inspiration and expiration [2-4]. The relative difference between AAC and EEAC varies with alterations in the breathing pattern.

Earlier studies have examined the assumption of equality between end-exhalation and alveolar alcohol by comparing ABT values with blood measurements finding a considerable amount of variation in the ratio of EEAC to BAC. For further evidence regarding the lack of end-exhaled and alveolar equality, two studies [5, 6] have shown that EEAC is approximately 15-20% lower than AAC (obtained using isothermal [temperature controlled] rebreathing) on average. The explanation for this variation has been discussed before [2, 3, 7].

Two recent studies have demonstrated a relationship between blood:breath ratio for alcohol and body weight [8] or gender [9] in normal subjects. Thus, it may be possible that the blood:breath ratio for alcohol is dependent on physiological or anatomic differences among individual subjects [10]. When an ABT is performed, there is little control of either the volume inspired or the volume exhaled. Under normal resting conditions, a subject inspires and exhaled a tidal volume (TV) beginning from a functional residual capacity (FRC). To take an ABT, the subject is asked to inhale and exhaled into the breath test instrument as far as possible. Although the subject is asked to inhale, he/she is not required to inhale a full inspiratory capacity (IC) to total lung capacity (TLC). It takes some effort to inspire a full IC. So it is most likely that a subject is at less that full total lung capacity at the time that a breath exhalation is initiated. Some subjects may even exhale with very little inspired volume.

The expiratory volume also varies one breath test to another. To obtain a valid ABT, a subject can exhale any amount between the minimum exhaled volume required by the particular breath test instrument (usually between 1.1 and 1.5 liters). The maximum exhaled volume of the lungs is limited by the difference between TLC and residual volume (RV) of the lungs. The amount of volume exhaled will depend on the amount of air inspired and the amount of effort exerted by the subject. The exhaled volume can vary between the minimum volume (1.1 or 1.5 liters) and the full vital capacity (VC). The exhaled volume depends on the limitations of the lungs and the relative cooperation of the subject and will vary from time to time.

We use a mathematical model [3] to explore the dependence of the blood:breath ratio (BBR) on body size (weight or lung volume). It was hypothesized that BBR will depend on the body size as well as the level of cooperation.

The methods used are described in a previous publication from our laboratory [11]. It is well know that, in human adults, lung volume increases with body height and decreases with age. For any racial group, females have smaller lung volumes than males. Lung volumes are smaller in African Americans, both males and females, than their Caucasian height-, age-, and gender-matched counterparts. Because individuals with smaller lung volume must exhale a greater fraction of their lung volume to fulfill any minimum volume requirement for a valid sample, we reasoned that a subject with a smaller lung volume would exhale farther along the increasing exhaled partial pressure profile before an end-exhaled sample is taken. We used our mathematical model to determine whether the predicted "alveolar deficit" might differ depending on gender, body height, weight, race and age and in the presence of an inflammatory airway disease (causing an increased bronchial blood flow) [4].

In order to characterize the exchange of ethyl alcohol in subjects of varying lung volume, we used a mathematical model described previously [1, 3, 12]. The model has a symmetric bifurcating structure through 18 generations. The details of the model are described in Hlastala and Anderson [11]

The ABT was developed in the 1950's [13, 14] based on the gas exchange properties of the usual respiratory gases, O2 an CO2. At that time, it was thought that the initial volume exhaled from the lungs contained air from the airways with essentially no alcohol and that the last part of the exhaled volume comprised air with alcohol from the alveoli that was in equilibrium with BAC (implicitly assuming no exchange with the airways). In an attempt to validate the assumption that end-exhaled air had the same alcohol concentration as that in alveolar air, several studies have compared

breath alcohol concentration (BrAC) with BAC in human subjects. More variability has been observed in the ratio of blood to breath alcohol than was expected. This range is quite large as outlined in a previous review [2]. The general finding is that BrAC, for a fixed BAC shows a range ± 2 standard deviations (including 95% of the population) of approximately ± 40% [15, 16], a variability that is surprisingly large if the assumption of equilibrium between end-exhaled ethanol partial pressure and alveolar ethanol partial pressure were correct. A likely explanation for this variability is that ethyl alcohol exchanges entirely in the airways with the bronchial circulation [17, 18]. Ethyl alcohol represents an example of airway gas exchange in that 100% of the exchange occurring in the airways with the bronchial circulation [3]. In the case of alcohol the EEAC for full exhalation is about 80%-85% of the AAC [2, 5, 6].

For highly soluble gas like ethyl alcohol, exhaled partial pressure continues to increase with continued exhalation due to airway gas exchange. An example of an exhaled ethyl alcohol profile is shown in Figure 1.

Figure 1

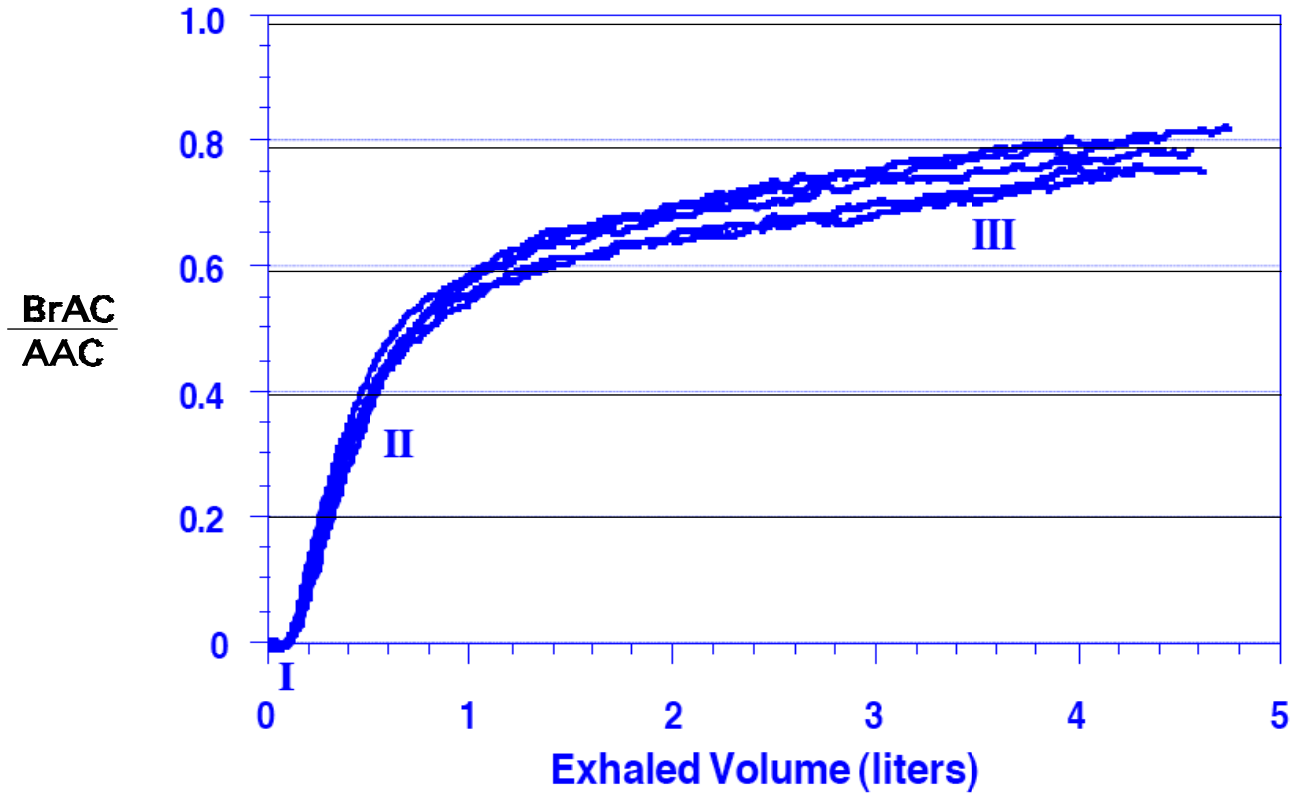

Figure 1. Exhaled alcohol ethanol concentration, normalized by alveolar alcohol concentration, over five full exhalations at a constant flow (modified from [1]) from the same subject. Phases I, II and III are physiological terms related to the "dead space" (I), "mixed gas from dead space and alveolar space" (II) and "alveolar plateau" (III).

In this example, the subject exhaled at a constant expiratory flow rate throughout the full exhalation. Five different expiratory profiles for the same subject are shown. During exhalation at a constant exhaled flow rate, the exhaled alcohol partial pressure rises continuously and does not reach a plateau until exhalation has ceased. When the subjects stops exhalation (either due to reaching residual volume or simply because the subject chooses to stop) the alcohol partial pressure plotted against time levels off because exhalation has stopped [2], a sample is taken and assumed to be "alveolar" in nature. In other words, the alcohol breath test assumes that the end-exhaled alcohol concentration is identical to alveolar concentration, and hence, blood alcohol concentration. However, any breath sample is "always" lower in alcohol concentration than AAC. The usual approach is to assume that the end-exhaled partial pressure is related to the blood alcohol partial pressure with an average BBR of 2100. This factor neglects the fact that during an average exhalation, the alcohol exchanges in the airways of the lungs and assumes that this constant ratio applies to all individuals. Indeed, the ratio between alveolar air and blood has been measured using isothermal rebreathing and found to be closer to the 1947 ± 110 [5] to 2019 ± 121 [6] range. Both studies found the rebreathed air alcohol partial pressure to be approximately 15% greater than the end-exhaled partial pressure after a full exhalation (to residual volume). Such experimental observations are consistent with the predictions of our mathematical model.

Alcohol breath testing instruments require a minimum exhaled volume before a breath sample is taken at the end of an exhalation. For a subject with a small lung volume, a greater fraction of the vital capacity must be exhaled before the sample criteria are fulfilled. Most breath test instruments require a minimum exhalation pressure (or flow) for a minimal duration of time (4-6 seconds and a minimal exhalation volume (between 1.1 liters and 1.5 liters). Once the minimum criteria are fulfilled, a sample will be taken when the change in exhaled alcohol partial pressure levels off (always achievable when the exhaled flow is stopped). For a subject with a vital capacity of 6 liters using a Datamaster (minimum volume is 1.5 liters), a sample can be obtained anywhere between 1.5 and 6.0 liters of exhalation because the subject may choose to stop exhalation any where between 1.5 liters and VC. For a subject with a vital capacity of 2 liters using a Datamaster, a sample can be obtained anywhere between 1.5 and 2.0 liters of exhalation. A subject with a small lung volume will proceed further up the increasing BrAC exhaled profile before a sample is taken.

Examples of average end-exhaled alcohol partial pressure normalized by alveolar partial pressure for individuals with vital capacities of 2.0, 4.0 and 6.0 liters are shown in **Figure 2.**

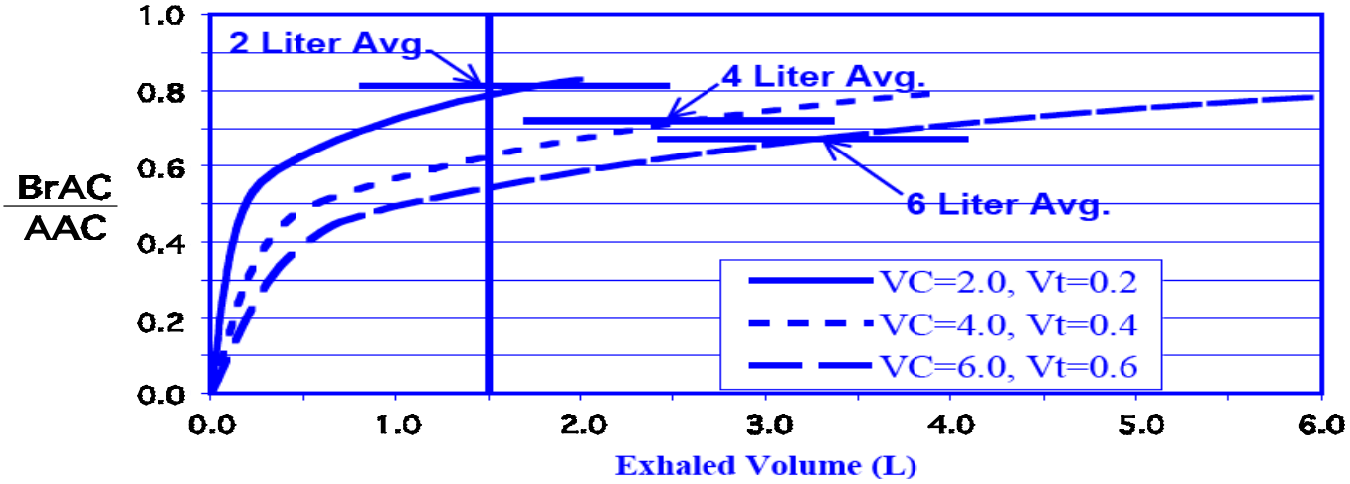

Figure 2. Three exhaled alcohol profiles (using a mathematical model) for three subjects with vital capacity of 2.0, 4.0 and 6.0 liters. The horizontal solid bars indicate the average end-exhaled partial pressure normalized by alveolar partial pressure. The relative average end-exhaled breath to alveolar partial pressure ratios are 0.82, 073 and 0.67 for subject vital capacities of 2.0, 4.0, and 6.0 liters, respectively.

On the average, the subject with the 2.0 liter vital capacity achieves a greater average BrAC (relative to the BAC) of 0.82 compared to 0.67, for a subject with a 6.0 liter vital capacity. Individuals with smaller lung volumes provide breath samples that are greater than those with larger lung volumes because of the minimum exhalation volume requirement.

One of the fundamental assumptions of the ABT is that during exhalation, the BrAC continues to increase until alveolar air reaches the mouth. At this point the BrAC levels off. This observation has been assumed to indicate that EEAC is equal to AAC. However, breath alcohol always increases during exhalation as air passes from the alveoli to the mouth [1]. The flatness of the slope of the exhaled alcohol profile simply means that exhalation has stopped. It is not an indication of alveolar air. Additional support of this idea follows from two studies into the processes of isothermal rebreathing in human subjects [5, 6], who showed that EEAC (with a single-exhalation maneuver) is always less than AAC. The difference (alveolar deficit), on average, is approximately 15% [2], consistent with the notions described in this paper. Individuals with smaller lung volumes might have a smaller alveolar deficit such that the individual with a larger lung volume and an ABT that is greater than individual with a larger lung volume.

The ABT was developed with assumptions appropriate to the level of knowledge at the time. The first record of using the breath to estimate BAC comes Bogen [19] in 1927. Development of a practical device for measuring BrAC did not occur until the 1950's, through the efforts of Harger et al [14] and Borkenstein and Smith [13]. In these early times, these scientists were unaware of the strong interaction of alcohol with the airway mucosa during the exhalation process. Thus the assumption that end-exhaled breath provides a valid sample of alveolar air seemed reasonable. The assumption has continued to the present day without experimental validation.

The concept of the paradigm shift can also be applied to the ABT. The current paradigm assumes that end-exhaled breath alcohol is identical to alveolar alcohol and hence, equal to BAC. Current anomalies include: 1) the observation that experimental measurements of blood/breath ratio for alcohol has a range of variation of ± 40% [15, 16, 20], 2) the observation that highly soluble gases like alcohol exchange with the airway mucosa [17, 18, 21, 22], 3) isothermal rebreathing produces alcohol concentrations that are greater than end-exhalation BrAC [5, 6], 4) hyper- and hypoventilation changes EEAC [6, 23], 5) changing exhalation volume alters end-exhaled BrAC [2]. The BrAC is dependent on the volume of air inhaled, the volume of air exhaled, breathing pattern both before the test and during the test and lung volume. In the face of these anomalies, forensic scientists now must undertake new experiments that will lead to a new paradigm for characterizing the ABT so that it will provide fair and unbiased measurements of the level of intoxication in human subjects.

We now face a fork in the road. We can continue to support the old paradigm, despite the anomalies, or we can head down the road of progress with research into the mechanisms that cause the anomalies observed. Further research into the mechanisms of the ABT is needed. Today's forensic scientists have continued to support the old paradigm despite the anomalous research observations. The field needs a scientific revolution with further experimentation into the sources of the anomalous behavior of the ABT and the revision of procedures used for administration of the ABT. Without such change, it is appropriate to consider increasing the legal limit for individuals with smaller lung volumes (women, African Americans, shorter and older individuals).

Table 1. Comparative overestimates of small lung volume

	Predicted Lung Vol.	Avg BrAC BAC
55" Male vs. 75" Male - 40 Yr		
55" - 40 Yr Male	2.786	
75" - 40 Yr Male	5.743	
BrAC Ratio of Small to Large Volume		1.11
67" Male vs. 67" Female - 40 Yr		
67" Female - 40 Yr	3.414	
67" Male - 40 Yr	4.560	
BrAC Ratio of Small to Large Volume		1.04
67" Caucasian Male vs. 67" AA Male - 40 Yr		
67" AA Male - 40 Yr	3.731	
67" Caucasian Male - 40 Yr	4.560	
BrAC Ratio of Small to Large Volume		1.03
75" Male - 60 Yr vs. 20 Yr		
75" Male - 60 Yr	5.544	
75" Male - 20 Yr	6.351	
BrAC Ratio of Small to Large Volume		1.02

REFERENCES

1. George SC, Babb AL, Hlastala MP. Dynamics of soluble gas exchange in the airways: III. Single exhalation breathing maneuver. *J. Appl. Physiol.* 1993;75 (6):2439-2449.

2. Hlastala M. The alcohol breath test - A brief review. *J Appl Physiol.* 1998;84:401-408.

3. Anderson J, Babb A, Hlastala M. Modeling soluble gas exchange in the airways and alveoli. *Ann Biomed Eng.* 2003;31:1401-1422.

4. Anderson J, Hlastala M. Breath tests and airway gas exchange. *Pulmon Pharmacol Therapeutics.* 2006;(In press).

5. Jones AW. Role of rebreathing in determination of the blood-breath ratio of expired ethanol. *J. Appl. Physiol.: Respirat. Environ. Exercise Physiol.* 1983;55:1237-1241.

6. Ohlsson J, Ralph DD, Mandelkorn MA, Babb AL, Hlastala. MP. Accurate measurement of blood alcohol concentration with isothermal rebreathing. *J. Stud. Alc.* 1990;51(1):6-13.

7. Jones AW. Physiological aspects of breath alcohol measurement. *Alcohol, Drugs and Driving.* 1990;6:1-25.

8. Skåle A, Slødal L, Wethe G, Mørland J. Blood/breath ratio at low alcohol levels: a controlled study. *Ann Toxicol Analytique.* 2002;XIV:41.

9. Jones A, Andersson L. Comparison of ethanol concentrations in venous blood and end-expired breath during a controlled drinking study. *Forensic Sci Int.* 2003;132(1):18-25.

10. Hlastala M. Invited editorial on "The alcohol breath test". *J Appl Physiol.* 2002;93:405-406.

11. Hlastala M, Anderson J. The impact of

breathing pattern and lung size on the alcohol breath test. *Ann Biomed Eng.* 2007;35:264-272.

12. Tsu ME, Babb AL, Ralph DD, Hlastala MP. Dynamics of heat, water, and soluble gas exchange in the human airways: I. A model study. *Ann. Biomed. Eng.* 1988;16:547-571.

13. Borkenstein R, Smith H. The Breathalyzer and its application. *Med. Sci. Law.* 1961;2:13.

14. Harger RN, Forney RB, Barnes HB. Estimation of the level of blood alcohol from analysis of breath. Paper presented at: First International Conference on Alcohol and Traffic., 1950.

15. Jones AW. Variability of the blood: breath alcohol ratio in vivo. *J. Stud. Alc.* 1978;39:1931-1939.

16. Jones A, Andersson L. Variability of the blood/breath alcohol ratio in drinking drivers. *J Forens Sci.* 1996;41:916-921.

17. Schimmel C, Bernard S, Anderson J, Polissar N, Lakshminarayan S, Hlastala M. Soluble gas exchange in the pulmonary airways of sheep. *J Appl Physiol.* 2004;97:1702-1708.

18. Hlastala M, Swenson E. Airway gas exchange. *In: The Bronchial Circulation. Ed.: J.Butler. Exec Ed: C Lenfant. Marcel Dekker, Inc.* 1992:pp. 417-441.

19. Bogen E. Drunkenness - a quantitative study of acute alcoholic intoxication. *J. Am. Med. Assoc.* 1927;89(18):1508-1511.

20. Emerson V, Holleyhead R, Isaacs M, Fuller N, Hunt DJ. The measurement of breath alcohol. *J. Forens. Sci.* 1980;20:3-70.

21. Swenson ER, Robertson HT, Polissar NL, Middaugh ME, Hlastala MP. Conducting airway gas exchange: diffusion related differences in inert gas elimination. *J. Appl. Physiol.* 1992;72(4):1581-1588.

22. Souders JE, George SC, Polissar NL, Swenson ER, Hlastala MP. Tracheal gas exchange: perfusion-related differences in inert gas elimination. *J. Appl. Physiol.* 1995;79:918-928.

23. Jones AW. How breathing technique can influence the results of breath-alcohol analysis. *Med. Sci. Law.* 1982;22(4):275-280.

Michael P. Hlastala of Seattle, Washington is currently Professor of Physiology and Biophysics and Medicine at the University of Washington. He has extensive training in the field of bioengineering and biophysics. He offers Consulting Services for DUI-DWI cases involving chemical testing and field sobriety testing. He has authored or co-authored over 400 papers and articles. He can be reached at mphlastala@comcast.net.

SWOTing Your Way to Not Guilty

Patrick T. Barone
Barone Defense Firm, Birmingham, MI

As trial lawyers, marketing is really what we engage in. Metaphorically speaking, we attempt to persuade juries to "buy" our product, which is, of course, is a not guilty verdict. When teaching the basics of marketing, business schools teach a method called "SWOT," an acronym that stands for "strengths, weaknesses, opportunities and threats." The SWOT analysis serves as a simple model that guides the development of marketing plans.

The same approach can be applied to trial preparation. Once you are retained and begin planning for trial, think about the weaknesses of your client's case and develop a plan for how to overcome them. In the marketing lexicon, SWOT's strengths and weaknesses are "internal" factors and include things like the location of a business, the quality of the product or service, and so forth.

The advantage of a SWOT analysis is that it

can help you clarify and summarize the key issues and difficulties as well as opportunities that you may face when defending a client's case. There is value in this approach because, once you consider the implications of the issues identified, you can begin devising objectives and developing strategies for dealing with them. The ideal outcome is that you maximize the strengths and minimize the weaknesses in order to take advantage of opportunities that may arise during your representation.

Here is a brief and partial list of some strengths and weaknesses that might arise in a drunk driving case:

Strengths:
No bad driving
Good FST performance
No or low chemical test result
Little or no correlation between police observations and high chemical test result

Weaknesses:
Bad driving / accident / injury / death
Poor FST performance
High test result
Prior record (where admissible)

The other two categories, opportunities and threats are "external" factors. A brief and partial list of these might include:

Opportunities:
Inexperience of state's witnesses
Inexperience of state's lawyer
Problems with reliability of chemical evidence
Medical defense to chemical evidence

Threats:
Jury will convict based on sympathy or prejudice
Jury will disregard or disbelieve defense
Jury will dislike you or your client
Judge will interfere with your attempts to obtain justice

Once you've prepared your SWOT list, your next task is to determine how you can best emphasis your strengths and opportunities while minimizing your threats and weaknesses. The remainder of this article will focus on what to do with the inevitable weaknesses in your client's case.

In thinking about the weaknesses of your case always remember the old adage, "If it's too good to be true, then it usually is." This idea has been a part of popular culture for generations. Don't think you're kidding the jury by hiding the weaknesses of your case. Discuss those weaknesses during voir dire and in your opening statement. Doing so openly and honestly demonstrates that you know the weaknesses in the case and that you're not trying to hide anything. This will help increase your credibility – the most important asset you will have in the courtroom. Make sure that you effectively communicate to the jury that you have thought through these weaknesses and have developed a cogent answer to them. Your goal is to be sure that each juror can thereafter make an honest evaluation of any bad facts for him or her self. Formulate a delivery that provides jurors with the language they will need to use during deliberations when they need to justify their not guilty verdict to the other jurors.

Nearly all drunk driving cases have at least some bad facts, and some drunk driving cases have nearly all bad facts. Be up front with the jury, let the bad facts out, and do so early and often. Like most of the rest of us, jurors are tired of being scammed by politicians and every other artful peddler, and being honest about what's wrong with your client's case will help create a bond of trust.

Often, the worst fact of all is the breath or blood test result. I can remember when I argued my first handful of drunk driving cases before a jury. I would always hide from the bad facts. I would not talk about the chemical test result during voir dire or during opening statement. I would wait for the prosecutor to move for the introduction of the chemical evidence, then state to the court why I thought the prosecutor had failed to lay an appropriate foundation. If the witness tried to state the test results before evidence had been admitted, I'd object – "Lack of foundation, your honor."

At some point, my experience trying cases helped me realize two things. First, unless suppressed beforehand, the test results almost always come in at trial. Second, while there is absolutely nothing to be gained from hiding from this number, there is much to lose. I concluded

that it was better to start talking about the number the first chance I got. So now, if the judge allows me voir dire, I might ask a question such as, "Can anyone think of any reason why a driver faced with a .12 breath test result would want to stand trial?", or, "Without knowing anything other than Jimmy's .12 breath test result, what would your verdict be?" Another way to ask the question is, "Are you open to the possibility that the .12 is wrong?"

Your SWOT weaknesses should be discussed during the opening statement as well, but it should be discussed in the broader context of your overall theme and within the context of the story you are telling. Of course, the opening statement is not the time to argue but, rather, the time to be persuasive, and any persuasive statement must embrace the weaknesses in the case. Your credibility is the most important thing you have in the courtroom and, no matter how skillful you may otherwise be in trial, if the jury senses that you are not being forthright, you will lose the case.

It is also important to consider the threats in your client's case that exist based on what your SWOT analysis has revealed. Some of these threats may be those that exist in all drunk driving cases, such as the jury's relative disdain for drunk drivers and propensity to accept and believe the state's chemical test results. Other threats may be case-specific, such as a particularly talented state's witness, or a particularly acrimonious judge. Certainly, some of these can also be discussed with a jury during your opening statement. If you've cross-examined the state's witnesses in the past and have noted some predilection of theirs, discuss this with the jury. For example, you may describe the state's toxicologist as follows:

"Dr. Smith is the state's expert witness. He is a doctor of toxicology and by stature is a relatively small man with thick glasses and an accent. When he takes the witness stand, he will sit with his hands in his lap, legs together, looking very relaxed, and he will lean forward toward me when listening to my question, but will then turn to the jury and look you in the eye as he answers. When asked a tough question, he will not answer the question directly, forcing me to ask and re-ask the question. He has a tendency to pause before answering the tough questions, and might even take out a handkerchief and pat his forehead before he answers. Look for these behaviors when I ask the doctor about how the chromatograph in this case shows proof of contamination."

Notice that I am not suggesting that you propose any conclusions for the jury to draw from this behavior, but the way a witness looks and acts while testifying is most certainly evidence and is, therefore, fair game to discuss during the opening statement. This will put the testimony of the witness into a broader context and help inoculate the jury from a witness that they might otherwise find very credible. It is much more difficult to discuss an adversarial judge. Although this often has a way of taking care of itself, if it doesn't, then mentioning it to the jury will not likely make things better.

Be very careful in the manner in which you handle an inexperienced witness or prosecutor. Americans love to support the underdog, and certainly this goes for jurors as well. The last thing you want is for the jury to perceive you as a bully. Try to match your approach to that of a witness. If the cop is a bit timid, then be somewhat restrained when questioning him or her. Consider also your own age, body size and gender and how that compares with the witness, and then think about how this should impact the way you deal with him or her. This same analysis applies to a new or inexperienced prosecutor. Although the dynamic is somewhat different because we expect prosecutors to be able to "play the part" and they are already imbued with a certain amount of prestige and authority because of the position they hold, this is really only part of the calculation, and most jurors will not appreciate you bullying them either.

Once you've engaged in a SWOT analysis and understand our client's "market position," then you can begin your task of trial preparation. The analysis of the strengths, weakness, opportunities and threats of your client's case will guide you as you prepare your voir dire, opening statements and cross-examination. When everything comes together you will be ready to successfully "sell" your product to the

jury. The payment for all your hard work will be the jury's not-guilty verdict.

Patrick T. Barone, editor of The DWI Journal: Law & Science, is an Adjunct Professor at the Thomas M. Cooley Law School where he teaches Drunk Driving Law and Practice. He is also the principal and founding member of the Barone Defense Firm, located in Birmingham, Michigan , and the co-author of two books on DWI-related issues, including Defending Drinking Drivers (James Publishing), a leading treatise in the field. He is also a sustaining member of National College of DUI Defense, and can be reached at (248) 594-4554.

Case Law & Litigation Tips

SOUTH DAKOTA

Officer had reasonable suspicion to stop defendant after observing rear end of his truck fishtail upon turning on a snowy and icy road

State v. Wendling, 754 N.W.2d 837 (S.D. 2008)

On a snowy and icy road, the rear end of the defendant's pick-up truck "fishtailed" when he attempted to make a turn. An officer stopped him, and had the defendant sit in the back of the patrol car. Inside the vehicle, the officer smelled a strong odor of alcohol and suspected the defendant of being under the influence. No field sobriety tests were conducted because of the icy road conditions. The defendant took a PBT, which registered 0.102. The officer arrested the defendant and took him to the local hospital for a blood test, which yielded a result of 0.132.

Because the defendant had two prior DUI convictions within the past ten years, he was charged with a felony. Prior to trial, the defendant moved to have the evidence suppressed and the case dismissed based on a lack of probable cause for the stop. The officer admitted that the only reason for the stop was the "fishtailing," which he testified was normal given the road conditions. The trial court granted the motion to suppress, finding that the officer did not have sufficient justification for the stop.

On appeal by the prosecution, the South Dakota Supreme Court reversed the trial court, stating that the lower court erred by applying a probable cause standard to justify a traffic stop, rather than the lesser standard of reasonable suspicion. The supreme court explained that, "[w]hile the stop may not be the product of mere whim, caprice, or idle curiosity, it is enough that the stop is based upon 'specific and articulable facts which taken together with rational inferences from those facts reasonably warrant the intrusion.'"

TENNESSEE

Officer signaled by anonymous citizen-driver to intervene with a third party does not have reasonable suspicion to justify stop without prior basis to evaluate citizen-informant's status or relationship to third party

State v. Day, ___S.W.3d ___, No. M2006-00989-SC-R11CD, 2008 WL 4287637 (Tenn. Sept. 22, 2008)

A police officer was headed northbound on routine patrol when he noticed a southbound vehicle flashing its lights. The vehicle's driver waved her arms at the officer and pointed at a white sport utility vehicle in front of her. The officer made a u-turn and pulled between the two vehicles. He then activated his blue lights and initiated a traffic stop of the SUV, driven by the defendant. The citizen-informant also pulled over to the side of the road behind the officer's patrol car. Up to this point, the officer had not seen the defendant engage in "any bad driving or anything of that nature." After first speaking with the citizen-informant, the officer approached the SUV and, as he spoke to the defendant, detected the smell of alcohol. The defendant failed several field sobriety tests and was arrested. A blood sample taken from the defendant indicated a blood-alcohol content of .25 percent.

Prior to trial, the defendant filed a motion to suppress any evidence obtained as a result of the traffic stop, claiming it was not based on reasonable suspicion, supported by specific and articulable facts, that a criminal offense had been, or was about to be, committed. After the motion was denied, the defendant pled guilty to third-offense driving under the influence and driving on a revoked license. The Tennessee Court of Criminal Appeals concluded that, at the time the officer initiated the traffic stop, he lacked reasonable suspicion and, accordingly, reversed the judgment of the trial court and dismissed the case. The Tennessee Supreme Court granted the state's application for leave to appeal and affirmed the court of criminal appeals, holding that "a law enforcement officer signaled by an anonymous citizen-driver in a manner obviously intended to invite the officer's intervention as to a third party-but without any indication as to the nature of the citizen's concern or any other information-does not have reasonable suspicion adequate to stop and seize the third party."

"In a case involving a citizen complaint, any review necessarily involves an analysis of the credibility and basis of knowledge of the person making the report, the proximity in time of the report and the conduct complained of, any corroboration by law enforcement, and the seriousness of the threat," the court explained. "We acknowledge that information from a known citizen informant is presumed reliable and not subject to the same level of scrutiny applied to a compensated informant." However, the court noted that, in this case, the citizen informant was unknown to the officer. "For reliability to be presumed, information about the citizen's status or his or her relationship to the events or persons involved must be present," stated the court.

The court found that the officer had no basis upon which to evaluate the citizen-informant's status or her relationship to the defendant, noting that the only information the officer had was the single fact that the citizen-informant was driving behind the defendant's SUV. Accordingly, the court stated that it was not reasonable for the officer to infer from citizen-informant's tip that the defendant had engaged in criminal behavior. "As acknowledged by the State in its brief to the Court of Criminal Appeals, 'any number of things could have led the informant to be concerned about the [SUV] and/or the driver.'"

LITIGATION TIPS

Now that cell phones are ubiquitous, it is not uncommon for a "citizen informant" to call and report what they believe to be drunk driver. The question in such cases is whether or not the police can make an arrest based on such information. In evaluating these cases it is important to know what the law of the jurisdiction requires relative to reliability and corroboration. Accordingly, it is important to know whether the officer making the stop had any additional information on which to base the stop. Jurisdictions vary relative to the amount of corroboration necessary before an officer may stop a vehicle on the basis of an anonymous tip.

For example, this issue was presented to the Washington Court of Appeals in the case of *Campbell v. State of Washington, Department of Licensing*, 644 P.2d 1219 (Wash. App. 1982). In *Campbell*, the question before the Court was whether a citizen's belief that a driver is drunk establishes sufficient probable cause for that officer to stop the vehicle without any other evidence of drunk driving. The court held "in the

absence of any corroborative information or observation, a police officer is not authorized to stop a vehicle on the sole basis that a passing motorist points to a vehicle and announces that it is being driven by a drunk driver." *Campbell* at 1220.

In factually similar case of *Marben v. State Department of Public Safety*, 294 N.W.2d 697 (Minn. 1980), the Minnesota Supreme Court concluded that the officer "had a specific and articulable suspicion that a traffic violation had occurred" and thus was correct in stopping defendant's vehicle. *Id*. at 699. This Court did find however that there must be some underlying factual justification for the informant's conclusion. The hope is that this additional requirement will help to prevent stops made by a citizen who is mistaken.

NEW YORK

Law enforcement agency's failure to follow own sobriety checkpoint guidelines renders stop unlawful under the Fourth Amendment

People v. Dongarra, ___ N.Y.S. 2d ___, No. 2007-55331, 2008 WL 4426094 (N.Y. City Ct. Oct. 2, 2008)

The defendant's vehicle was stopped at a state police sobriety checkpoint. After allegedly displaying certain outward indicia of intoxication and failing four out of five field sobriety tests, she was asked to give a breath sample, which resulted in a .13 blood alcohol content level. The defendant was subsquently charged with operating a motor vehicle while having .08 of one per centum or more by weight of alcohol in her blood and also operating a motor vehicle while in an intoxicated condition.

Prior to trial, the defendant brought a motion to suppress all evidence obtained from the checkpoint stop. She challenged the constitutionality of the checkpoint stop, claiming that the state police failed to follow their own self-established, written guidelines. As a matter of first impression, the court was faced with resolving whether a law enforcement agency's failure to follow their own sobriety checkpoint guidelines renders a stop unlawful under the Fourth Amendment of the United States Constitution or article I, § 12 of the New York Constitution. Upon review, the court granted the motion to supress.

According to the court, "[i]n addition to establishing a seemingly stringent protocol for the selection of sites, scheduling, briefing, setup, system of stops and interview procedures, the written guidelines of the New York State Police call for the making of certain records and/or reports before, during and after the date of the checkpoint." The parties stipulated that none of the required documents were ever prepared, let alone transmitted to the appropriate official or division of the New York State Police.

The court held that law enforcement agencies must adhere to a standard of substantial compliance with their own guidelines for conducting suspicionless vehicle stop procedures, i.e. a checkpoint, in order for the procedure to comport with Fourth Amendment. It noted, however, that "not every trivial deviation from written guidelines will turn a sobriety checkpoint into an unreasonable seizure."

"Inasmuch as the plan should emanate from the higher echelons of the law enforcement agency and inasmuch as the discretion of the individual officers in the field must be circumscribed, logic dictates that the plan must be followed," stated the court. "A plan whose execution is left to the whim and caprice of officers in the field is no plan at all."

DWI JOURNAL: Law & Science
Whitaker Newsletters Inc., Publishers
PO Box 224—Spencerville, MD 20868-0224

RETURN SERVICE REQUESTED

FIRST CLASS
U.S. POSTAGE PAID
Permit No. 1906
Southern, MD