# Law & Science Transfermal model of the Calculation of the Calculation

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### Limitations in Transdermal Alcohol Monitoring

By Michael P. Hlastala, PhD

**PART 1:** The Secure Continuous Remote Alcohol Monitor (SCRAM) is an apparatus that attaches to the ankle and monitors alcohol on the surface of the skin. Courts have used SCRAM as a way to semi-continuously (every 30 minutes) monitor of subjects for alcohol consumption in an indirect fashion <sup>1</sup>.

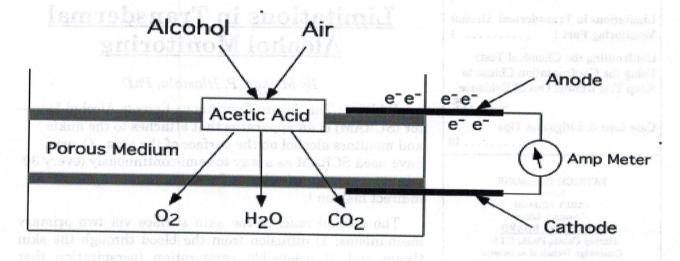
The alcohol reaches the skin surface via two primary mechanisms: 1) diffusion from the blood through the skin tissue and 2) insensible perspiration (perspiration that evaporates immediately upon reaching the surface of the skin). The relative role of the two mechanisms in transporting alcohol from the blood to the surface of the skin has yet to be experimentally described. Past research on transdermal alcohol monitoring has been reviewed by Hawthorne and Wojcik <sup>2</sup>. SCRAM and Wrist TAS devices have been evaluated by Marques and McKnight<sup>1</sup>.

Temperature can influence the skin exchange characteristics of alcohol. Increased skin temperature will increase the solubility of ethanol in the skin cells enhancing the transdermal exchange due to increased molecular diffusion and solubility. Increased body temperature will result in sweating as a mechanism of body heat dissipation. Increased sweating will lead to increased transdermal exchange of ethanol via the perspiration mechanism. Cooling, on the other hand, has the opposite effect. Changes in local skin blood flow with temperature will likely have little effect on transdermal transport because the exchange is diffusion limited (dependent primarily on the diffusion properties of the skin under normal conditions). Changes in convection (delivery of ethanol by blood flow) will have little influence on the transdermal exchange. A further discussion of the physiological aspects of transdermal exchange of ethanol can be found in an earlier paper in this journal 3.

Fuel Cell

Ethanol is analyzed by a fuel cell (produced by Draeger – a major manufacturer of breath testing equipment). The fuel cell (Figure 1) converts electrochemical energy stored in the ethanol molecule into electrical energy manifested as an electrical current. Originally SCRAM fuel cells sampled at 60-minute intervals. When the

Transdermal Alcohol Concentration (TAC) is greater than 0.020 %, the sampling rate is every 30 minutes. Recently, AMS (Alcohol Monitoring Systems, manufacturer of SCRAM) has changed the SCRAM units to sampling every 30 minutes whether the TAC is above or below 0.020 %. It has been recognized by AMS that the fuel cell is not linear below 0.02 % <sup>1</sup>.



**Figure 1.** Schematic of a fuel cell used in the SCRAM device to measure alcohol concentrations at 30 minute time intervals. This rest period is required for the fuel cell to recover for another measurement.

Tac Dynamics

The TAC profile is similar to the BAC profile. However, the TAC profile is delayed, smaller and broader because of the slow diffusion process. The TAC peak is lower and the absorption and elimination slopes are less than the BAC slopes. The TAC peak may be 2-3 hours after the BAC peak. Figure 2 shows sample TAC curves in individuals with varying skin diffusion properties. Notice that the TAC profile is flatter and broader compared to the BAC profile. This is caused by the limitation to diffusion through the skin and, in particular, the stratum corneum (outer dense layer of dead skin cells). The slope of the BAC elimination is always greater than the slope of the TAC elimination.

Contaminants

Fuel cells are not specific for ethanol (ethyl alcohol). They react with any chemical having an hydroxyl group (-OH), and will thus react to

chemicals other than ethyl alcohol, but with a different sensitivity. Examples of chemicals that can get into the body by inhalation of fumes or skin contact are: methyl alcohol (wood alcohol – used to produce bio-diesel fuel), n-propanol (cleaning solvent), isopropyl alcohol (rubbing alcohol, metabolically produced in uncontrolled diabetes), butyl alcohol, butoxyethanol (strong cleaning agent), ethylene glycol (antifreeze), propylene glycol (used as food supplement) and glycerine (used in many soaps).

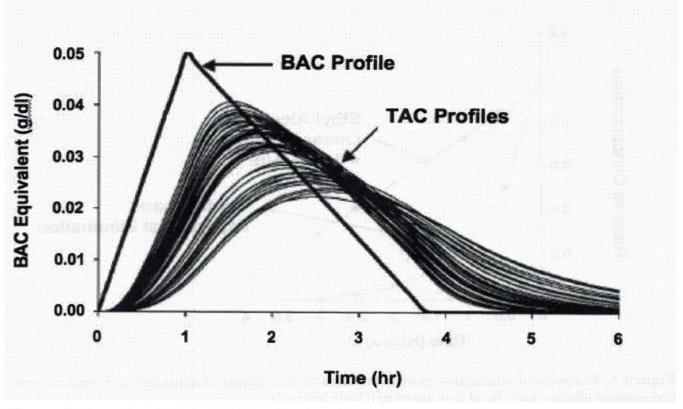


Figure 2. Examples of several TAC profiles in subjects with varying skin diffusion properties. (from Anderson and Hlastala <sup>6</sup>).

### <u>Differentiating Ethyl Alcohol From Other</u> Alcohols

Ethyl alcohol leaves the body primarily through metabolism in the liver. The elimination or burn-off rate is constant (zero-order kinetics). The BAC burn-off rate averages about 0.017 gm/dl/hr in males and 0.020 gm/dl/hr in females 4,5 whether the BAC is high or low. The elimination rate of alcohol can be distinguished by its linearity. At very low BAC (<0.02 gm/dl), the burn-off rate tends to decrease below the burn-off rates at greater BAC levels and become non-linear.

Other alcohols (some listed above) leave the body in proportion to their concentration. High concentrations have a greater elimination rate while low concentrations have a lower elimination rate. This results in an exponential pattern of elimination (steeper at first and shallower later) and appears distinctly different than the alcohol elimination. Figure 3 shows a schematic representation of the elimination profiles for ethyl alcohol and for the other contaminating

alcohols. An appropriate way to determine whether an alleged violation is due to ethyl alcohol or contaminants is to examine the TAC data for a linear elimination rate. If it is not linear, then it is most likely one of the non-ethanol alcohol contaminants.

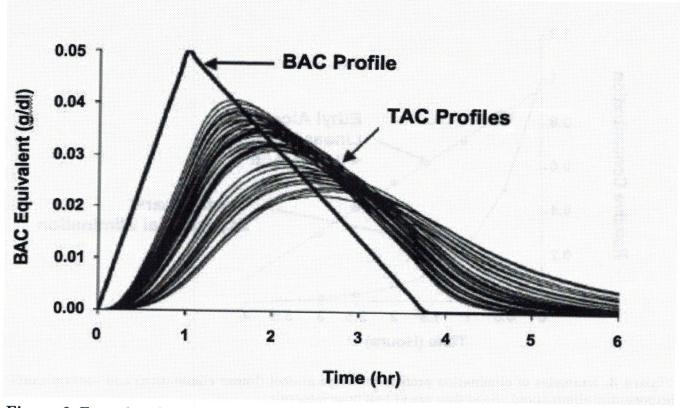


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# Confronting the Chemical Test: Using the Confrontation Clause to Keep Test Results Out of Evidence

Patrick T. Barone Barone Defense Firm, Birmingham Michigan

In Melendez-Diaz v. Massachusetts<sup>1</sup>, the Supreme Court held that the admission of certificates by state laboratory analysts, which stated that material seized by the police was determined to be cocaine of a certain quantity, denied the defendant his right to confront witnesses, i.e., cross-examine the laboratory analyst, under the Sixth Amendment.

Justice Scalia, who wrote the opinion, broadly discussed the right to confrontation, essentially making the *Melendez-Diaz* opinion the second chapter in his book on the Sixth Amendment. The first chapter of Scalia's book was, of course, *Crawford v. Washington²*, and *Melendez-Diaz* picks up where that opinion left off. *Melendez-Diaz* discussed and applied the Confrontation Clause analysis laid out in *Crawford*, particularly to criminal cases and more generally to drunk driving cases. Consequently, *Meledez-Diaz* now represents one of the most important Supreme Court cases impacting DUI defense in decades.

Pursuant to the Sixth Amendment, "[i]n all criminal prosecutions, the accused shall enjoy the right... to be confronted with the witnesses against him," or as was clarified in *Crawford*, the right to confront those "who bear testimony" against him<sup>3</sup>. The Supreme Court held that a witness's testimony against a defendant is, thus, inadmissible unless the witness appears at trial or, if the witness is unavailable, the defendant had a prior opportunity for cross-examination<sup>4</sup>. The core class of testimonial statements covered by the Confrontation Clause would include:

ex parte in-court testimony or its functional equivalent – that is, material such as affidavits, custodial examinations, prior testimony that the defendant was unable to cross-examine, or similar pretrial statements that declarants would reasonably expect to be used prosecutorially; extrajudicial statements . . . contained in formalized testimonial materials, such as affidavits, depositions, prior testimony, or confessions; statements that were made under circumstances which would lead an objective witness reasonably to believe that the statement would be available for use at a later trial<sup>5</sup>.

Nearly four years later, the Supreme Court, in *Melendez-Diaz*, would add to the class of testimonial statements.

Melendez-Diaz was charged with distributing and trafficking in cocaine. At trial, the prosecution submitted three "certificates of analysis," or affidavits, showing the results of the forensic analysis performed on substances seized by the police. The certificates reported the weight of the seized bags and stated that the bags "[h]a[ve] been examined with the following results: The substance was found to contain: Cocaine<sup>6</sup>." Melendez-Diaz objected to the admission of the certificates, arguing that, pursuant to Crawford, it violated his rights under the Confrontation Clause. The trial court overrruled the objection and admitted the certificates, and the jury eventually found Meledez-Diaz guilty. Melendez-Diaz challenged his conviction on direct appeal, raising the same Sixth Amendment argument, but was unsuccessful. Upon review, the Supreme Court held that, pursuant to Crawford, the laboratory certificates were testimonial statements, thus rendering the affiants as "witnesses" subject to the Confrontation Clause7.

In reaching its decision, the Court explained that affidavits were mentioned twice in the core class of testimonial statements laid out in *Craw*-

ford<sup>8</sup>. The Court also cited White v. Illinois<sup>9</sup>, in which the Court held that the Confrontation Clause is implicated by extrajudicial statements "only insofar as they are contained in formalized testimonial materials, such as affidavits, depositions, prior testimony, or confessions<sup>10</sup>." Thus, the Court concluded in Melendez-Diaz that the certificates were quite plainly affidavits because they were "declaration[s] of facts written down and sworn to by the declarant before an officer authorized to administer oaths<sup>11</sup>." In other words, the laboratory certificates were held to be incontrovertibly a "solemn declaration or affirmation made for the purpose of establishing or proving some fact<sup>12</sup>."

Accordingly, the Court reasoned that, if the substance found in the possession of Melendez-Diaz and his co-defendants was, as the prosecution claimed, cocaine, then it would be precisely the testimony that the analysts would be expected to provide if called at trial. The Court ultimately concluded that the "certificates" were functionally identical to live, in-court testimony, doing "precisely what a witness does on direct examination13." It further explained that, not only were the affidavits "made under circumstances which would lead an objective witness reasonably to believe that the statement would be available for use at a later trial14," but under Massachusetts law, the sole purpose of the affidavits was to provide "prima facie evidence of the composition, quality, and the net weight" of the analyzed substance<sup>15</sup>. Thus, explained the Court, "we can safely assume that the analysts were aware of the affidavits' evidentiary purpose, since that purpose - as stated in the relevant state-law provision - was reprinted on the affidavits themselves16."

In short, pursuant to *Crawford*, the analysts' affidavits were testimonial statements, making the analysts "witnesses" for purposes of the Sixth Amendment. And, absent a showing that the analysts were unavailable to testify at trial and that Melendez-Diaz had a prior opportunity to cross-examine them, admitting the affidavits into evidence at trial would violate the Confrontational Clause<sup>17</sup>.

The significance of this ruling to DUI defense practitioners cannot be overstated. As we all know, "[i]nvolvement of government officers in the production of testimony with an eye toward trial presents unique potential for prosecutorial abuse – a fact borne out time and again throughout a history with which the Framers were keenly familiar<sup>18</sup>." We've all seen these abuses first hand; one excellent example being the debacle with Washington's breath testing program, where fraudulent affidavits were filed by state workers in support of the state's quality assurance program.

The frustration we've all faced is that in nearly every state, there are few foundational requirements for breath or blood test results. Even the requirements that exist are, in the case of breath tests, often met through affidavits, simulator solution "certificates," calibration check (simulator) logs and the like; while in blood test cases, the foundation requirements are met with certificates ostensibly prepared by one or more persons involved in the collection, transportation, storage or testing of the blood. Because of Melendez-Diaz, however, the use of such "ex parte examinations as evidence against the accused 19" should no longer take place in DUI prosecutions.

Previously, these documents were allowed into evidence based on a particular hearsay exception, and this approach and analysis was based on the now overruled *Roberts* rule.<sup>20</sup> We can anticipate that when *Melendez-Diaz* arguments are made in breath and blood test cases, prosecutors will try to frame their response in terms of the rules of evidence, because in part, this approach has always been successful. As the argument generally goes, for example, simulator logs and technician "certificates" are simply business records that are admissible based on some presumed level of reliability.<sup>21</sup>

This evidence-based analysis of reliability, however, is no longer appropriate. As stated in *Melendez-Diaz*, the Confrontation Clause is a rule of criminal procedure. Thus, when arguing that certificates and the like are not admissible, i.e., the prosecutor failed to lay a foundation, it will be important for you to re-frame your argument into one of criminal procedure rather than one of evidence. The test is no longer whether the disputed evidence meets a hearsay exception

but, rather whether the disputed evidence is the kind that declarants would reasonably expect to be used for evidentiary purposes. The constitutional admissibility no longer turns on the "vagaries of the rules of evidence, much less to amorphous notions of 'reliability.'"

Accordingly, it now appears that all state employees involved in testing a particular breath or blood sample, as well as many of the employees involved in quality assurance/quality control of the equipment used, would be required to testify. It is less clear, however, whether or not those individuals involved in simple equipment maintenance would also be required to testify.

With Melendez-Diaz being a new opinion, only one state court has held that, based on Crawford, a certificate that a breathalyzer is working is testimonial<sup>22</sup>, while all other state courts have held otherwise. This question remains open simply because the Supreme Court in Melendez-Diaz stated, albeit in a footnote, that "documents prepared in the regular course of equipment maintenance may well qualify as nontestimonial statements."23 No matter how you look at it, though, it seems clear that Melendez-Diaz has hardly ended the debate in this regard. Prosecutors will certainly cite to the footnote, but it should be noted that the Supreme Court chose permissive, rather than mandatory, language. The Court hardly stated that such records will always qualify. What is curious about the footnote language, however, is that it seems to ignore the majority's own admonition that "this argument is little more than an invitation to return to our overruled decision in Roberts,"24which held that "evidence 'particularized guarantees of trustworthiness' was admissible notwithstanding the Confrontation Clause."25 Thus, it would seem that the reliability of documents prepared in the regular course of equipment maintenance ought to be tested in the only way the Constitution provides (the substantive guarantee) - through crossexamination.

There is also a problem with respect to defining "maintenance records," which *Melendez-Diaz* did not address. For example, Michigan law requires law enforcement to keep simulator logs. The sole purpose of these logs is to establish in a

court proceeding that calibration of the breath testing equipment has been checked with a .08 simulator solution "each calendar week" and that the equipment has been otherwise inspected once every 120 days, Are these documents maintenance records or are they testimonial records? If we consider them maintenance records, then are we not thereby assigning them some degree of inherent reliability ala Roberts? Also, are these logs really any different from the laboratory certificates in Melendez-Diaz, in that the sole purpose of the logs are to provide "prima facie evidence" that the equipment was working properly when the defendant's breath was tested? Certainly, these simulator logs are not required to "maintain" the equipment in the way, for example, that replacing a printer ribbon might.

In part, this determination turns on whether or not the records at issue involve some aspect of "forensic science." Do the disputed records merely show that just a certain part was replaced or otherwise maintained on a certain day, or do they demonstrate or "prove" in some way that the machine in question can actually do what it purports to do – accurately measure blood or breath alcohol? Consider, for example, this excerpt from *Melendez-Diaz*:

Confrontation is one means assuring accurate forensic analysis. While it is true, as the dissent notes, that an honest analyst will not alter his testimony when forced to confront the defendant, the same cannot be said of the fraudulent analyst. Like the eyewitness who has fabricated his account to the police, the analyst who provides false results may, under oath in open court, reconsider his false testimony. And, of course, the prospect of confrontation will deter fraudulent analysis in the first place.

Confrontation is designed to weed out not only the fraudulent analyst, but the incompetent one as well. Serious deficiencies have been found in the forensic evidence used in criminal trials. One commentator asserts that "[t]he legal community now concedes, with varying degrees of urgency, that our system produces erroneous convictions based on discredited forensics." One study of cases in which exonerating evidence resulted in the overturning of criminal convictions concluded that invalid forensic testimony contributed to the convictions in 60% of the cases.<sup>26</sup>

Perhaps the same can be true of police officers involved in equipment testing, who may, under oath, reconsider false assertions that certain simulator or calibration checks or tests were performed on certain days with certain results.

Another possible way to determine if these documents are testimonial is by analyzing whether "those tests were routine, and whether interpreting their results required the exercise of judgment or the use of skills that the analysts may not have possessed." If at least some of that methodology or information (described on the so-called maintenance records) requires the exercise of judgment and presents a risk of error, or if the technician's honesty, proficiency, and methodology might in some way impact the information described in the document, 28 then the document is testimonial.

Here is, courtesy of the *Meledez-Diaz* opinion, another example of where allowing a document into evidence without testimony is considered a Sixth Amendment Violation:

Far more probative here are those cases in which the prosecution sought to admit into evidence a clerk's certificate attesting to the fact that the clerk had searched for a particular relevant record and failed to find it. Like the testimony of the analysts in this case, the clerk's statement would serve as substantive evidence against the defendant whose guilt depended on the nonexistence of the record for which

the clerk searched. Although the clerk's certificate would qualify as an official record under respondent's definition—it was prepared by a public officer in the regular course of his official duties—and although the clerk was certainly not a "conventional witness" under the dissent's approach, the clerk was nonetheless subject to confrontation.<sup>29</sup>

There can be little doubt in a breath or blood test case that certain so-called maintenance records serve as substantive evidence against a defendant whose guilt will depend on whether or not the equipment was working properly.

The Supreme Court also discussed a defendant's ability to subpoena witnesses and whether or not this should satisfy the Confrontation Clause:

Converting the prosecution's duty under the Confrontation Clause into the defendant's privilege under state law or the Compulsory Process Clause shifts the consequences of adverse-witness no-shows from the State to the accused. More fundamentally, the Confrontation Clause imposes a burden on the prosecution to present its witnesses, not on the defendant to bring those adverse witnesses into court. Its value to the defendant is not replaced by a system in which the prosecution presents its evidence via ex parte affidavits and waits for the defendant to subpoena the affiants if he chooses.30

Although the Supreme Court recognized that the Confrontation Clause may make criminal prosecution more burdensome, it explained that so is the case with other constitutional rights, such as the right to trial by jury and the right against self-incrimination. "The Confrontation Clause — like those other constitutional provisions — is binding, and we may not disregard it at our convenience."<sup>31</sup>

The Supreme Court recently granted certiorari in Briscoe v. Virginia,32 in which the defendant, charged with cocained-related crimes, argued that admission of certificates of analysis without the forensic analyst present to testify, violated his confrontation rights. Briscoe further argued that a procedure provided in Virginia state law, Code § 19.2-187.1, permitting a defendant to call a forensic analyst as an adverse witness, does not protect his confrontation rights and actually imposes an unconstitutional affirmative step that he must take in order to assert his Sixth Amendment right of confrontation. The Virginia Supreme Court held that "the procedure in Code § 19.2-187.1 adequately safeguards a criminal defendant's rights under the Confrontation Clause and that the defendants' failure in these cases to utilize that procedure waived their right to be confronted with the forensic analysts, i.e., to enjoy the elements of confrontation."33

There are two schools of thought as to why the Supreme Court granted certiorari rather than remanding the case to be considered in light of *Melendez-Diaz*. Some believe this is an effort by the dissent to overrule *Melendez-Diaz*, with Justice Suter leaving. On the other hand, it gives the Court an immediate opportunity to determine what a "notice and demand" statute is.

In any event, it seems clear that in drunk driving prosecutions, many of the affidavits, logs, and certificates that were previously admitted into evidence based on a hearsay exception will no longer be admissible. But the battle is far from over, and it will probably be many years before the full impact of *Melendez-Diaz* is felt. It is certainly possible that the new Supreme Court Justice may have her say, making this opinion short-lived.

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- 2. Crawford v. Washington, 541 U.S. 36 (2004)
- 3. Id. at 51
- 4. Id. at 54
- 5. *Id.* at 51-52 (internal citations and quotation marks omitted).
- 6. Melendez-Diaz, 129 S. Ct. at \_\_\_

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7. Id. at ___
8. Id. at
9. White v. Illinios, 502 U.S. 346 (1992)
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11. Id. at __ (quoting Black's Law Dictionary 62
(8th ed. 2004))
12. Id. at __ (quoting Crawford, 541 U.S. at 51)
13. Id. at __ (quoting Davis v. Washington, 547
U.S. 813, 830 (2006)
14. Id. at (quoting Crawford, 541 U.S. at 51)
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17. Id. at __ (internal citation omitted)
18. Crawford, 541 U.S. at 56 n.7
19. Id. at 50
20. Ohio v. Roberts, 448 U.S. 56 (1980)
21. Crawford, 541 U.S. at 61
22. Shiver v. State, 900 So.2d 615 (Fla. App.
2005)
23. Melendez-Diaz, 129 S.Ct at __ n.1
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32. Magruder v. Virginia, 657 S.E.2d 113 (Va.
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33.Id. at 124

## Case Law & Litigation Tips

### **ARIZONA**

The totality of the circumstances determine whether a defendant exercises physical control of a vehicle.

State of Arizona v. Zaragoza, Vincent; 209 P.3d 629 (2009).

On April 29, 2006, a Tucson police officer responded to an emergency call at an apartment complex. Outside the complex, the officer saw Defendant Vincent Zaragoza holding on to cars as he staggered through the parking lot toward his own vehicle. Zaragoza entered his car, and the officer pulled up behind him. When the officer shined his flashlight inside the car, he saw Zaragoza in the driver's seat with one hand on the steering wheel as he inserted the key into the ignition with the other hand. Zaragoza had not yet started the car. The officer instructed Zaragoza to exit, and he complied, nearly falling as he did so. Zaragoza was extremely intoxicated, with a blood alcohol content later found to be .357.

Zaragoza testified at trial that he intended to sleep in the car after having an argument with a woman inside the apartment complex and that he only planned to start the ignition to roll down the window and turn on the radio. He denied any intention of driving. The only issue at trial was whether Zaragoza exercised "actual physical control" of his vehicle. Over Zaragoza's objection, the court instructed the jury on actual physical control as follows:

The defendant is in actual physical control of the vehicle if, based on the totality of the circumstances shown by the evidence, his potential use of the vehicle presented a real danger to himself or others at the time alleged.

The jury found Zaragoza guilty of aggravated driving under the influence of an intoxicant while having a suspended or revoked license and aggravated driving with a blood alco-

hol concentration of 0.08 or more while his license was suspended or revoked.

Arizona's driving under the influence statute, Ariz. Rev. Stat. ("A.R.S.") § 28-1381(A)(1) (2005), makes it "unlawful for a person to drive or be in actual physical control of a vehicle . . . [w]hile under the influence of intoxicating liquor." The statute does not define "actual physical control," and Arizona courts have crafted inconsistent jury instructions on the meaning of that phrase.

In State v. Love, this Court, however, abandoned any bright-line jurisprudence that had previously been contemplated in favor of a "totality approach." This approach lent greater flexibility to the adjudication of actual physical control cases by providing a list of factors a fact finder could consider in deciding if a person actually controlled the vehicle. Id.

In deciding whether the defendant exercised actual physical control of the vehicle, this Court declined to apply a "rigid, mechanistic analysis," and decided "to allow the trier of fact to consider the totality of the circumstances in determining whether defendant was in actual physical control of his vehicle." *Id.* at 326.

The court also noted that the facts determine whether a defendant exercises physical control of a vehicle and that any instruction on actual physical control that requires a jury to consider a defendant's purpose in exercising control of a vehicle incorrectly states the law.

Instead, the court ruled that the following modified form of the RAJI should be used in future actual physical control prosecutions. That instruction reads as follows:

In determining whether the defendant was in actual physical control of the vehicle, you should consider the totality of the circumstances shown by the evidence and whether the defendant's current or imminent control of the vehicle presented a real

danger to [himself] [herself] or others at the time alleged. Factors to be considered might include, but are not limited to:

- 1. Whether the vehicle was running;
- 2. Whether the ignition was on;
- 3. Where the ignition key was located:
- 4. Where and in what position the driver was found in the vehicle;
- Whether the person was awake or asleep;
- 6. Whether the vehicle's headlights were
- 7. Where the vehicle was stopped;
- 8. Whether the driver had voluntarily pulled off the road:
- 9. Time of day;
- 10. Weather conditions;
- 11. Whether the heater or air conditioner was
- 12. Whether the windows were up or down;
- 13. Any explanation of the circumstances shown by the evidence.

This list is not meant to be all-

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inclusive. It is up to you to examine all the available evidence and weigh its credibility in determining whether the defendant actually posed a threat to the public by the exercise of present or imminent control of the vehicle while impaired.

The court also noted that the totality approach permits drunk drivers to be prosecuted under a much greater variety of situations-for example, even when the vehicle is off the road with the engine not running. The drunk who turns off the key but remains behind the wheel is just as able to take command of the car and drive away, if so inclined, as the one who leaves the engine on.

### ALASKA

The defense of necessity requires that a defendant show that it was reasonable for him to conclude that his unlawful act of operating the vehicle while under the influence was performed to prevent a significant evil, and that there was no adequate alternative course of action to prevent this evil.

> State of Alaska v. Wall, Claude; 203 P.3d 1170 (2009).

On June 5, 2006, Alaska State Trooper Lawrence Erickson was on patrol in the Soldotna area. Erickson saw a car stopped at the intersection of Bennett Court and Kalifornsky Beach Road. The car was in the right lane of Bennett Court, with its front end pointing toward the intersection.

When Erickson approached the vehicle the driver admitted that the vehicle was his and that he had removed the keys from the ignition. However, the driver claimed that his friend had been driving and had abandoned him there. The driver showed signs of intoxication; was disoriented, and he had a hard time focusing on the trooper.

While Erickson was talking to Wall, three more people arrived on the scene by cab: Royce Kenny Oder, Josephine Mestas, and Rita Lindsey. These people had apparently been with the driver earlier in the evening, and one or two of these people contradicted the driver's explanation.

The State charged Wall with felony driving under the influence, as well as driving with a suspended license. At trial, the parties stipulated that Wall's blood alcohol content was .156 percent (i.e., almost twice the legal limit).

During trial, Wall's attorney asked the trial judge to instruct the jury on the defense of necessity. When Judge Brown asked Wall's attorney what harm Wall was trying to prevent, the defense attorney responded that Wall had been trying to move the car out of the roadway so that it would not constitute a hazard to other vehicles. Judge Brown refused to give the requested necessity instruction. The jury convicted Wall of driving under the influence but acquitted him of driving with a suspended license.

The court held that to be entitled to a jury instruction on necessity, Wall had to show that, viewing the evidence in the light most favorable to him, it was reasonable for him to conclude (1) that his unlawful act of operating the vehicle while under the influence was performed to prevent a significant evil, and (2) that there was no adequate alternative course of action to prevent this evil. In addition, Wall had to establish that the foreseeable harm created by his action was not disproportionate to the foreseeable harm he was trying to avoid.

On appeal, Wall argues that this test is met because it was necessary for him to operate the vehicle in order to get the vehicle out of the road-

way. This argument fails for three reasons. First, when Wall got behind the wheel and started cranking the ignition, a friend of Wall's was still present -- and he could have operated the vehicle instead of Wall. Second, the chronology of events described by Wall does not support a necessity defense. According to Wall's testimony, he operated the vehicle -- that is, he got behind the wheel and repeatedly turned the key in the ignition -- because he and Oder believed that the car could be started and then driven away. It was only after these attempts failed that Wall decided that they should push the vehicle off the road so that it would not constitute a traffic hazard. (Oder and the other passengers left the scene at about this time, and Wall -- who was now alone in the vehicle -- never made any effort to get the vehicle off the road.)

In other words, the asserted necessity to move the car off the roadway did not arise until Wall had already committed the offense. Furthermore, Wall did not testify about the alternatives that were seemingly available to him. For instance, Wall did not discuss the possibility of using flares or emergency blinkers to alert other motorists to the hazard. In addition, Wall's vehicle was stopped less than a quarter-mile from another road (Ciechanski Road), and there was also a bar (the Duck Inn) in the same area. But when Wall took the stand, he did not discuss the possibility of going to the bar to call for a tow truck, or (alternatively) flagging down another motorist, or going to the bar to enlist someone's aid in pushing his vehicle off the road.

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