

Matt Malhiot – Widmarks and Extrapolation Lecture Video Notes

By Garrett M. Berman, Assistant State Attorney, 17th Judicial Circuit

- 03:30 – in a social environment, it's (drinking's) different
- 03:38 – It's a game of beat the clock, last call for alcohol, take 5 shots of tequila and drive home before it's in my system
- 03:49 – What kind of mentality is that? But you see it all the time?
- 04:11 – Question I'm always asked is what was it at the time of driving?
 - 04:17 – Well, there's three answers: higher, lower or the same
 - 04:26 – You're not giving me enough information
- 04:31 – Key I need to know is when did they stop drinking
 - 04:38 – That's a vital key if they are trying this argument
- 04:59 – Re: information about last drink...Where does that normally come from? Look to the Miranda forms
 - 05:14 – Usually where you'll find when they were stopped
- 05:18 – There is a lot of research and a lot of voodoo math used out there between retrograde extrapolation and Widmarks
- 05:48 – Re Widmarks... it has passed Frye and is accepted in the scientific community. But like any science, you can play with the numbers and to do a Widmark calculation you are basing most of the numbers on what the defendant is going to tell you
- 06:06 – And the defendant has a bias, as to not to say the truth
- 06:12 – Mocking a defendant... "I had two beers." Really?!?! Then why is your breath test a .196?
- 06:30 – There are too many variables
- 06:34 – So, Widmark's calculations the defense experts use all the time because they can calculate the hypothetical peak alcohol concentration at a time. But it is based on what the person, the accused, tells them.
 - Unless they were in the bar with them, counting the drinks and measuring the shots
- 06:54 – It's not very accurate.

- 07:19 – With .068 breath 3-6 hours after crash, won't do retrograde to put person over .08 at time of driving to give the state the presumption...
 - Reason why I won't do it is the exact same reason I do not support the defense's argument of doing it to put him under a number
 - The .08 threshold is a statutory threshold, not a scientific one
 - The number is what the number is
- 08:29 – retrograde used a lot to defuse their argument; I will use retrograde to rebut facts, use it put in a range of alcohol concentrations
 - Will not say an exact number result
- 12:00 – general population eliminates alcohol between .015 and .025 per hour; I'll even go .010 per hour... I use a range
- 13:30 – less than 5% of the population is outside of that general rate; 95% of the population will fall between those numbers of .010 and .015
- 14:20 – higher number used will hurt the accused
- 15:23 – If we are going to rebut the defense that said I had two beers at according to my body weight of 150 lbs. two beers within two hours, I should never have been more than .04 and your machine is broken...And that's what they do
 - Their argument is at time of driving I was at .041 based on body weight, what I ate, two twelve ounce Miller Lites, all those things – that's a Widmark
- 15:56 – They'll get real technical and tell you how many ounces of ethanol were consumed or grams of ethanol per kilogram of body weight
 - 16:03 They really throw a lot of math crap out there
 - Basically it's 150 lbs. 12 ounces beer, one hour, .018
- 17:00 – Charles Smith/Stephen Daniels/Jay Zager
 - None of those three hold a degree, even a Bachelor's degree, in anything – nothing
 - They were police officers for years, Daniels' wasn't
 - They have been through no advanced chemistry, toxicology, forensics, criminalistics
 - Their formal education consists of a PhD – public high school diploma
 - I honestly believe to understand the science – the math is easy –
 - Why is the elimination rate like that, what are the variables
- 18:24 – I think you need to take a degree in science, I think you need experience in forensic toxicology, I think you need training in alcohol elimination rate and forensic alcohol toxicology, that's my personal belief
- 19:30 – won't look at retrograde and consider if there is not at least one hour between time of last drink and time of incident

- If you can't determine it, I won't do it
- 24:15 – Favorite question for defense experts:
 - Is it possible that the defendant drank more than he is willing to say?
- 26:05 – research shows that in normal social drinking environment, within 10-20 minutes of last drink, you're peaked
 - I use an hour just to be 3x as sure, so that argument from the defense
- 26:57 – depends on what possible means. In the scientific world, possible mean anything less than 100% (but possibly not very probable)
- 27:09 – Normally within 10-20 minutes, they have peaked; I give it an hour personally, just to make sure
- 27:22 – The defense expert will say that isn't it true that it takes 3 hours to absorb it; possible yes, not very likely; not in normal drinking environment
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