

27 January 2010  
Our ref: 0001.10

Thank you for your FOI enquiry which was passed to me from our external website.

*"How are 'back calculations' done in order to determine a persons blood alcohol level prior to drinking. Please provide this information as quickly as possible. Please give all information that is required to make these calculations, in particular the formular used to make the calculations."*

The necessary information as to how to carry out back calculations is freely available in the scientific literature. Therefore pursuant to s21 of the Freedom of Information Act (2000) I have deemed the information you have requested to be exempt from disclosure.

However, in order to assist you further, I have been provided with the following list of external resources that our experts use as part of their work:

| Item | Reference  |
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| 1    | Road Traffic Act, 1988<br>This can be found at the following link:<br><a href="http://www.legislation.gov.uk/ukpga/1988/52/contents">http://www.legislation.gov.uk/ukpga/1988/52/contents</a>  |
| 2    | Road Traffic Offenders Act, 1988<br>This can be found at the following link:<br><a href="http://www.legislation.gov.uk/ukpga/1988/52/contents">http://www.legislation.gov.uk/ukpga/1988/52/contents</a>  |
| 3    | Road Traffic Act, 1991<br>This can be found at the following link:<br><a href="http://www.legislation.gov.uk/ukpga/1991/40/contents">http://www.legislation.gov.uk/ukpga/1991/40/contents</a>  |
| 4    | Transport and Works Act 1992<br>This can be found at the following link:<br><a href="http://www.legislation.gov.uk/ukpga/1992/42/contents">http://www.legislation.gov.uk/ukpga/1992/42/contents</a>  |
| 5    | Forrest A.R.W, "The Estimation of Widmark's Factor" J Forens Sci Soc <u>26</u> , 249, 1986   |
| 6    | Lewis M.J.Blood Alcohol" J. Forensic Science Society 1986 26 95-113  |
| 7    | Watson P.E. "Prediction of Blood Alcohol Concentrations in Human Subjects" J et al Studies Alcohol, <u>42</u> , 1981, 547  |
| 8    | Cooper W.E., "Alcohol Drugs and Road Traffic"Schwar T.G., Juta, Cape Town, 1979. Smith L.S   |
| 9    | Walls H.J., "Drink Drugs and Driving" Sweet and Maxwell 1985. Brownlie A.R.,   |
| 10   | S.I. 2039 Weights and Measures (Intoxicating Liquor) Order 1988<br>This can be found at the following link:<br><a href="http://www.legislation.gov.uk/uksi/1988/2039/contents/made">http://www.legislation.gov.uk/uksi/1988/2039/contents/made</a>                                     |
| 11   | S.I. 1550 Weights and Measures (Various Foods) (Amendment) Order 1990<br>This can be found at the following link:<br><a href="http://www.legislation.gov.uk/uksi/1990/1550/contents/made">http://www.legislation.gov.uk/uksi/1990/1550/contents/made</a>                               |
| 12   | S.I. 1883 Weights and Measures (Intoxicating Liquor) (Amendment) Order 1994<br>This can be found at the following link:<br><a href="http://www.legislation.gov.uk/uksi/2001/1322/pdfs/uksi_20011322_en.pdf">http://www.legislation.gov.uk/uksi/2001/1322/pdfs/uksi_20011322_en.pdf</a> |
| 13   | S.I. 2867 Weights and Measures The Units of Measurement Regulation 1994  |

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|    | This can be found at the following link:<br><a href="http://www.legislation.gov.uk/ukxi/1994/2867/made">http://www.legislation.gov.uk/ukxi/1994/2867/made</a>  |
| 14 | Ley N.J Drink Driving Law and Practice, 2nd EDN, Sweet and Maxwell 1997  |
| 15 | Garriott, J.C. Medicolegal Aspects of Alcohol 4 <sup>th</sup> Edition 2003   |
| 16 | Health Survey for England-latest year data. Mean Weights Table<br>This can be found at the following link:<br><a href="http://www.ic.nhs.uk">www.ic.nhs.uk</a> |
| 17 | McCallow P.Drink Drive Case Notes 2 <sup>nd</sup> Edition 2007   |
| 18 | Davis, Kenyon and Kirk – A Rapid Titrimetric method for determining the water content of Human Blood   |