**Drugs and Driving Committee Literature (Based on ASB Standard 120)**

**Cannabinoids**

* Arkell, T.R. et al. [Cannabidiol (CBD) content in vaporized cannabis does not prevent tetrahydrocannabinol (THC)-induced impairment of driving and cognition.](https://www.ncbi.nlm.nih.gov/pubmed/31044290) *Psychopharmacology (Berl)* 236:2713-2724 (2019)
* Bidwell, L.C. et al. [Association of naturalistic administration of cannabis flower and concentrates with intoxication and impairment.](https://pubmed.ncbi.nlm.nih.gov/32520316) *JAMA Psychiatry* 77:787-796 (2020)
* Bondallaz, P. et al. [Cannabis and its effects on driving skills.](https://www.ncbi.nlm.nih.gov/pubmed/27701009) *Forensic Sci Int* 268:92-102 (2016)
* Dubois, S. et al. [The combined effects of alcohol and cannabis on driving: Impact on crash risk.](https://www.ncbi.nlm.nih.gov/pubmed/25612879) *Forensic Sci Int* 248:94-100 (2015)
* Hartley, S. et al. [Effect of smoked cannabis on vigilance and accident risk using simulated driving in occasional and chronic users and the pharmacokinetic-pharmacodynamic relationship.](https://pubmed.ncbi.nlm.nih.gov/30872375) *Clin Chem* 65:684-693 (2019)
* Hartman, R.L. et al. [Cannabis effects on driving skills.](http://www.ncbi.nlm.nih.gov/pubmed/23220273) *Clin Chem* 59:478-492 (2013)
* Hartman, R.L. et al. [Cannabis effects on driving lateral control with and without alcohol.](https://www.ncbi.nlm.nih.gov/pubmed/26144593) *Drug Alcohol Depend* 154:25-37 (2015)
* Hartman, R.L. et al. [Cannabis effects on driving longitudinal control with and without alcohol.](https://www.ncbi.nlm.nih.gov/pubmed/26889769) *J Appl Toxicol* 36:1418-1429 (2016)
* Hartman, R.L. et al. [Effect of blood collection time on measured Δ9-tetrahydrocannabinol concentrations: implications for driving interpretation and drug policy.](https://www.ncbi.nlm.nih.gov/pubmed/26823611) *Clin Chem* 62:367-377 (2016)
* **[NEW]** Høiseth, G. [Impairment due to alcohol, tetrahydrocannabinol, and benzodiazepines in impaired drivers compared to experimental studies.](https://pubmed.ncbi.nlm.nih.gov/27327554/) *Traffic Inj Prev* 18:244-250 (2019)
* Huestis, M.A. et al. [Blood cannabinoids. I. Absorption of THC and formation of 11-OH-THC and THCCOOH during and after smoking marijuana.](http://www.ncbi.nlm.nih.gov/pubmed/1338215) *J Anal Toxicol*16: 276-282 (1992)
* Huestis, MA. [Cannabis (Marijuana) – Effects on Human Behavior and Performance.](https://pubmed.ncbi.nlm.nih.gov/26256486/) In: *Forensic Science Review*, Birmingham, Alabama: Central Police University Press, 2002: 16-60.
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* Neavyn, M.J. et al. [Medical marijuana and driving: a review.](https://www.ncbi.nlm.nih.gov/pubmed/24648180) *J Med Toxicol* 10:269-279 (2014)
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* Ramaekers, J.G. et al. [Marijuana, alcohol and actual driving performance.](http://www.ncbi.nlm.nih.gov/pubmed/12404625) *Hum Psychopharmacol* 15:551-558 (2000)
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**CNS Stimulants (Completed Re-Review in 2022)**

* Amphetamine/Methamphetamine
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	+ Jones, A.W. et al. [Driving under the influence of central stimulant amines: age and gender differences in concentrations of amphetamine, methamphetamine, and ecstasy in blood.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Driving+under+the+influence+of+central+stimulant+amines%3A+age+and+gender+differences+in+concentrations+of+amphetamine%2C+methamphetamine%2C+and+ecstasy+in+blood.)J Stud Alcohol Drugs 69:202-208 (2008)
	+ **[NEW]** Høiseth, G. [Impairment due to amphetamines and benzodiazepines, alone and in combination.](https://pubmed.ncbi.nlm.nih.gov/25456327/) *Drug Alcohol Depend* 145:174-9 (2014)
	+ Logan, B.K. et al. [Methamphetamine and Driving Impairment.](http://www.ncbi.nlm.nih.gov/pubmed/8656187)Journal of Forensic Sciences 41:457-464 (1996)
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	+ **[NEW]** Musshoff, F. and Madea, B. [Driving Under the Influence of Amphetamine-Like Drugs.](https://pubmed.ncbi.nlm.nih.gov/22335607/) *J Forensic Sci* 57:413-419 (2012)
* MDMA
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* Cocaine
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	+ **[NEW]** Jenkins A. J. et al. [Correlation Between Pharmacological Effects and Plasma Cocaine Concentrations after Smoked Administration.](https://pubmed.ncbi.nlm.nih.gov/12422990/) J Anal Toxicol 26:382-392 (2002)
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**CNS Depressants**

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	+ **[NEW]** Vermeeren, A. et al. [Residual effects of low-dose sublingual zolpidem on highway driving performance the morning after middle-of-the-night use.](https://pubmed.ncbi.nlm.nih.gov/24587571/) *Sleep* 37:489-96 (2014)
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* Benzodiazepines
	+ **General Benzodiazepines** **(Completed Re-Review in 2023)**
		- Drummer, O.H. [Benzodiazepines – effects on human performance and behavior.](https://www.ncbi.nlm.nih.gov/pubmed/26256485) *Forensic Sci Rev* 14:1-14 (2002)
		- **[NEW]** Høiseth, G. [Impairment due to amphetamines and benzodiazepines, alone and in combination.](https://pubmed.ncbi.nlm.nih.gov/25456327/) *Drug Alcohol Depend* 145:174-9 (2014)
		- **[NEW]** Høiseth, G. [Impairment due to alcohol, tetrahydrocannabinol, and benzodiazepines in impaired drivers compared to experimental studies.](https://pubmed.ncbi.nlm.nih.gov/27327554/) *Traffic Inj Prev* 18:244-250 (2019)
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**Narcotic Analgesics**

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