

Supplemental Table 2. Risk of driver culpability or responsibility in motor vehicle accidents (MVA) after cannabis exposure

Location/ Country	N (total)	Cases	N (cases)	Controls	N (controls)	Analytical Matrix	THC Cutoff (ng/mL)	CB Only	Parameter	OR or RR	95% CI	Crude (C) or Adjusted (factors)	Ref.
Victoria, NSW & WA, Australia	1762	Fatally injured drivers, THC +	58	Fatally injured drivers, THC -	1704	Blood	Not given	CB only	MVA-DC	2.7 <sup>a</sup>	1.02-7.0	Demographics, crash type, BAC, year, year x crash type	(15)
Victoria, NSW & WA, Australia	1753	Fatally injured drivers, THC ≥5 ng/mL	49	Fatally injured drivers, THC -	1704	Blood	5	CB only	MVA-DC	6.6 <sup>a</sup>	1.5-28	Demographics, crash type, BAC, year, year x crash type	(15)
Ontario, Canada	699	Cannabis addiction treatment patients	181	Frequency- matched (age, sex) licensed drivers	518	N/A: Collision/ conviction records	--	--	MVA-DC	1.68 <sup>b</sup>	1.21- 2.34	Demographics, cocaine abuse	(30)
France	9772	Drivers in fatal crashes, THC +	759	Drivers in fatal crashes, THC -	9013	Blood	Not given	--	MVA-DC	3.17 <sup>a</sup>	2.56- 3.94	C	(37)
France	9091	Drivers in fatal crashes, THC +	759	Drivers in fatal crashes, THC -	9013	Blood	Not given	--	MVA-DC	1.78 <sup>a</sup>	1.40- 2.25	Demographics, BAC, Blood THC concentration, time of crash	(37)
France	9091	Drivers in fatal crashes, THC + <1 ng/mL	78	Drivers in fatal crashes, THC -	9013	Blood	Not given	--	MVA-DC	2.18 <sup>a</sup>	1.22- 3.89	C	(37)

Location/ Country	N (total)	Cases	N (cases)	Controls	N (controls)	Analytical Matrix	THC Cutoff (ng/mL)	CB Only	Parameter	OR or RR	95% CI	Crude (C) or Adjusted (factors)	Ref.
France	9091	Drivers in fatal crashes, THC + <1 ng/mL	78	Drivers in fatal crashes, THC -	9013	Blood	Not given	--	MVA-DC	1.57 <sup>a</sup>	0.84-2.95	Demographics, BAC, Blood THC concentration, time of crash	(37)
France	9311	Drivers in fatal crashes, THC + 1-2 ng/mL	298	Drivers in fatal crashes, THC -	9013	Blood	1	--	MVA-DC	2.54 <sup>a</sup>	1.86-3.48	C	(37)
France	9311	Drivers in fatal crashes, THC + 1-2 ng/mL	298	Drivers in fatal crashes, THC -	9013	Blood	1	--	MVA-DC	1.54 <sup>a</sup>	1.09-2.18	Demographics, BAC, Blood THC concentration, time of crash	(37)
France	9156	Drivers in fatal crashes, THC + 3-4 ng/mL	143	Drivers in fatal crashes, THC -	9013	Blood	3	--	MVA-DC	3.78 <sup>a</sup>	2.24-6.37	C	(37)
France	9156	Drivers in fatal crashes, THC + 3-4 ng/mL	143	Drivers in fatal crashes, THC -	9013	Blood	3	--	MVA-DC	2.13 <sup>a</sup>	1.22-3.73	Demographics, BAC, Blood THC concentration, time of crash	(37)
France	9253	Drivers in fatal crashes, THC + ≥5 ng/mL	240	Drivers in fatal crashes, THC -	9013	Blood	5	--	MVA-DC	4.72 <sup>a</sup>	3.04-7.33	C	(37)
France	9253	Drivers in fatal crashes, THC + ≥5 ng/mL	240	Drivers in fatal crashes, THC -	9013	Blood	5	--	MVA-DC	2.12 <sup>a</sup>	1.32-3.38	Demographics, BAC, Blood THC concentration, time of crash	(37)

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United States	32543	Drivers in fatal crashes, THC +	1647	Drivers in fatal crashes, THC -	30896	Blood or Urine	Not given	0% BAC	MVA-DRF	1.39 <sup>a</sup>	1.21- 1.59	C	(22)
United States	32543	Drivers in fatal crashes, THC +	1647	Drivers in fatal crashes, THC -	30896	Blood or Urine	Not given	0% BAC	MVA-DRF	1.29 <sup>a</sup>	1.11- 1.50	Demographics, driving record	(22)

<sup>a</sup> Odds ratio (OR)

<sup>b</sup>Relative risk (RR)

Abbreviations: THC:  $\Delta^9$ -tetrahydrocannabinol; CB: cannabis; CI: confidence interval; Ref.: reference; NSW: New South Wales; WA: Western Australia; DC: driver was judged culpable; DRF:  $\geq 1$  driver related factor (potentially unsafe driving action) contributed to crash; BAC: blood alcohol content