

**Supplemental tables**

**Supplemental table 1. Results from GLMs and conversions for Richardson and colleagues single binary exposure example using Evans County Data**

	OR	Risks	RD	RR
Paper	3.11 (1.48 to 6.52)	27.3% 10.8%	0.165 (0.030 to 0.300)	2.54 (1.44 to 4.46)
Odds ratio (OR) from a logistic regression.	3.11 (1.48 to 6.53)	0.273 (0.142 to 0.404) 0.108 (0.075 to 0.140)	0.165 (0.030 to 0.300)	2.54 (1.44 to 4.46)
Risk from a linear binomial GLM with no constant / intercept	3.11 (1.48 to 6.53)	0.273 (0.142 to 0.404) 0.108 (0.075 to 0.140)	0.165 (0.030 to 0.300)	2.54 (1.44 to 4.46)
Risk difference (RD) from a linear binomial GLM	3.11 ( 1.48 to 6.53)	0.273 (0.142 to 0.404) 0.108 (0.075 to 0.140)	0.165 (0.030 to 0.300)	2.54 (1.44 to 4.46)
Relative risk (RR) from a log binomial GLM	3.11 (1.48 to 6.53)	0.273 (0.142 to 0.404) 0.108 (0.075 to 0.140)	0.165 (0.030 to 0.300)	2.54 (1.44 to 4.46)

**Supplemental table 2. Results from GLMs and conversions for Richardson and colleagues two binary exposures' example using Evans County Data**

	OR	Risk	RD	RR
Paper	-	5.0% 14.7% 22.1% 31.6%	0.10 (0.04 to 0.16) 0.17 (-0.04 to 0.38) 0.27 (0.10 to 0.44)	2.95 (1.42 to 6.15) 4.44 (1.43 to 13.75) 6.33 (2.76 to 14.53)
Odds ratio (OR) from a logistic regression.	3.29 (1.49 to 7.28) 5.41 (1.37 to 21.40) 8.79 (3.15 to 24.51)	0.050 (0.018 to 0.082) 0.147 (0.095 to 0.199) 0.221 (0.015 to 0.427) 0.316 (0.149 to 0.482)	0.10 (0.04 to 0.16) 0.17 (-0.04 to 0.38) 0.27 (0.10 to 0.44)	2.95 (1.42 to 6.16) 4.44 (1.43 to 13.76) 6.33 (2.76 to 14.54)
Risk from a linear binomial GLM with no constant / intercept	3.29 (1.49 to 7.28) 5.41 (1.37 to 21.40) 8.79 (3.15 to 24.51)	0.050 (0.018 to 0.082) 0.147 (0.095 to 0.199) 0.221 (0.015 to 0.427) 0.316 (0.149 to 0.482)	0.10 (0.04 to 0.16) 0.17 (-0.04 to 0.38) 0.27 (0.10 to 0.44)	2.95 (1.42 to 6.16) 4.44 (1.43 to 13.76) 6.33 (2.76 to 14.54)
Risk difference (RD) from a linear binomial GLM	3.29 (1.49 to 7.28) 5.41 (1.37 to 21.40) 8.79 (3.15 to 24.51)	0.050 (0.018 to 0.082) 0.147 (0.095 to 0.199) 0.221 (0.015 to 0.427) 0.316 (0.149 to 0.482)	0.10 (0.04 to 0.16) 0.17 (-0.04 to 0.38) 0.27 (0.10 to 0.44)	2.95 (1.42 to 6.16) 4.44 (1.43 to 13.76) 6.33 (2.76 to 14.54)
Relative risk (RR) from a log binomial GLM	3.29 (1.49 to 7.28) 5.41 (1.37 to 21.40) 8.79 (3.15 to 24.51)	0.050 (0.018 to 0.082) 0.147 (0.095 to 0.199) 0.221 (0.015 to 0.427) 0.316 (0.149 to 0.482)	0.10 (0.04 to 0.16) 0.17 (-0.04 to 0.38) 0.27 (0.10 to 0.44)	2.95 (1.42 to 6.16) 4.44 (1.43 to 13.76) 6.33 (2.76 to 14.54)