

1 **Appendix 2.** Adjusted incidence-density ratios (IDR) in a multivariate unilevel model for the
 2 imputed associations between crash- and environment-related variables and the risk of death in
 3 the first 24 hours after a road crash. Spain, 1993-2013.

Variable	Category	IDR	95% CI		P value	FMI(2)
Type of crash	Collision with moving vehicle(1)	1	-	-	-	-
	Other	0.89	0.78	1.00	0.058	0.014
Traffic lane characteristics	Intersection(1)	1	-	-	-	-
	Other	1.64	1.45	1.86	<0.001	0.007
Area	Highway(1)	1	-	-	-	-
	Urban area	0.18	0.16	0.21	<0.001	0.015
	Community road	0.59	0.47	0.74	<0.001	0.003
Meteorological conditions	Good weather(1)	1	-	-	-	-
	Any adverse circumstances	1.37	1.08	1.73	0.009	0.005
Road surface	Normal(1)	1	-	-	-	-
	Altered	0.76	0.59	0.97	0.030	0.006
Time of day (24-hour clock)	0:00-2:59(1)	1	-	-	-	-
	3:00-5:59	1.55	1.01	2.38	0.043	0.009
	6:00-8:59	0.77	0.54	1.09	0.141	0.012
	9:00-11:59	0.45	0.33	0.64	<0.001	0.014
	12:00-14:59	0.40	0.28	0.55	<0.001	0.014
	15:00-17:59	0.45	0.32	0.63	<0.001	0.012
	18:00-20:59	0.48	0.35	0.67	<0.001	0.012
	21:00-23:59	0.60	0.43	0.85	0.004	0.012
Years	2011 - 2013(1)	1	-	-	-	-
	2008 - 2010	1.34	1.07	1.69	0.010	0.012
	2005 - 2007	2.10	1.70	2.60	<0.001	0.015
	2002 - 2004	2.16	1.75	2.68	<0.001	0.012
	1999 - 2001	2.42	1.96	2.98	<0.001	0.010
	1996 - 1998	2.31	1.87	2.85	<0.001	0.012
	1993 - 1995	2.67	2.17	3.29	<0.001	0.015
Province	Alava	1	-	-	-	-
	Albacete	1.51	0.80	2.87	0.206	0.004
	Alicante	1.02	0.61	1.71	0.928	0.004
	Almería	1.61	0.92	2.83	0.095	0.006
	Ávila	0.29	0.07	1.25	0.097	0.001

Badajoz	1.96	1.06	3.62	0.032	0.007
Baleares	1.25	0.76	2.07	0.373	0.005
Barcelona	1.01	0.62	1.64	0.974	0.009
Burgos	1.35	0.76	2.43	0.308	0.003
Cáceres	1.48	0.64	3.39	0.360	0.002
Cádiz	1.04	0.56	1.91	0.907	0.007
Castellón	1.08	0.61	1.91	0.798	0.005
Ciudad Real	1.28	0.71	2.31	0.417	0.005
Córdoba	1.12	0.60	2.10	0.715	0.003
Coruña, La	1.12	0.62	2.02	0.714	0.003
Cuenca	2.95	1.45	6.02	0.003	0.003
Girona	1.07	0.62	1.85	0.799	0.006
Granada	1.18	0.66	2.10	0.584	0.005
Guadalajara	1.91	0.76	4.80	0.169	0.001
Guipúzcoa	0.65	0.36	1.18	0.157	0.003
Huelva	0.89	0.41	1.93	0.774	0.002
Huesca	1.36	0.70	2.66	0.365	0.003
Jaen	1.41	0.65	3.04	0.386	0.003
León	1.49	0.88	2.54	0.140	0.004
Lleida	1.38	0.75	2.57	0.302	0.003
La Rioja	2.15	1.18	3.92	0.013	0.003
Lugo	1.16	0.60	2.25	0.654	0.003
Madrid	1.10	0.66	1.82	0.725	0.006
Málaga	1.24	0.69	2.21	0.474	0.004
Murcia	1.76	1.05	2.94	0.031	0.005
Navarra	1.91	1.08	3.41	0.027	0.005
Orense	1.96	1.04	3.67	0.037	0.003
Asturias	0.76	0.43	1.33	0.335	0.004
Palencia	1.24	0.63	2.42	0.537	0.004
Palmas, Las	1.70	0.93	3.08	0.084	0.003
Pontevedra	0.96	0.52	1.75	0.886	0.003
Salamanca	1.49	0.74	2.99	0.261	0.003
Santa Cruz	1.43	0.76	2.73	0.270	0.003
Cantabria	0.97	0.53	1.75	0.909	0.004
Segovia	1.53	0.69	3.41	0.298	0.006
Sevilla	1.38	0.82	2.35	0.230	0.003
Soria	1.81	0.72	4.56	0.207	0.002
Tarragona	1.52	0.91	2.54	0.111	0.005
Teruel	1.77	0.74	4.24	0.201	0.002
Toledo	2.37	1.36	4.12	0.002	0.003

Valencia	1.28	0.78	2.10	0.324	0.005
Valladolid	1.58	0.87	2.86	0.134	0.004
Vizcaya	0.68	0.37	1.22	0.193	0.003
Zamora	2.54	1.36	4.73	0.003	0.004
Zaragoza	1.71	0.99	2.95	0.056	0.005

(1) Reference category

(2) Fraction of missing information

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