

# COLLISION MATRIX

For road accidents fatalities by road user and other vehicles involved

FATALITIES BY USER TYPE	IN COLLISION WITH											Total
	Pedestrians	Bicycles	E-bikes	E-scooters	Mopeds	Motor-bikes	Cars	Lorries (<3,5 t)	Heavy Good Vehicles (>3,5 t)	Buses or Coach	Other vehicles	
Pedestrians			1	1	4	28	341	37	32	13	13	470
Bicycles		5				10	95	22	8	5	1	165
E-bikes							16		1		3	20
E-scooters		2		1			13				7	23
Mopeds					1	4	31	2	4		1	61
Motor-bikes		5	4		4	47	394	56	30	7	13	830
Passengers cars		8	1		3	2	494	61	123	12	13	1,252
Lorries (<3,5 t)							12	8	4	1	1	50
Heavy Good Vehicles (>3,5 t)							24	4	42	1	25	96
Buses or Coach						1		1	1		5	8
Other vehicles					1	4	24	2	8		16	55
(Absolute values) Total	13	12	1	2	13	96	1,444	193	253	39	42	3,030

The values within the matrix cells are calculated with a partition of the total cases, such that the sum per column and per row produces marginal distributions whose sum coincides with the total number of cases. Underlined in red, the highest frequencies recorded in the matrix cells.

# SANCTIONS



VIOLATIONS RELATED TO STOPPING, HALTING, AND PARKING



SPEEDING



FAILURE TO COMPLY WITH ROAD MARKINGS



IRREGULARITIES IN THE POSSESSION OF VEHICLE REGISTRATION DOCUMENTS.



USE OF SEAT BELTS AND CHILD RESTRAINT SYSTEMS



FAILURE TO COMPLY WITH MANDATORY INSURANCE REQUIREMENTS



IMPROPER USE OF IN-VEHICLE SAFETY DEVICES OR FAILURE TO WEAR CORRECTIVE LENSES



Sanctions applied in 2024 by Motorway Police, Carabinieri and Local Police of the main municipalities within the provinces