BRITISH COLUMBIA | RoadSafetyBC

Motor Vehicle Related Fatalities
10-year Statistics for British Columbia
2007-2016

Research and Data Unit
Policy and Strategic Initiatives Branch
Website: www.gov.bc.ca/roadsafetybc
Twitter: http://twitter.com/RoadSafetyBC

RAD 2017-122
August 2017

Contents

Introduction and Definitions

This report presents the preliminary count of fatal victims of motor vehicle crashes in British Columbia for the ten-year period 2007 to 2016. The report is updated every year.

The data source for report is police-reported information collected by police and entered into the Traffic Accident System (TAS). The reconciliation of this data with Coroners Service data is limited to basic information such as the total number of fatalities, collision date, date of death, age, and gender. However, the police-reported data is not reconciled with coroner data regarding the various contributing factors involved in fatal crashes. Some of the definitions and the standards of proof vary between the data sets. While a partial reconciliation process does occur between the data sets, each data set remains unique.

This data supports road safety programs, enforcement campaigns and policy development, and is used to evaluate various provincial road safety initiatives.

Although these counts are considered preliminary, the motor vehicle fatality numbers contained in this report are largely final and settled, subject to only small further adjustments given the possibility that some new or adjusted data is received after the publication of this report. If a few late cases are reported, the numbers will be updated in subsequent reports, on an annual basis. This, however, will not affect the general trends. Road crash fatalities vary based on many factors, including legislative and policy changes, the cumulative number of vehicle kilometers driven, enforcement practices and policies, seasonal weather, random variation, and road conditions and roadway characteristics and design.

Research from Australia indicates that for every motor vehicle-related death there are about 12 seriously injured victims, with a quarter of these catastrophic injuries.[1] It is important to recognize that while the focus of this report is on fatalities and related trends, the problems of injuries and their associated trends, while not reflected in this particular report, are recognized as a significant problem.

Definitions

Fatality: Refers to a road user who dies within 30 days after an injury sustained in a crash involving at least one motor vehicle on a 'highway' as defined in the *Motor Vehicle Act* (largely any public roadway). The *Motor Vehicle Act* does not apply to forest-service roads, industrial roads and private driveways. Fatal victims of off-road snowmobile accidents, homicides, and suicides are excluded from this report.

Road User: Refers to a driver, passenger, pedestrian or cyclist who is travelling on a 'highway' as defined in the *Motor Vehicle Act.*

Averages: 5-year average refers to the average number of fatalities from 2012 to 2016. 10-year average refers to the average number of fatalities from 2007 to 2016.

Notes about the data:

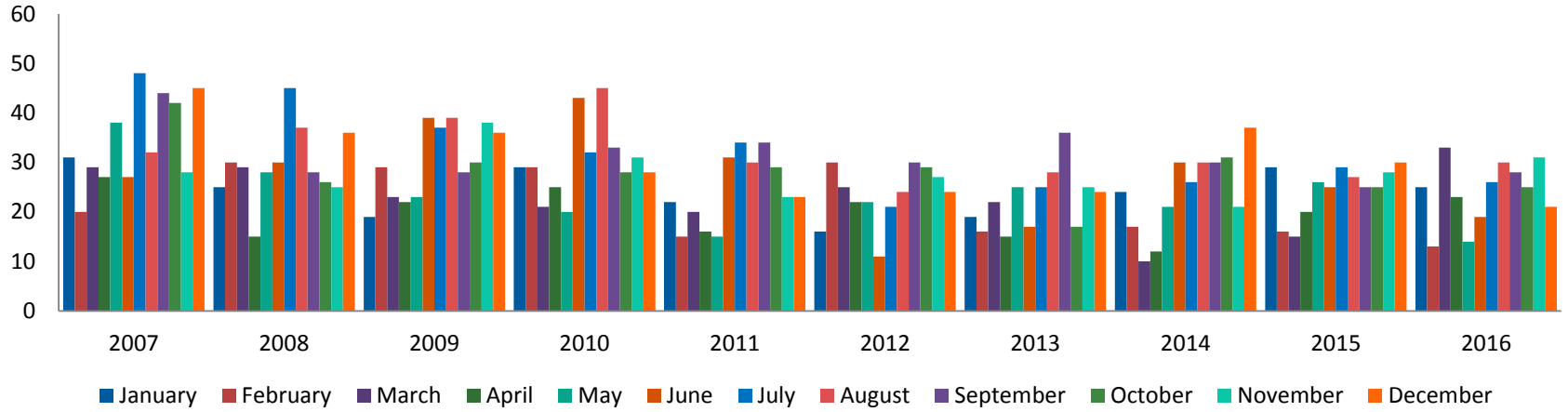
- Data is as of June 30, 2017.
- When comparing this fatality report with editions published in a different year, counts may differ due to further development of data, rounding, late reporting or corrections.
- Long-term trends may differ from the 10-year trends presented on the graphs.
- "Unknown" or "other" is listed when data was missing or incomplete.
- Due to rounding, 5 and 10-year averages may not add up.
- All 2016 counts are preliminary, but are largely final and settled.
- Fatal victim averages are rounded up.
- **Up to 4 different contributing factors** may be assigned to each entity (vehicle, motorcycle, cyclist or pedestrian) involved in a motor vehicle crash. Therefore some victims in tables 9 to 11 are included in other "contributing factors" tables on this document.

Fatal Victims by Month

Table 1: Fatal victims by month

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
January	31	25	19	29	22	16	19	24	29	25	23	24
February	20	30	29	29	15	30	16	17	16	13	19	22
March	29	29	23	21	20	25	22	10	15	33	21	23
April	27	15	22	25	16	22	15	12	20	23	19	20
May	38	28	23	20	15	22	25	21	26	14	22	24
June	27	30	39	43	31	11	17	30	25	19	21	28
July	48	45	37	32	34	21	25	26	29	26	26	33
August	32	37	39	45	30	24	28	30	27	30	28	33
September	44	28	28	33	34	30	36	30	25	28	30	32
October	42	26	30	28	29	29	17	31	25	25	26	29
November	28	25	38	31	23	27	25	21	28	31	27	28
December	45	36	36	28	23	24	24	37	30	21	28	31
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 1: Fatal victims by month



Fatal Victims by Region

Table 2: Fatal victims by region[2]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Fraser Valley	88	80	76	87	52	54	51	58	56	71	58	68
Greater Vancouver	71	53	37	35	33	43	47	35	44	39	42	44
North Central	70	64	58	71	61	46	53	59	58	58	55	60
Southern Interior	121	105	135	112	109	100	76	110	99	82	94	105
Vancouver Island	61	52	57	59	37	38	42	27	38	38	37	45
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

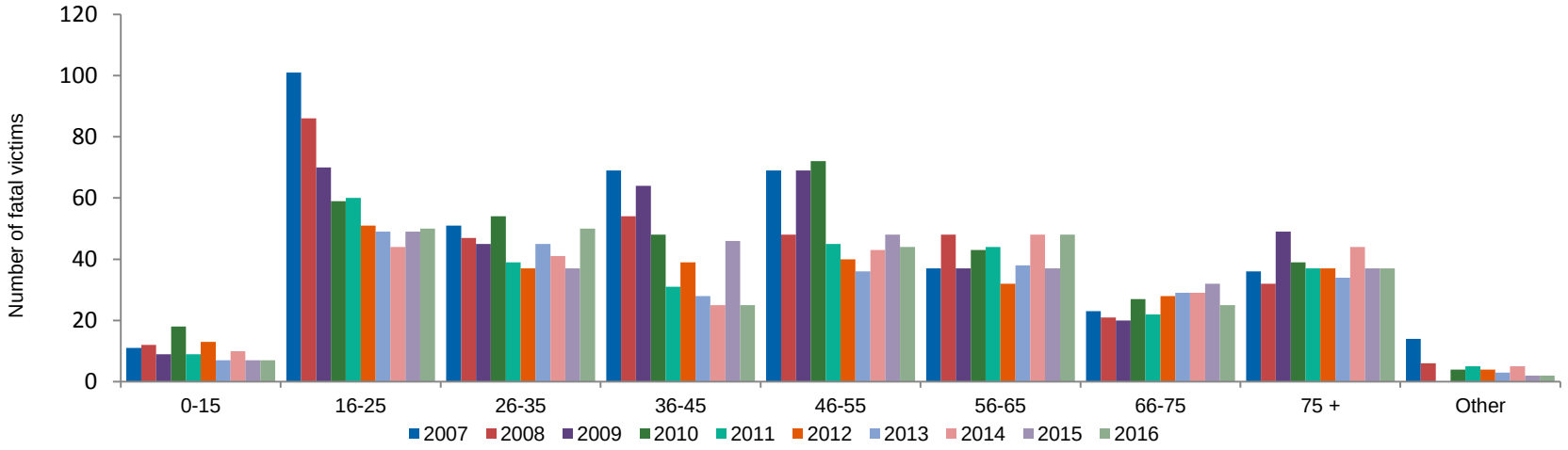
Figure 2: Fatal victims by region

Fatal Victims by Age Range

Table 3: Fatal victims by age range

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
0-15	11	12	9	18	9	13	7	10	7	7	9	11
16-25	101	86	70	59	60	51	49	44	49	50	49	62
26-35	51	47	45	54	39	37	45	41	37	50	42	45
36-45	69	54	64	48	31	39	28	25	46	25	33	43
46-55	69	48	69	72	45	40	36	43	48	44	43	52
56-65	37	48	37	43	44	32	38	48	37	48	41	42
66-75	23	21	20	27	22	28	29	29	32	25	29	26
75 +	36	32	49	39	37	37	34	44	37	37	38	39
Other	14	6	0	4	5	4	3	5	2	2	4	5
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 3: Fatal victims by age range

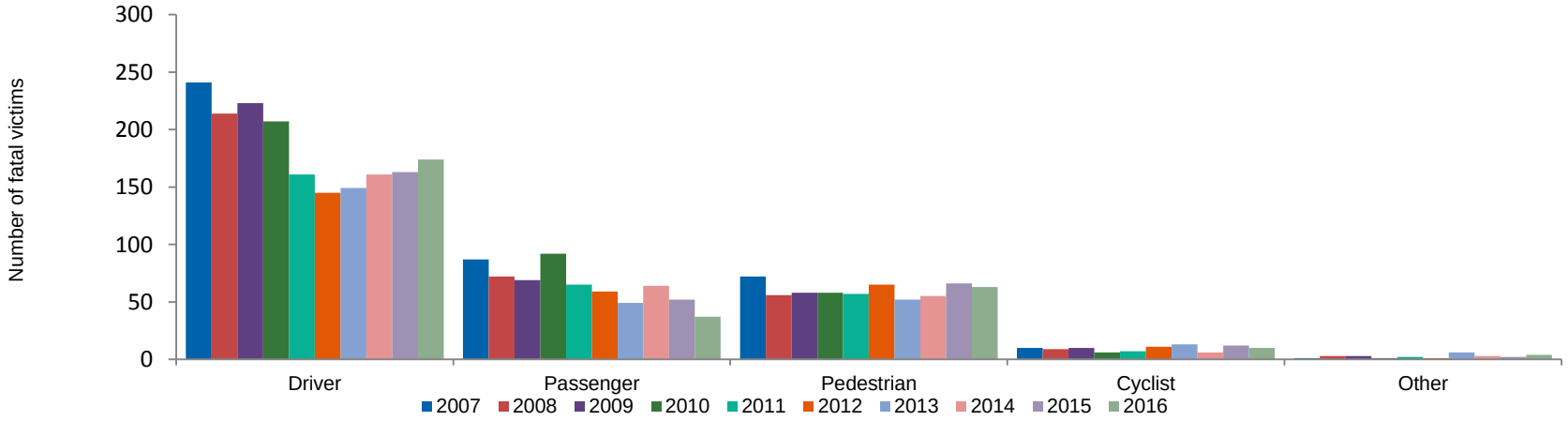


Fatal Victims by Role and Gender

Table 4: Fatal victims by road user type and gender

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Driver	Female	52	55	48	49	34	24	31	28	31	44	32	40
	Male	189	159	175	158	127	121	117	133	132	130	127	145
	unknown	0	0	0	0	0	0	1	0	0	0	1	1
Passenger	Female	50	36	36	46	33	36	30	32	27	19	29	35
	Male	37	36	33	46	32	23	19	32	25	18	24	31
	unknown	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian	Female	25	22	20	30	21	29	27	24	25	32	28	26
	Male	47	34	38	28	35	36	24	31	40	31	33	35
	unknown	0	0	0	0	1	0	1	0	1	0	1	1
Cyclist	Female	2	1	2	0	1	3	2	1	3	1	2	2
	Male	8	8	8	6	6	8	11	5	9	9	9	8
Other	Female	1	0	0	0	1	0	2	2	0	0	1	1
	Male	0	2	3	1	0	1	3	1	2	3	2	2
	unknown	0	1	0	0	1	0	1	0	0	1	1	1
Total		**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 4: Fatal victims by road user type

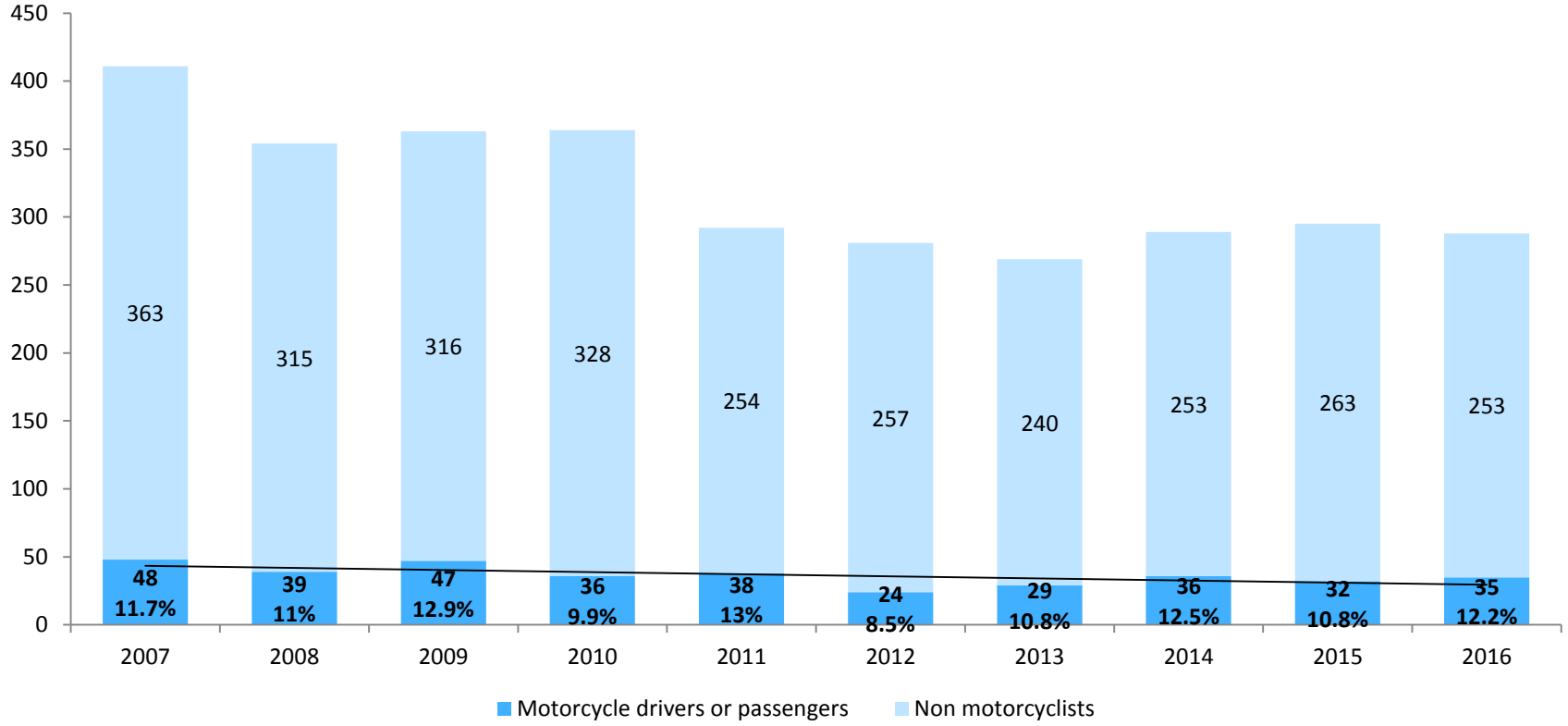


Motorcyclist Fatalities

Table 5: Motorcyclist Fatalities[3]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Motorcycle drivers or passengers	48	39	47	36	38	24	29	36	32	35	32	37
Non motorcyclists	363	315	316	328	254	257	240	253	263	253	254	285
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 5: Motorcyclist Fatalities

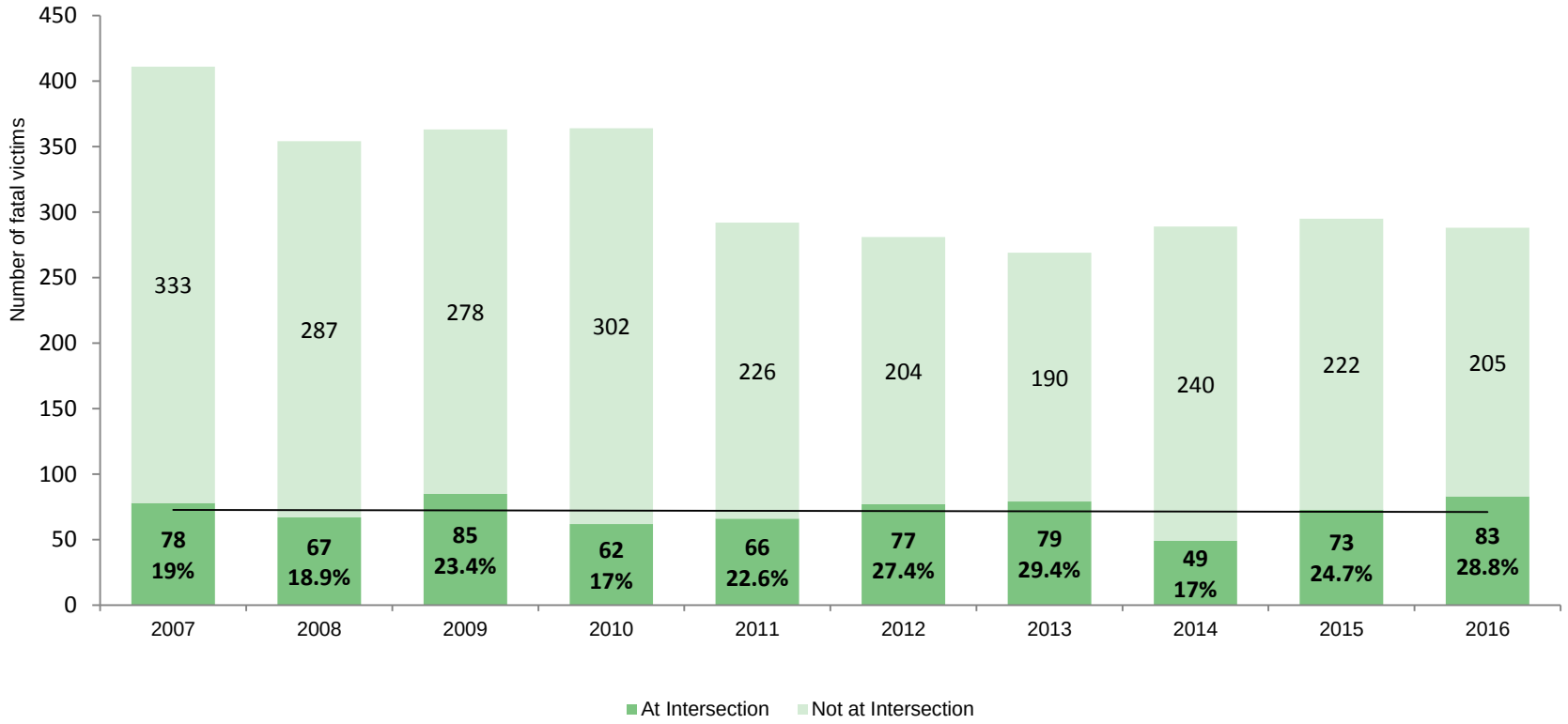


Fatal Victims of Crashes at Intersections and Non-Intersections

Table 6: Fatal victims of crashes at intersections and non-intersections

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
At Intersection	78	67	85	62	66	77	79	49	73	83	73	72
Not at Intersection	333	287	278	302	226	204	190	240	222	205	213	249
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 6: Fatal victims of crashes at intersections and non-intersections

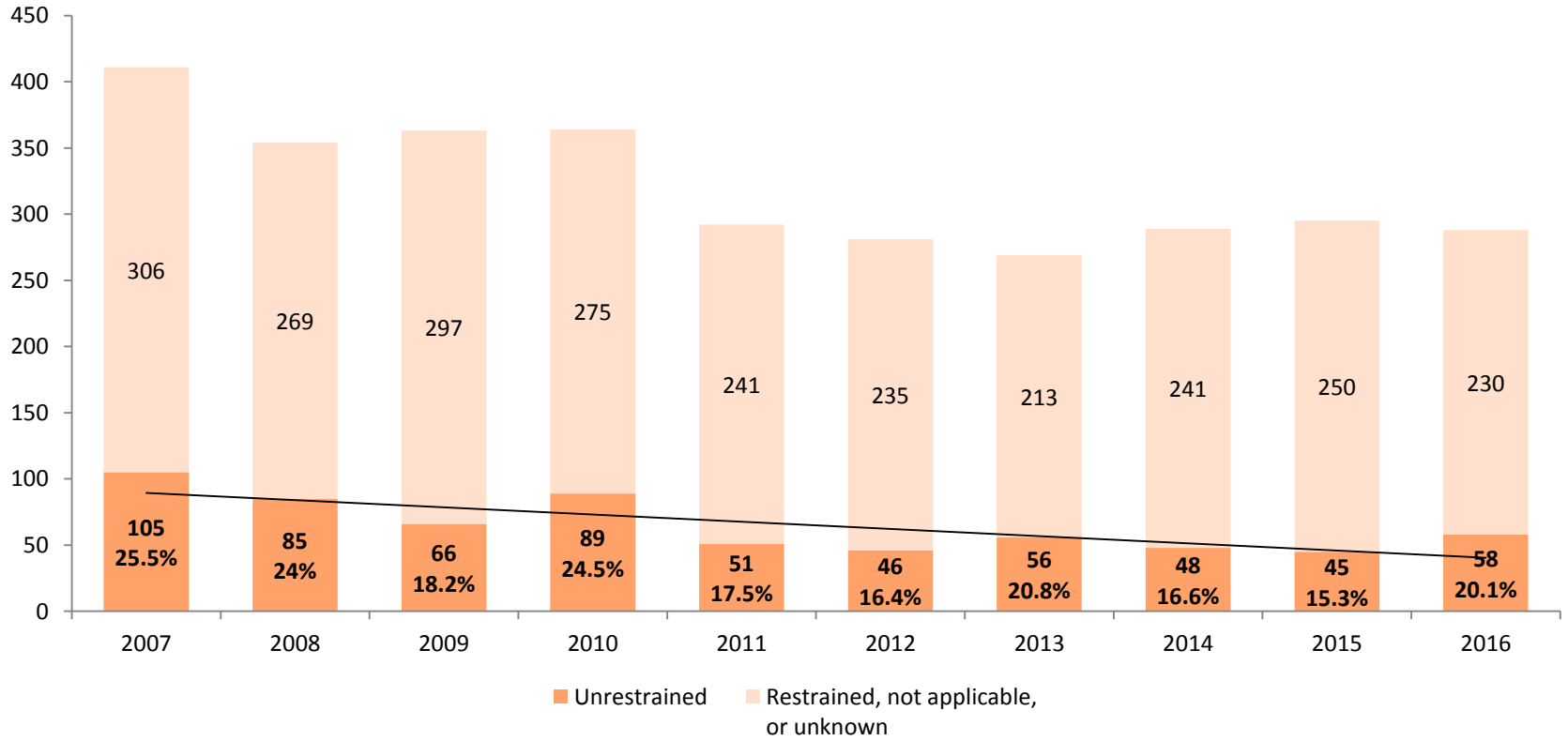


Unrestrained Fatal Victims

Table 7: Unrestrained fatal victims[4]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Unrestrained	105	85	66	89	51	46	56	48	45	58	51	65
Restrained, not applicable, or unknown	306	269	297	275	241	235	213	241	250	230	234	256
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 7: Unrestrained fatal victims

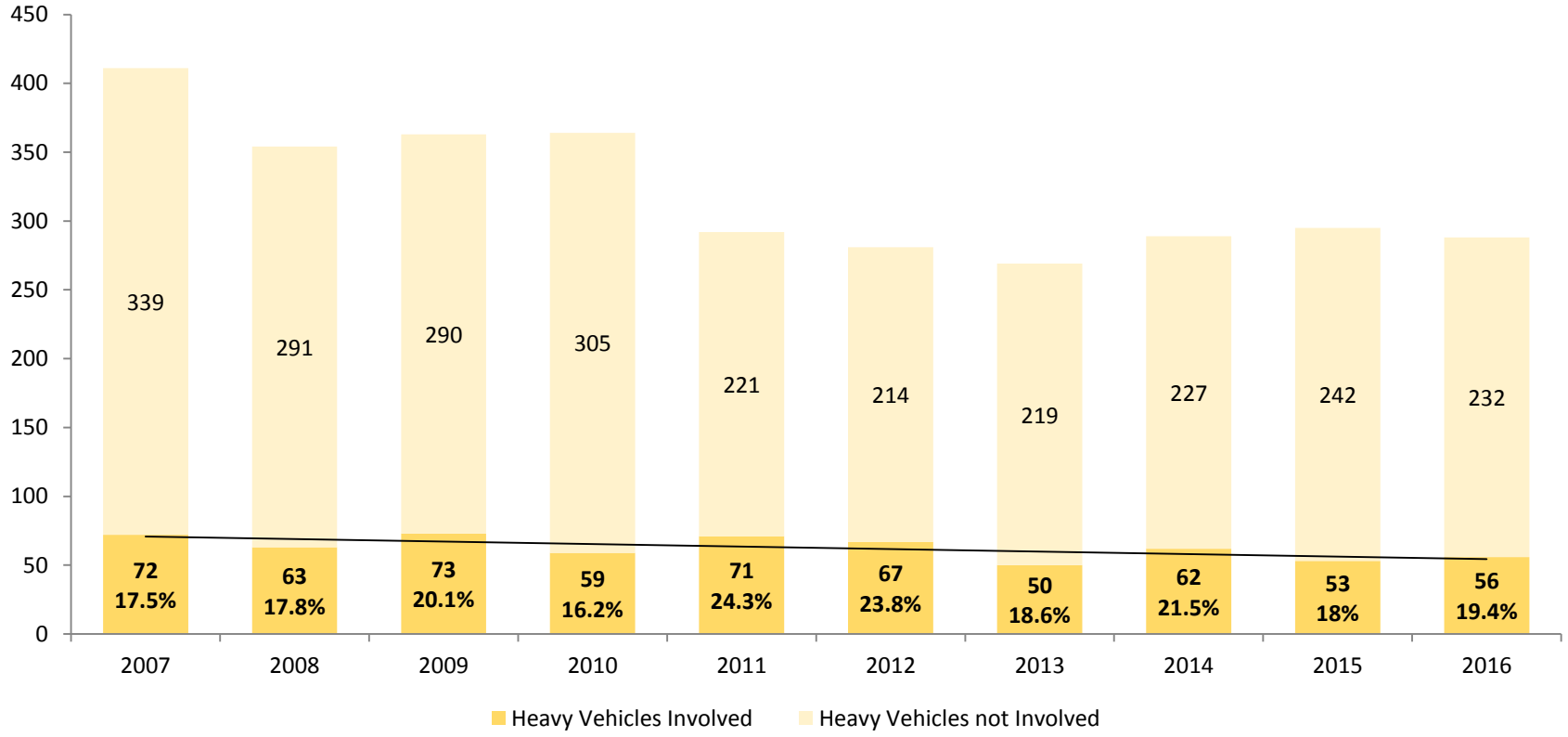


Fatal Victims of Crashes Involving Heavy Vehicles

Table 8: Fatal victims of crashes involving heavy vehicles[5]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Heavy Vehicles Involved	72	63	73	59	71	67	50	62	53	56	**58**	**63**
Heavy Vehicles not Involved	339	291	290	305	221	214	219	227	242	232	**227**	**258**
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 8: Fatal victims of crashes involving heavy vehicles

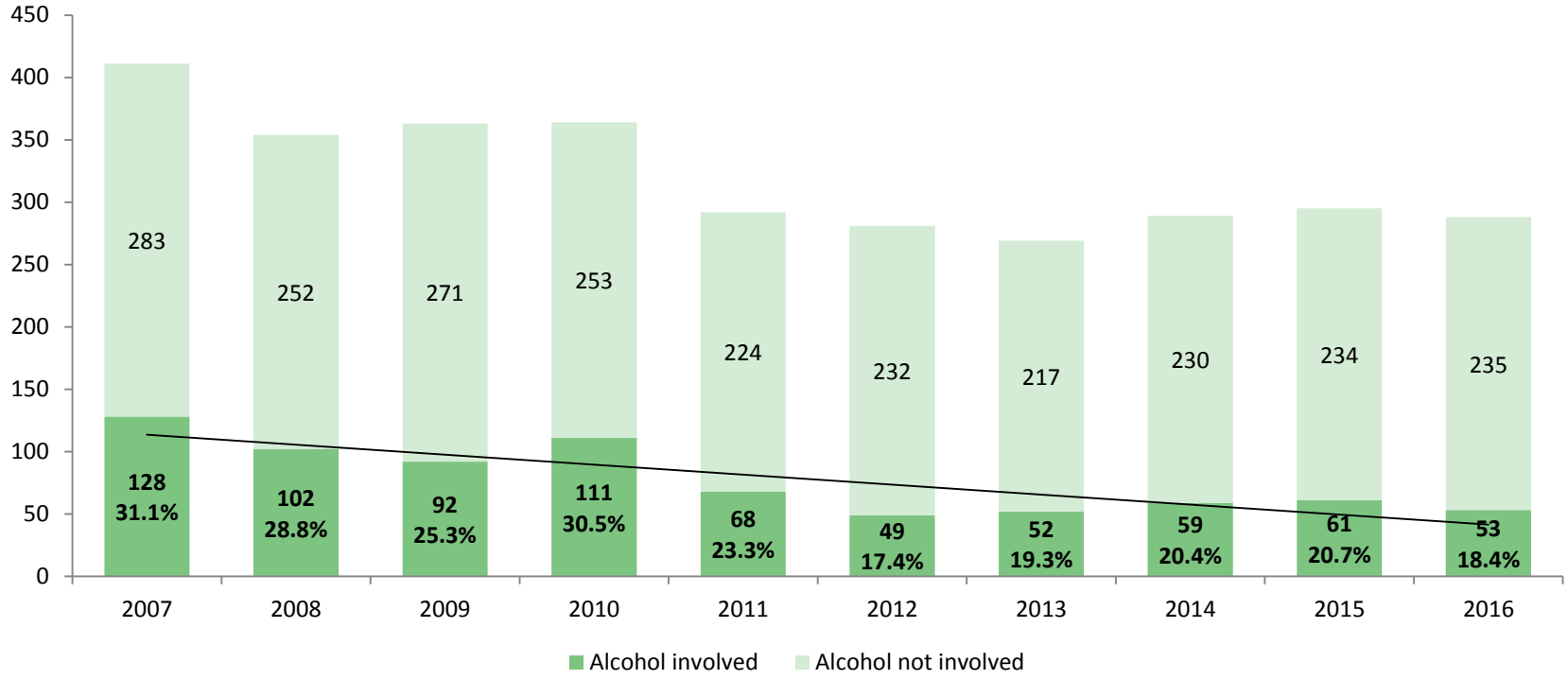


Fatal Victims of Crashes Involving Alcohol

Table 9: Fatal victims of crashes involving alcohol[6]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Alcohol involved	128	102	92	111	68	49	52	59	61	53	55	78
Alcohol not involved	283	252	271	253	224	232	217	230	234	235	230	244
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 9: Fatal victims of crashes involving alcohol

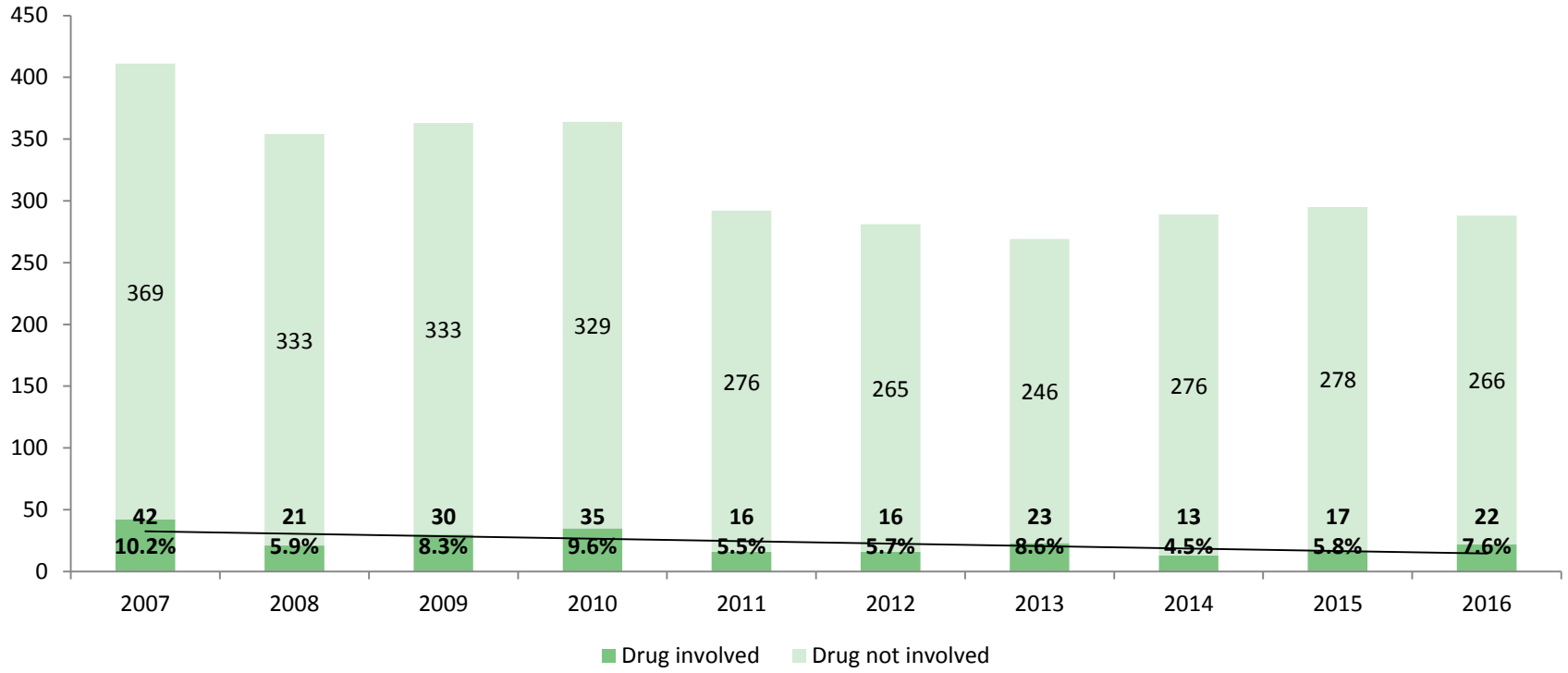


Fatal Victims of Crashes Involving a Drug

Table 10: Fatal victims of crashes involving a drug[7][8]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Drug involved	42	21	30	35	16	16	23	13	17	22	19	24
Drug not involved	369	333	333	329	276	265	246	276	278	266	267	298
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 10: Fatal victims of crashes involving a drug

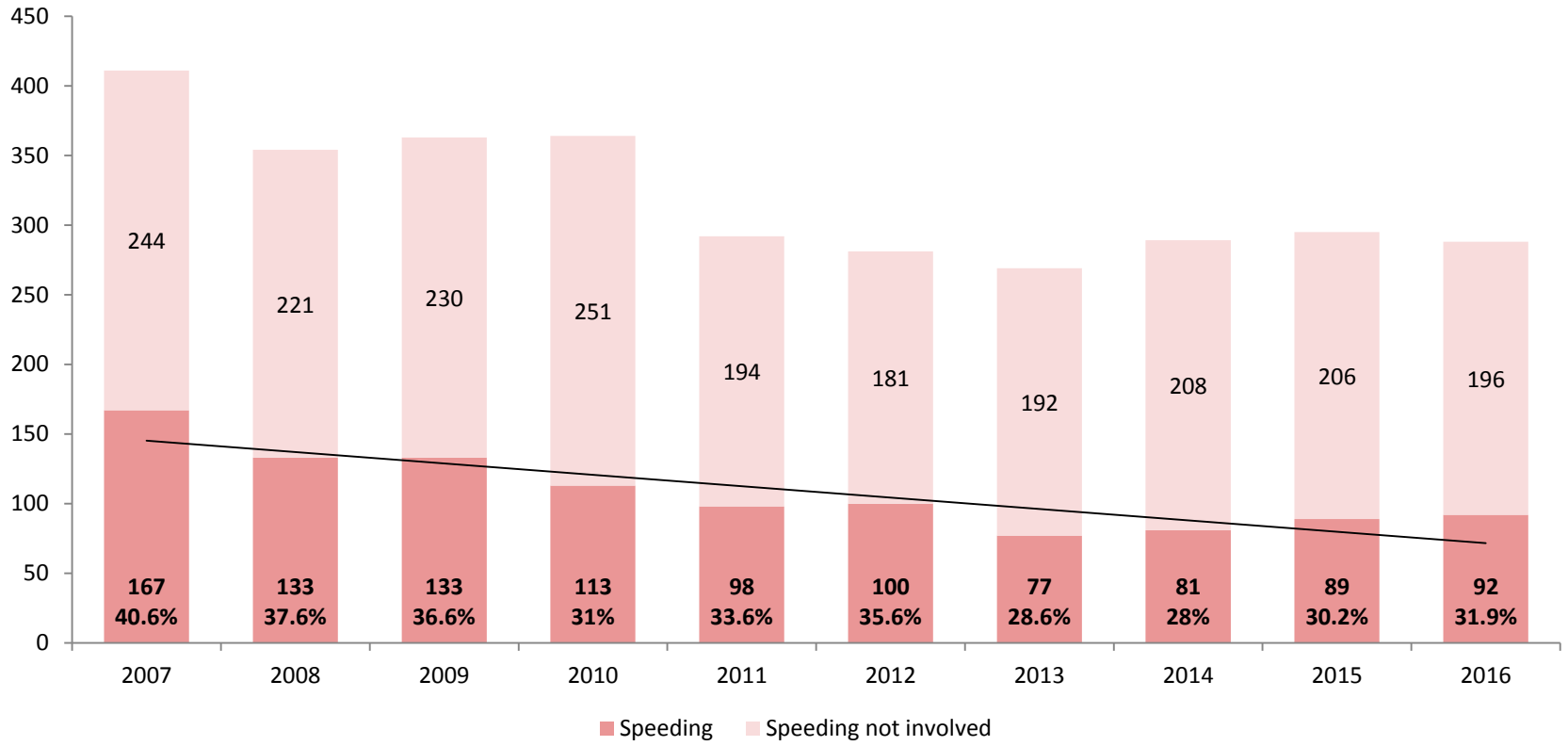


Fatal Victims of Crashes Involving Speeding

Table 11: Fatal victims of crashes involving speeding[9]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Speeding	167	133	133	113	98	100	77	81	89	92	88	109
Speeding not involved	244	221	230	251	194	181	192	208	206	196	197	213
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 11: Fatal victims of crashes involving speeding

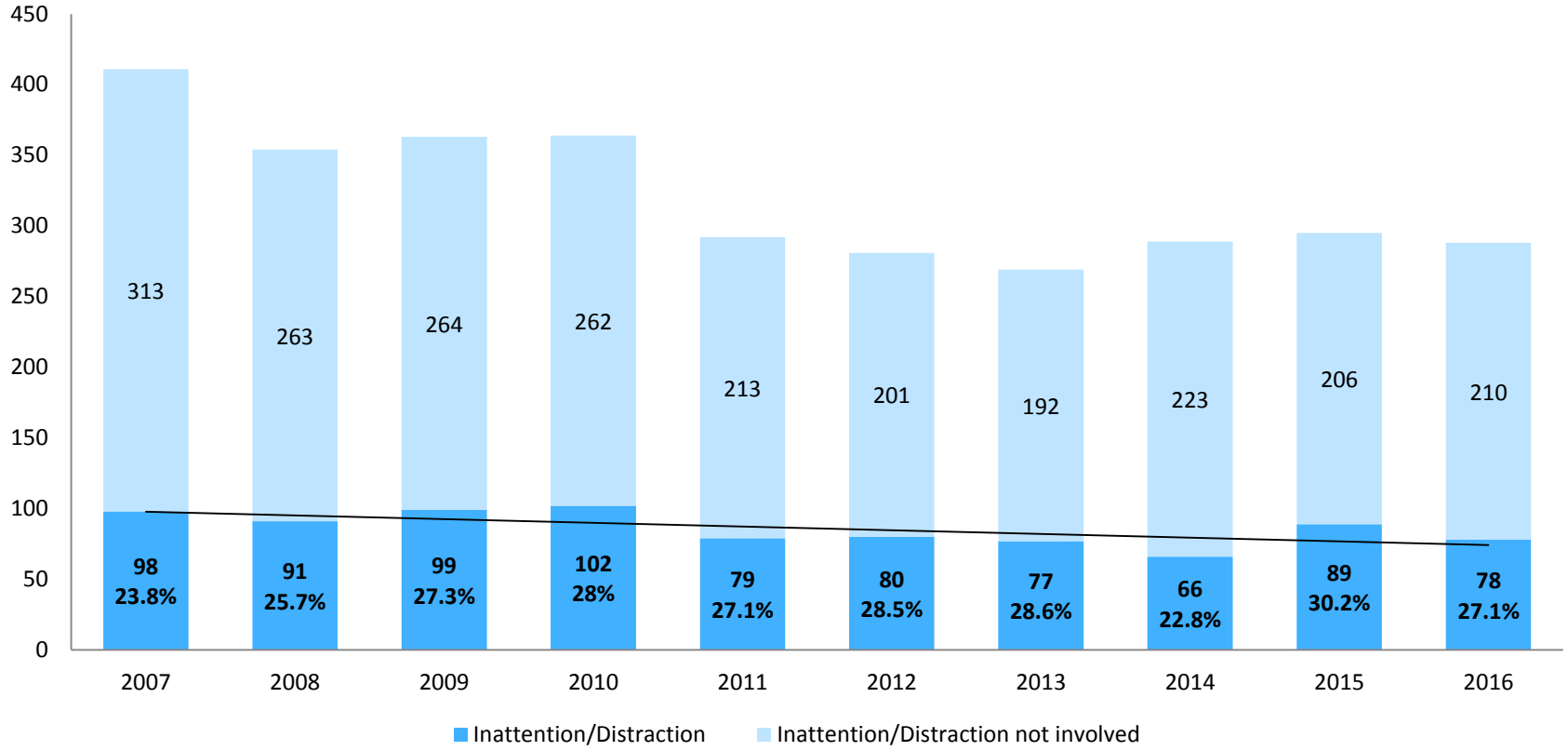


Fatal Victims of Crashes Involving all forms of Driver Distraction/Inattention

Table 12: Fatal victims of crashes involving driver distraction/inattention[10]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-year average	10-year average
Inattention/Distraction	98	91	99	102	79	80	77	66	89	78	78	86
Inattention/Distraction NOT involved	313	263	264	262	213	201	192	223	206	210	207	235
Total	**411**	**354**	**363**	**364**	**292**	**281**	**269**	**289**	**295**	**288**	**285**	**321**

Figure 12: Fatal victims of crashes involving driver distraction/inattention



Notes

[1] I. Johnston, C. Muir, & E. Howard (2014), Eliminating Serious Injury and Death from Road Transport: A crisis of complacency, Boca Raton, FL., CRC Press.

[2] British Columbia's regions include the following:

- Greater Vancouver: Includes Vancouver to Port Coquitlam, as far North as Whistler, and the eastern parts of the Sunshine Coast.
- Fraser Valley: Includes areas south of Vancouver, including Richmond, Delta, and Surrey, and as far east as Hope.
- Vancouver Island: Encompasses the Gulf Islands and the Mainland coastal community of Powell River.
- Southern Interior: Includes the southern third of the province, including the Kamloops area, the Okanagan and Kootenay regions, as far west as Boston Bar and Lillooet.
- North Central: Includes the Central Interior as far south as 100 Mile House, the Peace River district, Prince Rupert, Haida Gwaii, and all points north.

[3] Includes motorcycles, mopeds and enclosed motorcycles.

[4] Fatal victim was not wearing a restraint (seatbelt, lap belt, infant /child restraint system, booster seat).

[5] Heavy vehicles include: single unit truck / heavy (code 21); combination unit truck / light (code 30); comb unit truck / heavy (code 31); combination unit tractor / trailer (code 32); combination unit tractor/trailer & pup [4-wheel trailer] (code 33); log truck & pole trailer (code 34); tow truck (code 35); combination unit truck/pull trailer/5th wheeler (code 36); bus - local transit (code 41); bus - intercity (code 42); road construction (grader, paver, roller) (code 91); general construction (code 92); mobile crane (code 94).

[6] Fatal victims where one or more of the following contributing factors was assigned to the entities involved in the crash: alcohol involvement (10); ability impaired by alcohol (80); alcohol suspected (81);.

[7] Fatal victims where one or more of the following contributing factors was assigned to the entities involved in the crash: prescribed medication(27); drugs illegal (15); ability impaired by drugs (82); drugs suspected (83); ability impaired by medication (84).

8 Due to the nature of how contributing factors are assigned to each entity involved in a collision, it may be determined that an individual's involvement in a collision was due to both drugs **and** alcohol and therefore, that individual would be double counted both in fatalities where alcohol and drugs were a factor. Consequently, data on total impaired fatalities may be lower than the totals for fatalities where drugs and alcohol were contributing factors.

[9] Fatal victims where one or more of the following contributing factors was assigned to the entities involved in the crash: unsafe speed (code 31); exceeding speed limit (code 35); excessive speed over 40 km/h (code 36); and driving too fast for conditions (code 37).

[10] Fatal victims where one or more of the following contributing factors was assigned to the entities involved in the crash: communication/video equipment (code 34); driver inattentive (code 85); and driver internal/external distraction (code 86). "Driver inattentive (code 85)" represents the majority of these three codes.