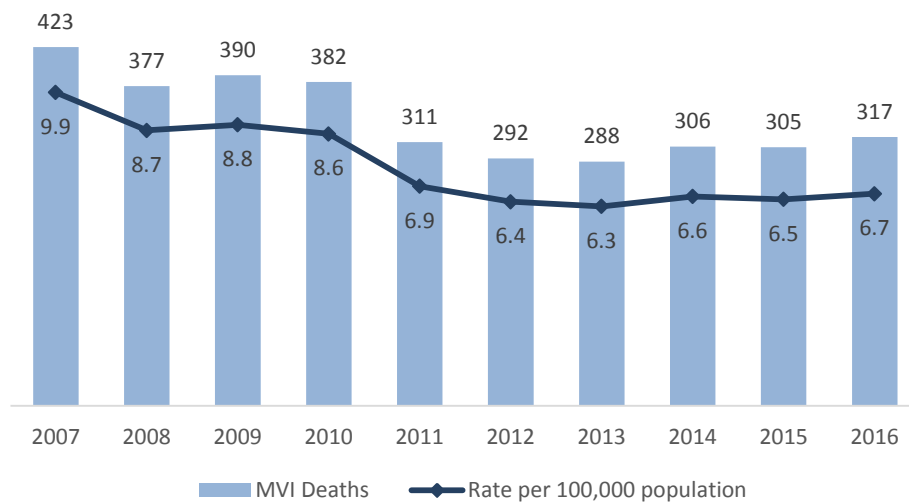


This report summarizes all accidental, traffic-related motor vehicle incident (MVI) deaths that occurred between January 1, 2007 and December 31, 2016.

**Inclusion Criteria:** For BC Coroners Service (BCCS) statistics, a traffic-related MVI is one occurring on a public "highway", as defined in the *Motor Vehicle Act*. This definition encompasses any roadway intended for or used by the public for the passage of vehicles, and any private place to which the public has access or is invited (e.g., for parking or vehicle servicing). Private driveways and forest service roads are excluded, except where the forest service road is open to public use. Incidents involving off-road vehicles, industrial vehicles, and farm vehicles are included when occurring on public highways, but excluded when occurring off-road or on a worksite.

**Caveats:** As the BCCS operates in a live database environment, the data are considered preliminary and subject to change. These data were compiled by date of death, which may differ from the date of injury. In some cases, the death may occur months or years subsequent to injury. These statistics may vary from those reported by other agencies because of differences in data definitions or reporting standards.

MVI Deaths and Crude Death Rate per 100,000 Population<sup>1</sup>



- Between 2007 and 2016, MVI deaths decreased by an average of 2.9% per year. The total percent change from 2007 to 2016 was a decrease of 25.1%.

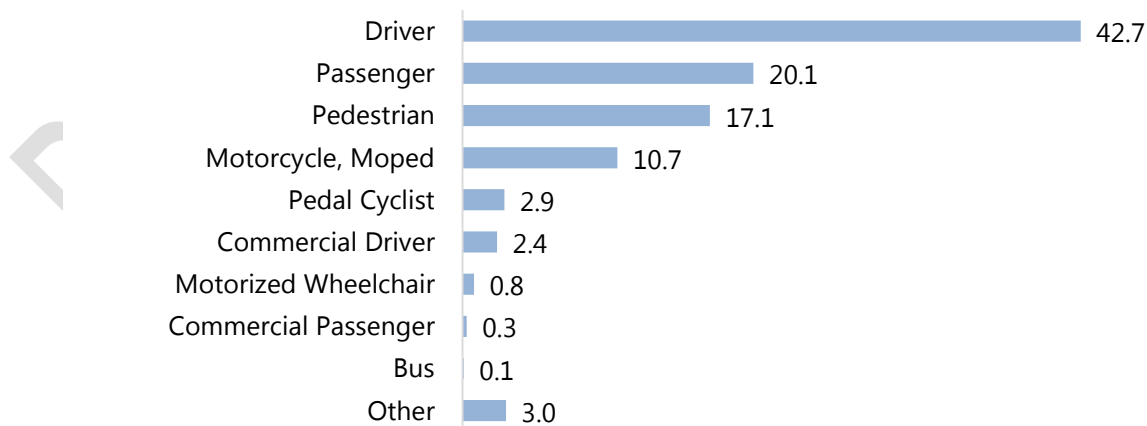
<sup>1</sup> Population estimates were taken from

<http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx>.

MVI Deaths by Region										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Interior	130	114	144	114	110	96	75	111	98	98
Fraser	107	99	87	104	61	57	60	69	67	74
Northern	68	61	55	70	62	49	59	61	56	55
Island	64	61	63	61	40	44	43	27	39	41
Metro	54	42	41	33	38	46	51	38	45	49
<b>Total</b>	<b>423</b>	<b>377</b>	<b>390</b>	<b>382</b>	<b>311</b>	<b>292</b>	<b>288</b>	<b>306</b>	<b>305</b>	<b>317</b>

MVI Deaths by Decedent Role										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Driver	204	178	176	166	123	109	108	121	124	140
Passenger	79	75	72	91	64	59	55	68	50	41
Pedestrian	65	56	60	60	57	63	52	54	66	65
Motorcycle, Moped	48	39	47	38	35	26	32	37	35	34
Pedal Cyclist	11	9	10	7	9	12	11	7	10	11
Commercial Driver	4	5	8	11	9	6	12	5	11	8
Motorized Wheelchair	5	1	6	1	-	6	2	3	3	4
Commercial Passenger	1	2	-	1	1	1	-	3	-	-
Bus	2	1	1	1	-	-	1	-	-	1
Other	4	11	10	6	13	10	15	8	6	13
<b>Total</b>	<b>423</b>	<b>377</b>	<b>390</b>	<b>382</b>	<b>311</b>	<b>292</b>	<b>288</b>	<b>306</b>	<b>305</b>	<b>317</b>

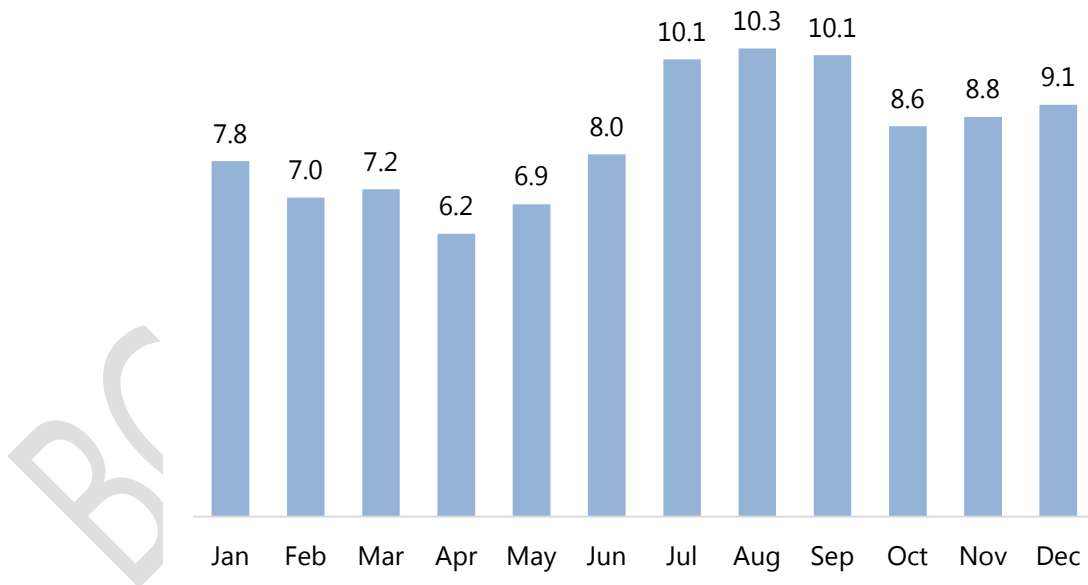
Percentage of MVI Deaths by Decedent Role, 2007-2016



- The average annual percent change in MVI deaths was greater for passengers (-5.3%) drivers (-3.4%) than for pedestrians (0.66%).

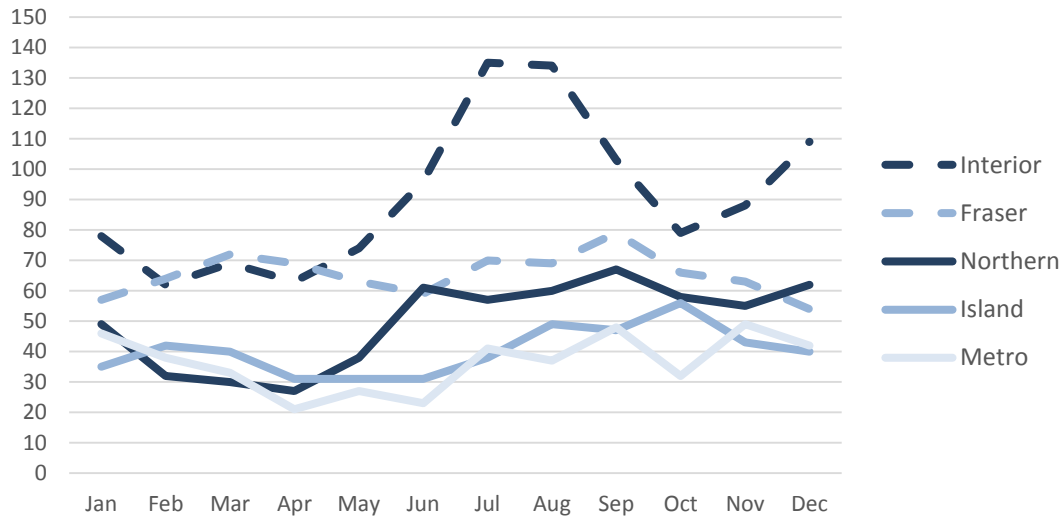
MVI Deaths by Month										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
January	28	28	20	36	28	17	21	29	28	30
February	26	32	33	31	17	30	17	18	18	16
March	29	32	23	23	22	30	24	11	17	33
April	29	17	23	29	16	24	17	12	19	25
May	35	28	29	23	14	22	24	20	22	16
June	26	30	38	37	28	12	21	33	27	18
July	48	50	39	35	32	22	26	32	29	28
August	37	36	40	44	32	27	32	29	36	36
September	50	31	31	37	32	28	38	35	30	32
October	39	28	33	32	36	26	21	28	23	25
November	35	27	40	25	27	30	24	25	30	35
December	41	38	41	30	27	24	23	34	26	23
<b>Total</b>	<b>423</b>	<b>377</b>	<b>390</b>	<b>382</b>	<b>311</b>	<b>292</b>	<b>288</b>	<b>306</b>	<b>305</b>	<b>317</b>

Percentage of MVI Deaths by Month, 2007-2016



- August had the highest incidence of MVI deaths for 2007-2016.

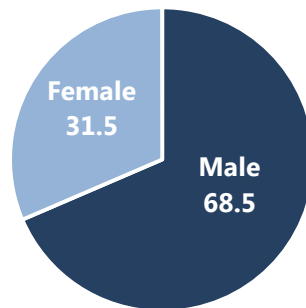
MVI Deaths by Month and Region, 2007-2016



- The largest number of MVI deaths in the province occurred in the Interior region during the summer months.

MVI Deaths by Gender										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Female	131	123	112	131	95	94	96	89	93	103
Male	292	254	278	251	216	198	192	217	212	214
<b>Total</b>	<b>423</b>	<b>377</b>	<b>390</b>	<b>382</b>	<b>311</b>	<b>292</b>	<b>288</b>	<b>306</b>	<b>305</b>	<b>317</b>

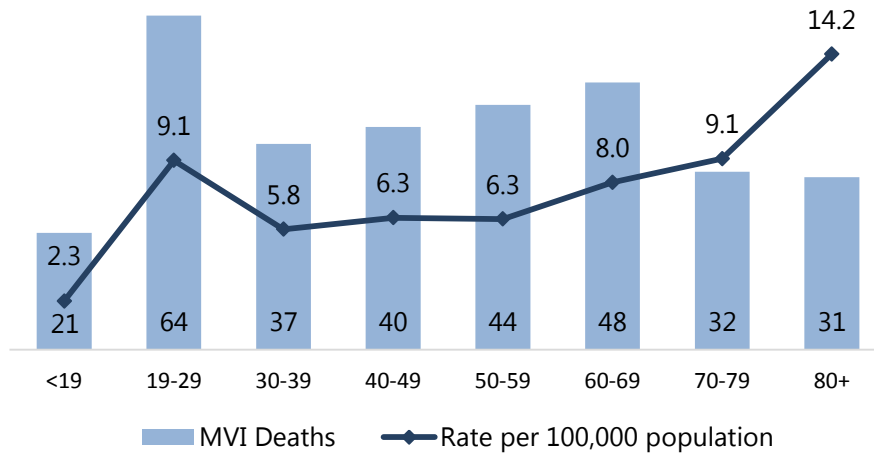
Percentage of MVI Deaths by Gender, 2007-2016



- There was a much higher proportion of MVI deaths among males than females.

MVI Deaths by Age Group										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<19	42	43	30	35	22	29	17	23	15	21
19-29	105	85	78	72	65	52	66	52	57	64
30-39	53	51	43	47	38	37	40	34	39	37
40-49	77	59	81	65	37	39	30	37	48	40
50-59	61	49	60	65	53	41	48	49	50	44
60-69	31	43	33	30	37	29	28	41	36	48
70-79	24	22	32	40	26	38	27	40	27	32
80+	30	25	33	28	33	27	32	30	33	31
<b>Total</b>	<b>423</b>	<b>377</b>	<b>390</b>	<b>382</b>	<b>311</b>	<b>292</b>	<b>288</b>	<b>306</b>	<b>305</b>	<b>317</b>

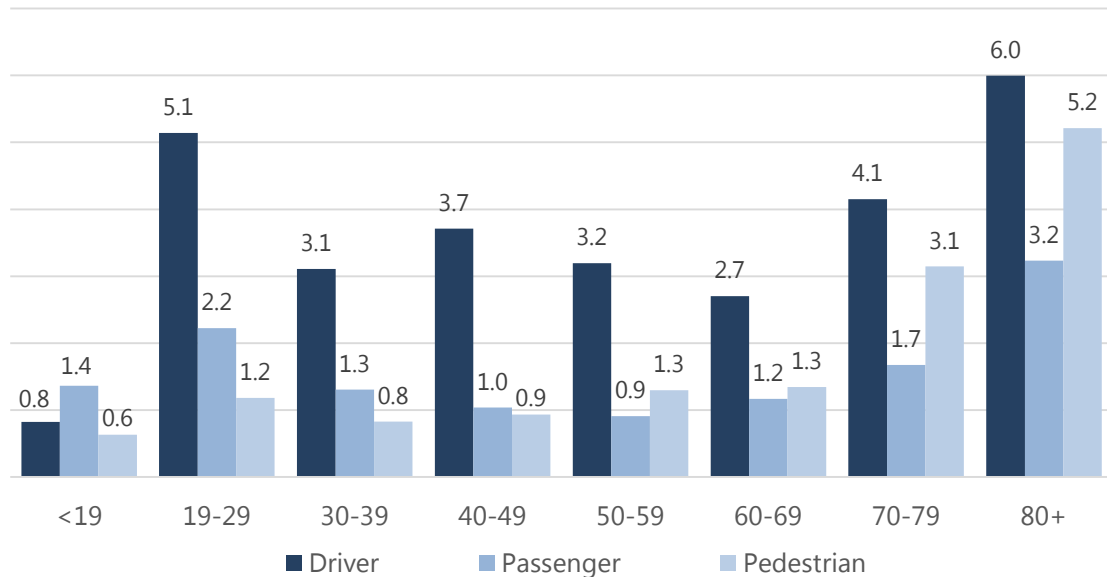
MVI Death Rate per 100,000 Population by Age Group, 2016



- In 2016, the MVI death rate was highest for those aged 70-79 and 80+. This may reflect age-related increases in susceptibility to injury and medical complications when involved in an MVI, rather than an increased likelihood of being involved in an MVI<sup>2</sup>.

<sup>2</sup> Li, G., Braver E.R. and Chen, L-H. (2003). Fragility versus excessive crash involvement as determinants of high death rates per vehicle-mile of travel among older drivers. Accident Analysis and Prevention, 35, 227-235.

Age-Specific MVI Death Rates per 100,000 Population by Means of MVI Death, 2007-2016



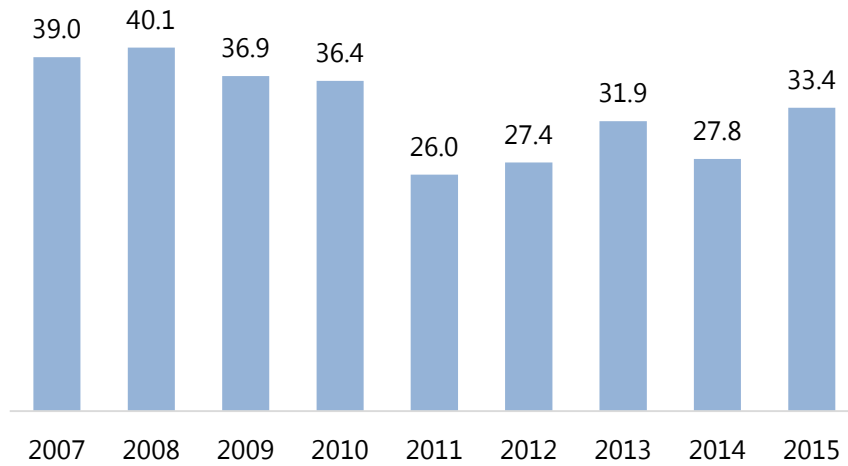
- People ages 80 years and older and 19-29 years had the highest MVI death rate when involved in an MVI where they were either a driver or passenger. People 70 years of age and older had the highest MVI death rate when involved in an MVI as a pedestrian.

BC Coroners Service

MVI Deaths Involving Alcohol and/or Drugs									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
Alcohol	96	83	90	77	46	44	41	45	47
Alcohol & Drugs	38	45	29	34	20	18	24	24	30
Drugs	31	23	25	28	15	18	27	16	25
Total Alcohol and/or Drugs	165	151	144	139	81	80	92	85	102
% of MVI Deaths	39.0	40.1	36.9	36.4	26.0	27.4	31.9	27.8	33.4

*Note: Alcohol/drug data for 2016 are not currently available.*

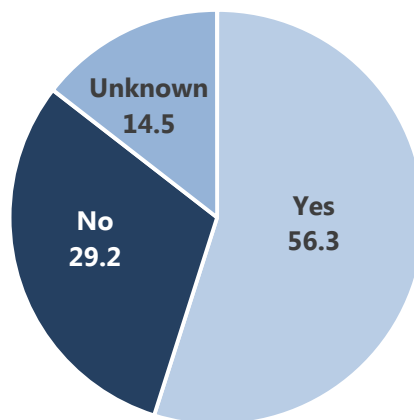
Percentage of MVI Deaths With Drugs and/or Alcohol Involved, 2007-2015



<b>Restraint Use<sup>3</sup></b>					
Restraint	2011	2012	2013	2014	2015
Yes	117	101	93	123	89
No	60	56	60	48	47
Unknown*	20	18	22	26	49
<b>Total</b>	<b>197</b>	<b>175</b>	<b>175</b>	<b>197</b>	<b>185</b>

Note: Restraint includes cases where both a shoulder and lap belt were used and cases where only a lap belt was used. \* Unknown includes cases where restraint use could not be determined and cases still under investigation. *Restraint use data for 2016 are not currently available.*

Percentage Restraint Use, 2011-2015

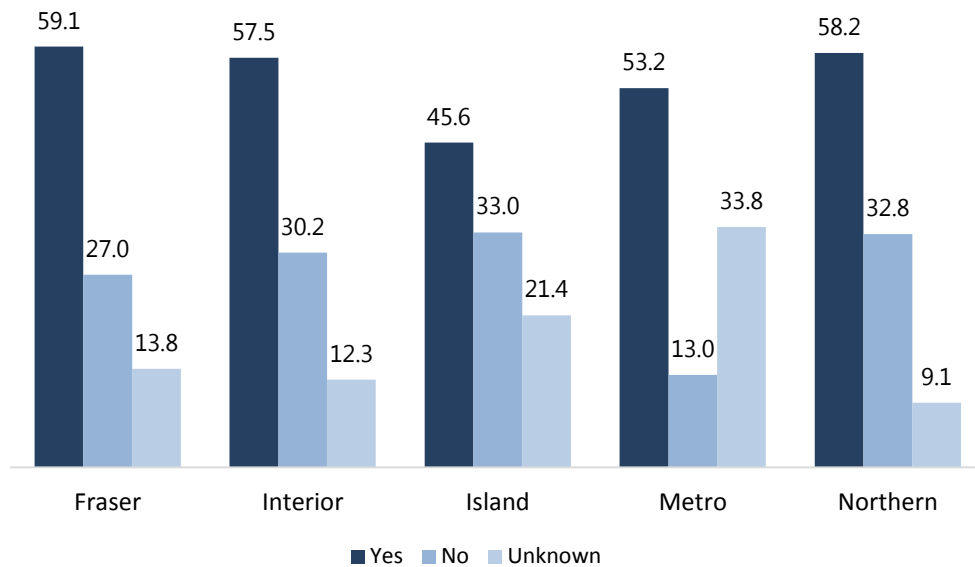


- Between 2011 and 2015, 29.2% of decedent drivers and passengers were not wearing a seatbelt. Transport Canada’s Rural and Urban Surveys of Seatbelt Use in Canada (2009-2010) indicated seatbelt use in British Columbia at 96.9%, suggesting an overrepresentation of non-seatbelt wearers in the MVI fatality statistics.

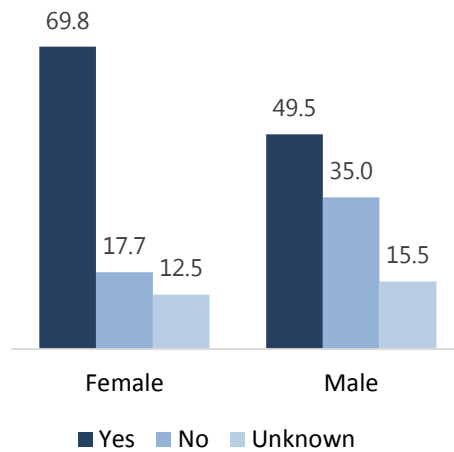
<sup>3</sup> Only includes drivers and passengers in private and commercial vehicles.



Percentage Restraint Use by Region, 2011-2015



Percentage Restraint Use by Sex, 2011-2015



- From 2011-2015, restraint use was more common among female decedent drivers and passengers than among male decedent drivers and passengers.