

Annual Statistical Fire Report 2009



**Emergency Management BC
Office of the Fire Commissioner**

*This report contains British Columbia fires as reported to the
Office of the Fire Commissioner for 2009*

British Columbia Fire Injuries and Fatalities

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British Columbia Fire Injuries and Fatalities

BC Dollar Losses, Fire Injuries and Fire Fatalities 5 Year Summary

Year	Population for BC	Total Number of Fires	Civilian Injuries	Firefighter Injuries	Civilian Fatalities	Firefighter Fatalities	BC Fire Injury/Fatality Rate*
2005	4,196,788	7250	175	20	34	1	4.6/0.8
2006	4,243,580	8073	180	21	23	0	4.7/0.5
2007	4,309,632	7846	150	22	43	0	4.0/1.0
2008	4,384,047	8092	168	41	57	0	4.7/1.3
2009	4,459,947	8718	165	35	53	0	4.4/1.2
Totals		39,979	977	139	210	1	
5 Year Average	4,318,799	7996	195	28	42	0.2	4.5/1.0

* BC Fire Injury/Fatality Rate per 100,000 populations.

1. Fire is any instance of destructive or uncontrolled burning of combustible solids, liquids or gases. Fire does not include: lightning, forest fires, motor vehicle accidents, and explosions - steam/ammunition.
2. Population Source: BC Stats.
3. Totals as reported to the Office of the Fire Commissioner.

Fire Fatalities by Property Classification

Property Classification	Fatalities	%
Residential - One and Two Family Dwellings	35	66
Residential - Mobile Homes	6	11
Outside Area	10	19
Senior Housing	1	2
Campground	1	2
Totals	53	100



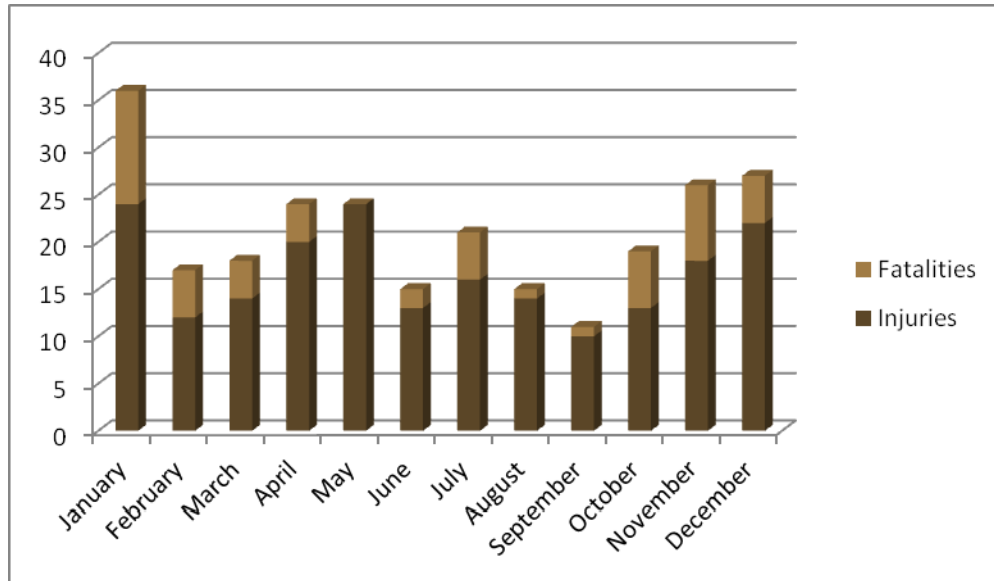
FIRE FACTS

Fire Injuries and Fatalities 2009

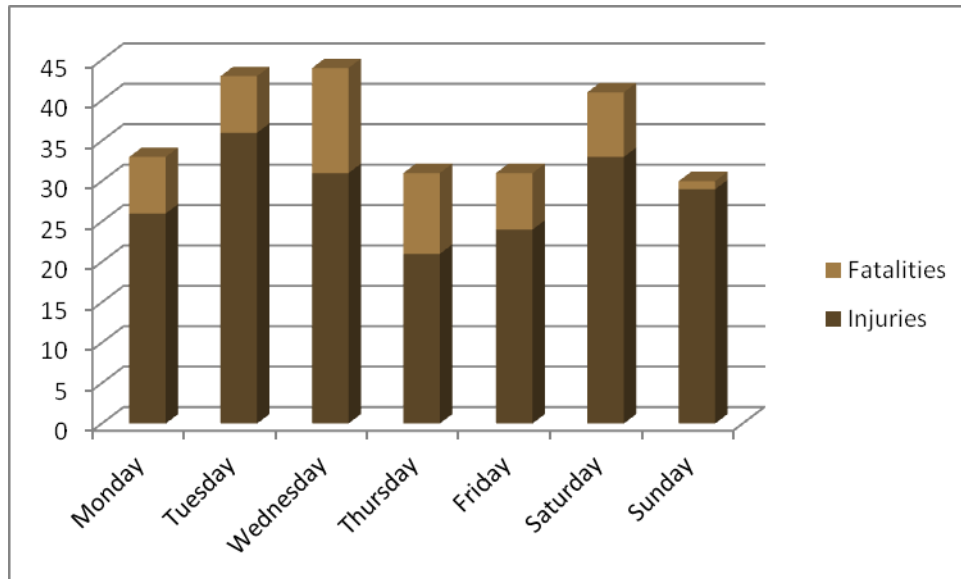
- Most injuries occurred in the spring months (April-May 22%) and winter months (Nov-Jan 32%).
- Most fatalities occurred in the January and November making up (38%).
- 11% of fire fatalities were caused by smoking materials (cigarette, lighter, matches) and 23% of fire injuries were caused by the stovetop/oven where the igniting object were determined as cause of the fires.

Residential Fires and Smoke Alarm Operation

Fire Fatalities and Injuries by Month



Fire Fatalities and Injuries by Day of Week

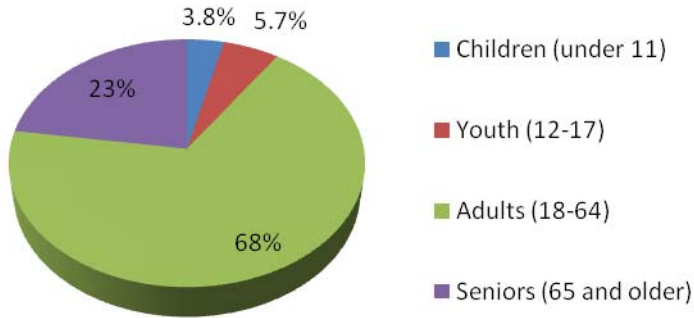


Fire Fatalities and Injuries by Time of Day

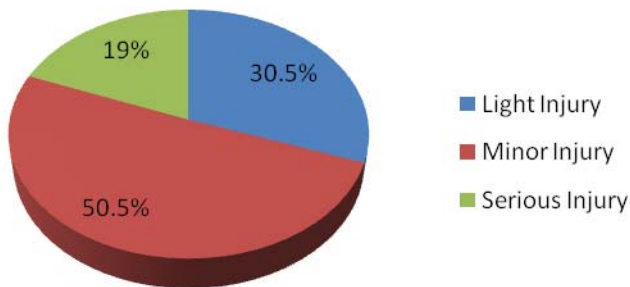
Time of Day Range	Fire Injuries		Fire Fatalities	
	Number	%	Number	%
6:01 am - 11:59 am	26	13	11	21
12 noon - 4:59 pm	62	31	8	15
5 pm - 9:59 pm	43	21.5	15	28
10 pm – 6 am	69	34.5	19	36
Total	200	100	53	100

Residential Fires and Smoke Alarm Operation

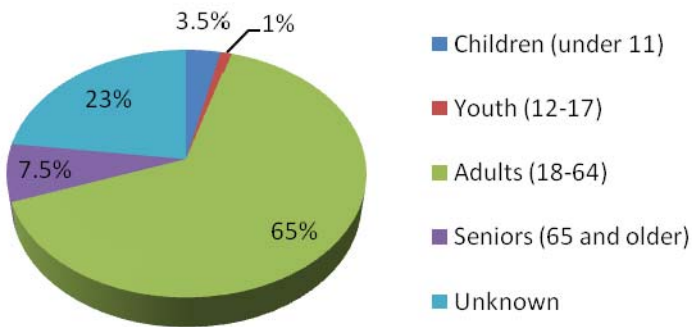
Fire Fatalities by Age Group



Type of Fire Injuries



Fire Injuries by Age Group



Location of Fire Fatalities

Abbotsford	1
Agassiz	1
Armstrong	1
Balfour	1
Burnaby	2
Cache Creek	1
Chilliwack	1
Cranbrook	1
Eagle Bay	3
Edgewater	1
Hornby Island	1
Ladysmith	5
Lake Cowichan	1
Lone Butte	1
Lund	1
Mayne Island	1
McBride	1
Merritt	1
Mission	1
Mount Currie	1
Nanaimo	1
Nelson	1
New Westminster	2
North Vancouver	2
Penticton	1
Port Coquitlam	1
Port Hardy	1
Quesnel	1
Saltspring Island	2
Savona	1
Sooke	1
Squamish	2
Surrey	2
Terrace	2
Vancouver	4
Victoria	2
Totals	53

* Above statistics include 35 firefighter injuries and 0 firefighter fatalities.

* See glossary for definitions of types of injuries.

Residential Fires and Smoke Alarm Operation



Top Areas of Origin for Fires Started in Residential Homes:

1. Kitchen - 26%
2. Ceiling/Wall/Floor - 11%
3. Bedroom - 9%
4. Living room - 8%

Smoke Alarm Operation

Smoke Alarm Breakdown by Description in Building Structures	Number of Fires	Total Dollar Loss	Injuries	Fatalities
Cannot be determined	721	\$70,960,860	49	18
Alarm Activated - Assisted Occupant(s) in evacuating	450	\$35,850,034	37	4
Alarm Activated - Inaudible	13	\$201,500	0	0
Alarm Activated - Occupant(s) unable to respond	28	\$684,579	3	3
Alarm Activated - Unnecessary to evacuate or unoccupied	163	\$9,101,113	2	0
Alarm Activated - Occupant action unknown	110	\$4,356,215	11	2
Alarm Not Activated - Unsuitable location	97	\$3,441,251	2	0
Alarm Not Activated - No battery or battery dead	54	\$12,803,770	1	2
Alarm Not Activated - AC power not connected, disabled or off	44	\$2,468,026	10	0
Alarm Not Activated - Mechanical Failure	10	\$460,217	0	0
Alarm Not Activated - Unknown	305	\$13,972,113	19	2
No smoke alarm installed	398	\$17,764,548	26	5
Sub-total - Smoke Alarm did not activate, or was not installed	908	\$50,910,125	58	9
Totals	2393	\$172,065,226	160	36

Fire Facts

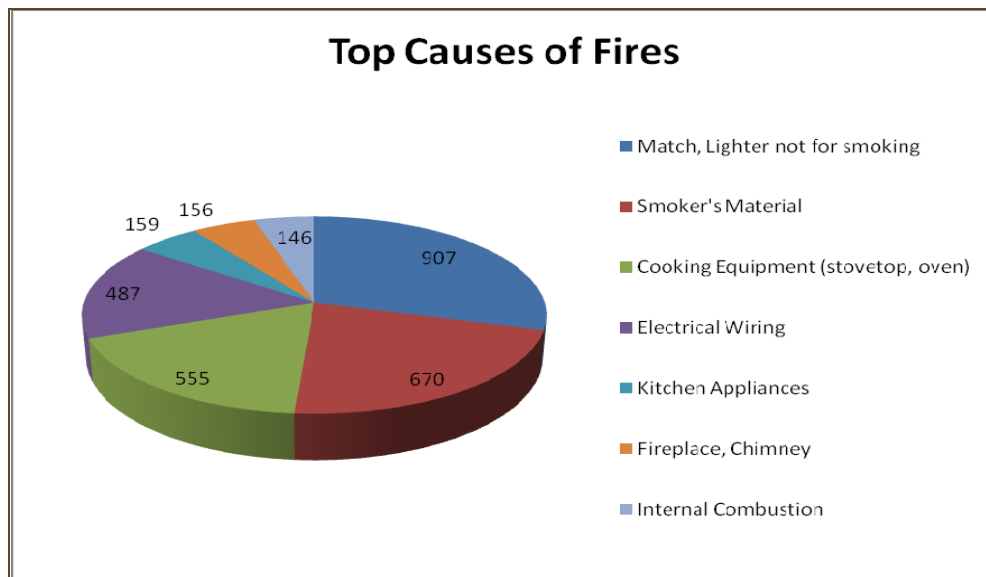
Residential Fires

- In 2009, residential fires accounted for nearly 80% of fire-related injuries in BC.
- On average, a British Columbian is injured by residential fire every 55 hours in BC.
- In 2009, there were 2,393 residential fires reported in B.C., resulting in 36 fatalities.
- Adults have the highest risk (75%) of dying in the home fires.
- Cooking is the leading cause of the determined home fires and fire related injuries.

Fire Dollar Losses in BC and Top Causes of Fires

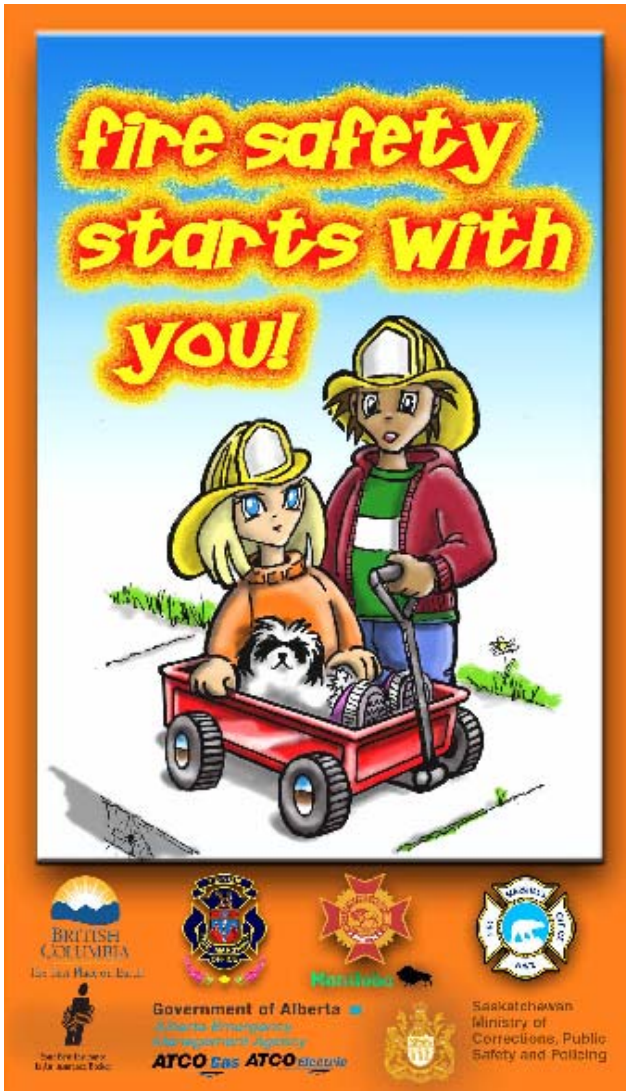
Five Year Fire Dollar Losses in BC

Year	Total Number of Fires	All Fires in BC Dollar Loss
2005	7250	\$213,474,122
2006	8073	\$236,880,593
2007	7846	\$307,307,614
2008	8092	\$385,910,724
2009	8718	\$291,895,609
Totals	39,979	\$1,435,468,662
5 Year Average	7995	\$287,093,732



Breakdown of Fires by Act or Omission

Act of Omission	Percentage	Injured	Fatality	Dollar Loss
Accidental	47%	134	25	\$126,711,644
Undetermined	31%	44	25	\$112,789,184
Incendiary	20%	14	3	\$47,957,338
Natural	2%	8	0	\$4,437,443
Totals	100%	200	53	\$291,895,609



Fire Prevention Week Facts

Through a federal proclamation signed in 2009, the second week of October will be known as “Fire Prevention Week” across Canada. The focus of the 2009 campaign was “Be Fire Safe: Don’t Get Burned” and included lesson plans focused on:

- identifying fire and burn hazards;
- knowing what to do in case of a fire and who to call;
- recognizing the sound of a smoke alarm and knowing what to do;
- planning an escape and practicing a home escape plan;
- demonstrating what to do if clothing is on fire; and,
- treating a minor burn.

BC Fire departments are the catalysts that get the Fire Prevention Week message out to BC schools, targeting kindergarten through grade 3 children and their families. Without fire department engagement, creative initiatives, communications and steadfast support to their communities, the fire safety message would not be as successful as it is.

Juvenile Firesetter Statistics

Gender Breakdown for Juvenile Firesetters :

- Male - 70
- Female - 14

Ignition Source used to start fires:

- Lighter - 64
- Matches – 16
- Other - 4

Fires Per Capita by Location *

Location Name	2009 Population	Number of Fires	Injuries	Fatalities	Fire Dollar Loss	Per Capita Loss	Fires per 1000 Persons
100 Mile House	1,943	22	0	0	1,071,949	551.7	11.3
Abbotsford	136,031	454	7	1	10,153,180	74.6	3.3
Alert Bay	476	0	0	0	0	0	0
Anmore	2,030	0	0	0	0	0	0
Armstrong	4,539	2	0	1	1,100	0.2	0.4
Ashcroft	1,742	1	0	0	0	0	0.6
Barriere	1,723	1	0	0	3,535	2.1	0.6
Belcarra	679	0	0	0	0	0	0
Bowen Island	3,613	1	0	0	142,500	39.4	0.3
Burnaby	223,076	164	16	2	7,286,378	32.7	0.7
Burns Lake	2,117	5	0	0	592,500	279.9	2.4
Cache Creek	1,085	1	1	1	25,000	23	0.9
Campbell River	31,367	34	0	0	1,016,990	32.4	1.1
Canal Flats	747	0	0	0	0	0	0
Castlegar	7,881	6	0	0	211,440	26.8	0.8
Central Saanich	16,190	18	1	0	323,750	20	1.1
Chase	2,481	4	0	0	534,630	215.5	1.6
Chetwynd	2,680	3	0	0	261,545	97.6	1.1
Chilliwack	76,200	205	15	1	5,349,592	70.2	2.7
Clearwater	2,364	1	0	0	130,000	55	0.4
Clinton	598	5	0	0	71,900	120.2	8.4
Coldstream	10,402	17	0	0	690,650	66.4	1.6
Colwood	16,194	29	2	0	471,450	29.1	1.8
Comox	13,460	1	0	0	2,373	0.2	0.1
Coquitlam	123,362	156	0	0	21,063,615	170.7	1.3
Courtenay	24,246	28	2	0	1,026,878	42.4	1.2
Cranbrook	19,185	33	0	1	892,016	46.5	1.7
Creston	5,252	25	0	0	75,000	14.3	4.8
Cumberland	3,167	1	0	0	3,000,000	947.3	0.3
Dawson Creek	11,528	49	0	0	955,257	82.9	4.3
Delta	99,984	22	1	0	1,573,888	15.7	0.2
Duncan	5,014	3	0	0	15,528	3.1	0.6
Elkford	2,606	19	0	0	0	0	7.3
Enderby	2,910	1	0	0	0	0	0.3
Esquimalt	17,704	13	0	0	933,800	52.7	0.7
Fernie	4,420	9	1	0	14,370	3.3	2
Fort St. James	1,362	0	0	0	0	0	0
Fort St. John	18,394	30	2	0	11,074,666	602.1	1.6

*As reported to the Office of the Fire Commissioner

Fires Per Capita by Location *

Location Name	2009 Population	Number of Fires	Injuries	Fatalities	Fire Dollar Loss	Per Capita Loss	Fires per 1000 Persons
Fraser Lake	1,135	1	0	0	2,000	1.8	0.9
Fruitvale	2,034	6	1	0	14,783	7.3	2.9
Gibsons	4,453	3	0	0	3,340	0.8	0.7
Gold River	1,426	8	0	0	360,615	252.9	5.6
Golden	3,964	20	0	0	1,324,504	334.1	5
Grand Forks	4,155	16	0	0	30,411	7.3	3.9
Granisle	377	0	0	0	0	0	0
Greenwood	633	0	0	0	0	0	0
Harrison Hot Springs	1,596	1	0	0	0	0	0.6
Hazelton	296	0	0	0	0	0	0
Highlands	2,036	0	0	0	0	0	0
Hope	6,277	55	1	0	699,068	111.4	8.8
Houston	2,962	2	0	0	320,000	108	0.7
Hudson's Hope	1,052	1	0	0	14,490	13.8	1
Invermere	3,184	0	0	0	0	0	0
Kamloops	87,124	155	3	0	4,648,108	53.4	1.8
Kaslo	1,167	0	0	0	0	0	0
Kelowna	120,961	228	2	0	4,985,259	41.2	1.9
Kent	5,522	11	0	0	2,108,833	381.9	2
Keremeos	1,514	12	0	0	367,496	242.7	7.9
Kimberley	6,713	15	0	0	1,009,085	150.3	2.2
Kitimat	9,238	34	8	0	2,524,386	273.3	3.7
Ladysmith	8,128	31	0	0	849,282	104.5	3.8
Lake Country	11,423	19	0	0	906,464	79.4	1.7
Lake Cowichan	3,186	3	0	1	651,668	204.5	0.9
Langford	27,362	53	0	0	1,631,839	59.6	1.9
Langley District Municipality	103,394	337	4	0	5,124,311	49.6	3.3
Langley, City of	25,557	36	1	0	1,232,026	48.2	1.4
Lantzville	3,721	0	0	0	0	0	0
Lillooet	2,370	18	0	0	500,000	211	7.6
Lions Bay	1,403	0	0	0	0	0	0
Logan Lake	2,193	2	0	0	33,732	15.4	0.9
Lumby	1,806	8	1	0	474,060	262.5	4.4
Lytton	231	0	0	0	0	0	0
Mackenzie	3,831	5	0	0	119,196	31.1	1.3
Maple Ridge	75,143	35	1	0	1,952,826	26	0.5
Masset	930	1	0	0	0	0	1.1

*As reported to the Office of the Fire Commissioner

Fires Per Capita by Location *

Location Name	2009 Population	Number of Fires	Injuries	Fatalities	Fire Dollar Loss	Per Capita Loss	Fires per 1000 Persons
McBride	675	1	0	1	1,000	1.5	1.5
Merritt	7,460	10	0	1	55,142	7.4	1.3
Metchosin	5,139	1	0	0	470,000	91.5	0.2
Midway	658	1	0	0	7,174	10.9	1.5
Mission	37,213	32	0	1	4,070,874	109.4	0.9
Montrose	1,023	0	0	0	0	0	0
Nakusp	1,532	12	0	0	1,306,200	852.6	7.8
Nanaimo	84,331	533	7	1	5,565,239	66	6.3
Nelson	9,951	21	0	0	1,328,234	133.5	2.1
New Denver	503	0	0	0	0	0	0
New Hazelton	610	0	0	0	0	0	0
New Westminster	65,096	127	6	2	1,305,425	20.1	2
North Cowichan	29,530	17	0	0	1,695,982	57.4	0.6
North Saanich	11,034	1	0	0	2,354	0.2	0.1
North Vancouver District Municipality	86,832	53	0	1	3,538,243	40.7	0.6
North Vancouver, City of	48,941	102	12	1	9,663,814	197.5	2.1
Northern Rockies Regional Municipality (Fort Nelson)	4,457	20	0	0	557,782	125.15	4.48
Oak Bay	18,035	66	0	0	102,735	5.7	3.7
Oliver	4,788	11	0	0	37,983	7.9	2.3
Osoyoos	5,196	9	0	0	542,624	104.4	1.7
Parksville	11,798	4	0	0	464,977	39.4	0.3
Peachland	5,250	19	0	0	556,356	106	3.6
Pemberton	33,291	49	0	1	2,897,868	87	1.5
Penticton	18,035	66	0	0	102,735	5.7	3.7
Pitt Meadows	17,937	13	1	0	1,341,043	74.8	0.7
Port Alberni	17,763	22	0	0	741,191	41.7	1.2
Port Alice	843	2	0	0	0	0	2.4
Port Clements	450	0	0	0	0	0	0
Port Coquitlam	56,516	151	2	1	3,063,055	54.2	2.7
Port Edward	577	0	0	0	0	0	0
Port Hardy	3,991	3	0	1	7,050	1.8	0.8
Port McNeill	2,622	2	0	0	246,763	94.1	0.8
Port Moody	33,039	83	1	0	243,115	7.4	2.5
Pouce Coupe	747	2	0	0	427,352	572.1	2.7
Powell River	13,355	26	0	0	1,494,850	111.9	1.9

*As reported to the Office of the Fire Commissioner

Fires Per Capita by Location *

Location Name	2009 Population	Number of Fires	Injuries	Fatalities	Fire Dollar Loss	Per Capita Loss	Fires per 1000 Persons
Prince George	74,639	454	0	0	3,358,422	45	6.1
Prince Rupert	12,862	52	1	0	384,050	29.9	4
Princeton	2,761	10	0	0	1,127,400	408.3	3.6
Qualicum Beach	8,776	4	0	0	366,497	41.8	0.5
Quesnel	9,722	37	0	1	1,273,322	131	3.8
Radium Hot Springs	1,006	4	0	0	38,500	38.3	4
Revelstoke	7,276	27	2	0	252,965	34.8	3.7
Richmond	193,491	514	13	0	10,456,874	54	2.7
Rosland	3,536	2	0	0	27,200	7.7	0.6
Saanich	113,656	181	5	1	1,550,736	13.6	1.6
Salmo	1,061	1	0	0	892	0.8	0.9
Salmon Arm	17,242	23	1	0	4,060,235	235.5	1.3
Sayward	326	0	0	0	0	0	0
Sechelt - including Indian Government	9,176	7	0	0	294,893	32.1	0.8
Sicamous	2,953	3	0	0	20,468	6.9	1
Sidney	11,592	13	0	0	634,500	54.7	1.1
Silverton	192	0	0	0	0	0	0
Slocan	345	0	0	0	0	0	0
Smithers	5,328	3	0	0	1,576,198	295.8	0.6
Sooke	10,553	43	3	0	928,950	88	4.1
Spallumcheen	5,135	1	0	0	512,900	99.9	0.2
Sparwood	3,809	2	0	0	42,500	11.2	0.5
Squamish	17,202	10	1	2	2,575,670	149.7	0.6
Stewart	481	0	0	0	0	0	0
Summerland	11,257	33	0	0	2,108,363	187.3	2.9
Sun Peaks Mountain	n/a	0	0	0	0	0	0
Surrey	447,106	593	24	3	35,050,717	78.4	1.3
Tahsis	354	0	0	0	0	0	0
Taylor	1,483	10	0	0	702,951	474	6.7
Telkwa	1,332	0	0	0	0	0	0
Terrace	11,689	69	2	2	1,156,603	98.9	5.9
Tofino	1,831	4	0	0	38,590	21.1	2.2
Trail	7,362	13	0	0	237,800	32.3	1.8
Tumbler Ridge	2,421	3	0	0	402,092	166.1	1.2
Ucluelet	1,593	3	0	0	193,955	121.8	1.9
Valemount	1,007	0	0	0	0	0	0
Vancouver	628,600	1,614	25	4	23,009,296	36.6	2.6
Vanderhoof	4,148	3	0	0	27,098	6.5	0.7

*As reported to the Office of the Fire Commissioner

Fires Per Capita by Location *

Location Name	2009 Population	Number of Fires	Injuries	Fatalities	Fire Dollar Loss	Per Capita Loss	Fires per 1000 Persons
Vernon	39,016	49	0	1	1,348,737	34.6	1.3
Victoria	82,886	75	7	1	2,474,772	29.9	0.9
View Royal	9,595	5	0	0	20,000	2.1	0.5
Village of Queen Charlotte	951	0	0	0	0	0	0
Warfield	1,813	2	0	0	7,100	3.9	1.1
Wells	244	0	0	0	0	0	0
West Kelowna	n/a	0	0	0	0	0	0
West Vancouver	43,361	32	1	0	4,139,695	95.5	0.7
Whistler	10,241	13	0	0	560,627	54.7	1.3
White Rock	18,998	0	0	0	0	0	0
Williams Lake	11,103	73	0	0	3,409,997	307.1	6.6
Zeballos	182	0	0	0	0	0	0
Unincorporated Areas	531,787	795	16	19	44,833,622	84.31	1.5
BC Total Population	4,459,947	8718	200	53	\$291,895,609	65.45	2.0

*As reported to the Office of the Fire Commissioner

Population Source: BC Vital Stats

Fire Facts

- OFC coordinated 66 deployments of structure protection personnel/equipment in 2009.
- There were 68 fires related to school property with a total dollar loss of \$3,079,182.
- There were 112 industrial fires totaling \$13,078,042 in dollar losses, with no injuries and fatalities. 65% of these fires were related to wood, furniture, paper and printing manufacturing.
- In 2009 there were 29 fires with a total dollar loss of \$43,022 caused by fireworks.
- There were 23 structure fires related to illegal activities from grow ops and methamphetamine labs which caused over \$3 million dollars in losses.

Act or omission (AO) - The human element by which someone has done something (an act) or failed to do something (an omission). The act or omission indicates whether the fire was deliberate, neglectful or accidental.

Area of origin - The area of a building or vehicle where the fire started.

Fire - Fire is any instance of destructive or uncontrolled burning of combustible solids, liquids or gases. Fire does not include:

- Lightning, forest fire, motor vehicle accidents, explosion - steam/ammunition.

Fire Fatality - A person killed as a direct result of a fire or a person who dies from a fire injury within one year following the date on which the injury was sustained.

Fire Injury - A person injured as a direct result of a fire.

Light Injury - An injury that required admission to a hospital for between 24 hours to 48 hours and/or absence from work for a period of two to fifteen days.

Minor Injury - An injury that does not require hospitalization of more than a 24-hour period or absence from work of not more than one full day.

Serious Injury - An injury that required admission to a hospital for a period of more than 48 hours and/or an absence from work for a period exceeding fifteen days.

Incendiary or Set Fires - Includes arson, suspected arson, riot, mischief or vandalism.

Juvenile Firesetter - Children and/or adolescents (under 18 years of age) that engage in fire setting.

Material first ignited - The actual material that ignites and creates the fire condition.

Property classification - The principal use or occupancy of the building.

Residential Property - Property in which sleeping accommodation is provided for normal residential purposes. Includes one and two family dwellings, apartments, rooming or boarding houses, hotels, motels, dormitories and mobile homes.

Smoker's Material and 'Open' Flames - Includes cigarettes, pipes, cigars and/or matches, lighters when used in conjunction with smoking. This includes matches and lighters not associated with smoker's material, candles, cutting torches, welding equipment and hot ashes.



Acknowledgements

Photo Acknowledgements

The Office of the Fire Commissioner would like to thank the photographers who submitted amazing pictures. They may not be copied or used elsewhere without permission from the original copyright holder.



If you have any questions or concerns regarding this report, or require more detailed statistical information, we encourage you to contact us.

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The Office of the Fire Commissioner uses a real-time database environment. Therefore, statistics are subject to change as fire reports are completed.

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