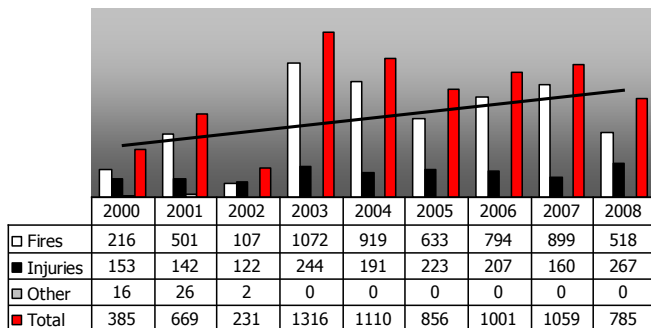


2008 Fireworks Report

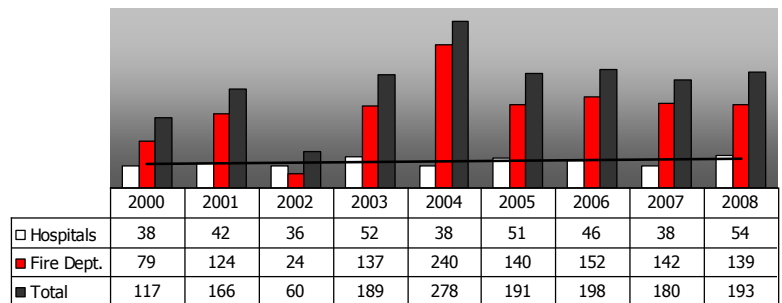
Mission: To implement a comprehensive and effective educational and enforcement program for fireworks injury prevention and fire safety.

There were 785 firework-related injuries and/or fires reported to the Office State Fire Marshal in 2008 by fire departments and hospital emergency rooms. This is a 26% decrease from the previous year's total of 1059. Of the 785 reports received, there were 518 fires and 267 injuries. These incidents resulted in \$208,018 in property loss. This data was collected on paper reports from individual fire departments and hospitals and is supplemented by the National Fire Incident Reporting System (NFIRS) database. Fireworks-related incidents most often occur on July 4th. This has remained constant over the past eight years.

Nine-Year Trend



Agencies Reporting



Homemade Cannon Incidents

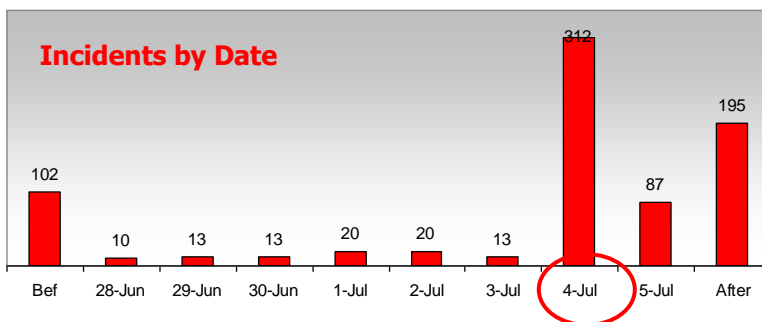
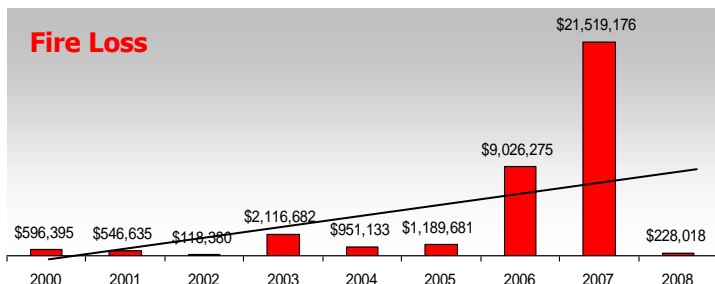
There were three exploding cannon incidents in Washington State within an 18-month period that caused serious and fatal injuries.

- Oct 6, 2006, Snohomish High School - 1 critical injury
- July 4, 2007, Littlerock WA - 1 fatal injury
- July 4, 2008, Rochester WA - 2 critical injuries

According to Brennan Phillips with the Bureau of Alcohol, Tobacco, Firearms and Explosives, "We are looking at the incidents as explosives accidents, improper explosives, i.e. smokeless powder vs. black powder." No federal laws were violated.

Shooting of muzzleloading artillery devices (cannons) should be performed by trained and experienced professionals. Homemade cannons, or any other type of cannon, should not be used by families to commemorate events at home.





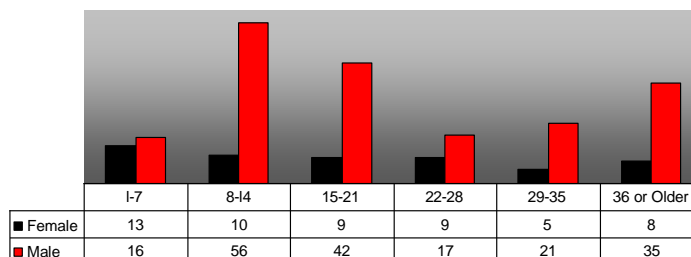
In 2008, fireworks-related fires caused an estimated loss of \$228,018. Illegal fireworks were identified as the cause in 35 of the fires and caused nearly \$134,000 of the estimated dollar loss. Legal fireworks were identified in 36 of the reported fires and accounted for approximately \$53,000 of the total loss. The type of fireworks was not identified by the reporting fire department in 86% of the fire incidents (Table #1).

Wildland fires accounted for the largest amount of fire loss at 60% of the fires and 54% of the total fire loss in 2008. Commercial fires accounted for 4% of the fires and 10% of the fire loss. Residential fires accounted for 9% of the fires and 16% of the fire loss. Vehicle fires accounted for 4% of the fires and 15% of the fire loss. School fires accounted for 2% of the fires and less than 1% of the fire loss (Table #1).

Property Type	Dollar Loss				Number of Fires			
	Illegal	Legal	Unknown	Total	Illegal	Legal	Unknown	Total
Wildland or Vegetation	\$101,520	\$1,050	\$21,445	\$124,015	20	18	275	313
Residential Structure	\$1,000	\$32,350	\$3,200	\$36,550	1	8	40	49
Commercial	\$9,400	\$5,000	\$9,131	\$23,531	6	2	12	20
School	\$1,900	\$0	\$0	\$1,900	4	2	5	11
Vehicle	\$20,000	\$15,000	\$0	\$35,000	1	1	21	23
Unknown/Other	\$0	\$0	\$7,022	\$7,022	3	5	94	102
Grand Total	\$133,820	\$53,400	\$40,798	\$228,018	35	36	447	518

Fireworks-related injuries by age and gender show that male youth and young adults are most often injured. There was no adult supervision in 27% of the incidents where supervision was known and children were involved. According to the Center for Disease Control, children are 11 times more likely to be injured by fireworks if they are unsupervised.¹

Injuries by Age and Gender



The type of injury caused most often was burns at 52%. The second leading injury was trauma at 30%. (Table #2).

Type of Injury	Type of Injury				Place Injured	Injury Location			
	Illegal	Legal	Unknown	Total		Illegal	Legal	Unknown	Total
					Arm	1	5	1	7
Amputation	8	0	4	12	Hand	21	23	16	60
First Degree Burn	9	19	8	36	Head or Face	29	44	19	92
Second Degree Burn	30	37	22	89	Leg or Foot	19	9	6	34
Third Degree Burn	3	6	2	11	Multiple	26	17	9	52
Trauma	42	25	11	78	Torso	5	5	1	11
Unknown	16	18	7	41	Unknown	5	2	4	11
Grand Total	108	105	54	267	Grand Total	106	105	56	267

Table #3 shows the types of fireworks involved in injury incidents. Illegal fireworks were involved in 106 injury incidents, or 40%. Legal fireworks were responsible for 105 incidents, or 39%.

Of the 105 incidents involving legal devices, sparklers caused 24%, followed by multi-aerials at 20% and third are roman candles and at 11% of the incidents. Illegal devices causing injuries include Homemade Explosive Devices at 21%, Missiles at 18% and Bottle Rockets at 10%. In 2008, there were 22 sparkler bomb incidents. Fire service personnel should be aware that sparkler bombs are illegal explosive devices and should only be handled by the bomb squad.

As shown in Table #4, the leading cause of fireworks-related injuries is "Holding" at 56 incidents, followed by "Leaning" at 30 incidents and "Tampering" with 26 incidents.

Type of Device	Illegal	Legal	Unknown	Total
Altered Fireworks	13	1	0	14
Bottle Rockets	11	0	0	11
Cones and Fountains	0	7	0	7
Firecrackers and Chasers	10	1	1	12
Ground Spinners	0	4	0	4
Helicopters	0	2	0	2
Homemade Explosive Devices	22	0	0	22
M-100's or Larger	10	0	0	10
M-80's	7	0	0	7
Missiles and Rockets	19	0	0	19
Multi Aerials	1	21	0	22
Novelties	0	9	0	9
Pipe Bombs	2	0	0	2
Public Display Mortars	8	1	1	10
Roman Candles	0	12	0	12
Smoke Items	0	6	0	6
Sparklers	0	26	0	26
Tennis Ball Bombs	1	0	0	1
Wheels	0	2	0	2
Unknown	2	13	54	69
Total	106	105	56	267

Cause of Injury	Total
Holding fireworks in hands	56
Leaning over fireworks	30
Tampering with fireworks	26
Throwing fireworks	7
Duds-relighting or handling	6
Unsafe surface for lighting	6
Other	136
Total	267

The chart below provides a summary of the reports received in 2008 by county and agency type.

County	Fire Department			Fire District			Hospital		Grand Total
	Fire	Injury	Total	Fire	Injury	Total	Injury	Total	
Asotin	2	1	3	3	0	3	0	0	6
Benton	12	0	12	2	0	2	2	2	16
Chelan	2	0	2	3	0	3	3	3	8
Clallam	1	0	1	2	0	2	1	1	4
Clark	18	5	23	7	0	7	11	11	41
Columbia	0	0	0	1	0	1	0	0	1
Cowlitz	5	0	5	2	0	2	2	2	9
Ferry	0	0	0	1	0	1	0	0	1
Franklin	7	0	7	1	0	1	0	0	8
Grant	8	0	8	12	1	13	1	1	22
Grays Harbor	4	0	4	1	0	1	6	6	11
Island	0	0	0	1	1	2	3	3	5
King	136	7	143	42	4	46	54	54	243
Kitsap	5	0	5	15	1	16	16	16	37
Kittitas	1	0	1	1	0	1	2	2	5
Klickitat	1	0	1	1	0	1	0	0	2
Lewis	0	0	0	1	0	1	5	5	6
Lincoln	1	0	1	1	0	1	0	0	2
Mason	1	0	1	3	1	4	12	12	17
Okanogan	0	0	0	0	0	0	2	2	2
Pacific	0	0	0	0	1	1	4	4	5
Pierce	45	0	45	26	3	29	51	51	125
San Juan	0	0	0	1	0	1	0	0	1
Skagit	4	0	4	2	0	2	5	5	11
Snohomish	20	1	21	21	1	22	19	19	62
Spokane	11	1	12	5	1	6	2	2	20
Stevens	0	0	0	10	1	11	3	3	14
Thurston	7	3	10	10	2	12	12	12	34
Walla Walla	5	1	6	11	0	11	0	0	17
Whatcom	3	0	3	5	2	7	1	1	11
Whitman	5	0	5	0	0	0	6	6	11
Yakima	16	0	16	5	0	5	7	7	28
Grand Total	320	19	339	196	19	215	229	229	785

A great way to enjoy fireworks is to attend a public display produced by trained professionals. Their shows are spectacular and safe. There are over 100 professional displays on July 4 in Washington State, and many other Independence Day activities. For more information about fireworks safety, public fireworks displays and the fireworks laws for your area, check the Celebrate Safely website at <http://www.wsp.wa.gov/fireworks/default.htm>

¹ Center for Disease Control, National Center for Injury Prevention and Control, Fireworks-Related Injuries, April 4, 2006, <http://www.cdc.gov/ncipc/factsheets/fworks.htm>.