

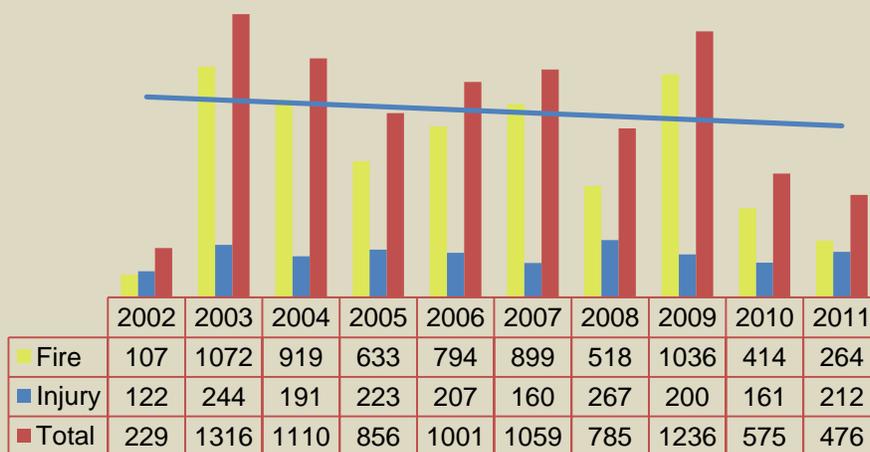
2011 FIREWORKS REPORT

There were 476 fireworks-related injuries and/or fires reported to the Office of the State Fire Marshal in 2011 by fire departments and hospital emergency rooms. Of the 476 reports received, there were 264 fires and 212 injuries. These incidents resulted in \$568,846 in property loss.

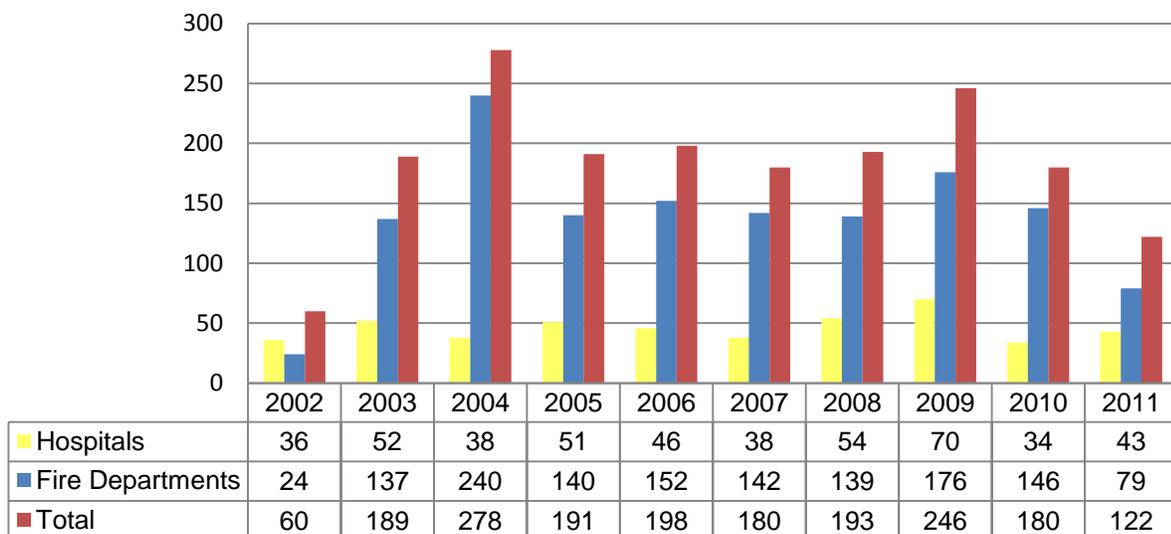
This is a 17% reduction from the previous year's total of 575 reported incidents. The reduction in the number of incidents reported may be attributed to not having access to the reports submitted using the National Fire Incident Reporting System (NFIRS) database. Data shown in this report was collected from paper reports submitted by individual fire departments and hospitals.

Fireworks-related incidents continue to occur most often on July 4th. This is a trend that has remained constant over the past years.

Ten-Year Trend

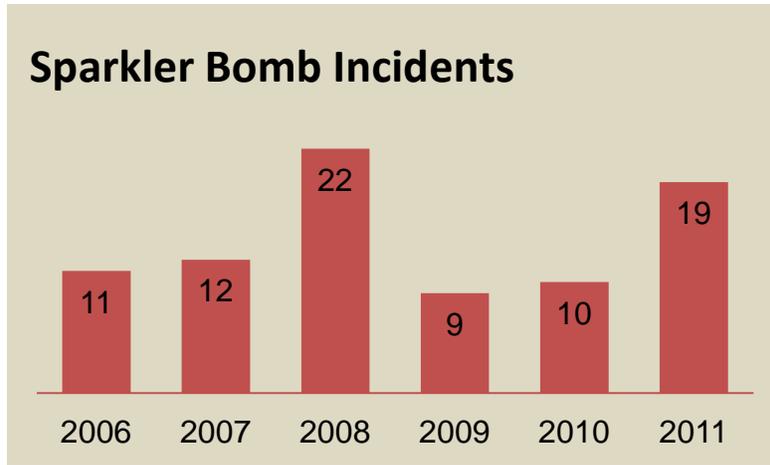


Agencies Reporting



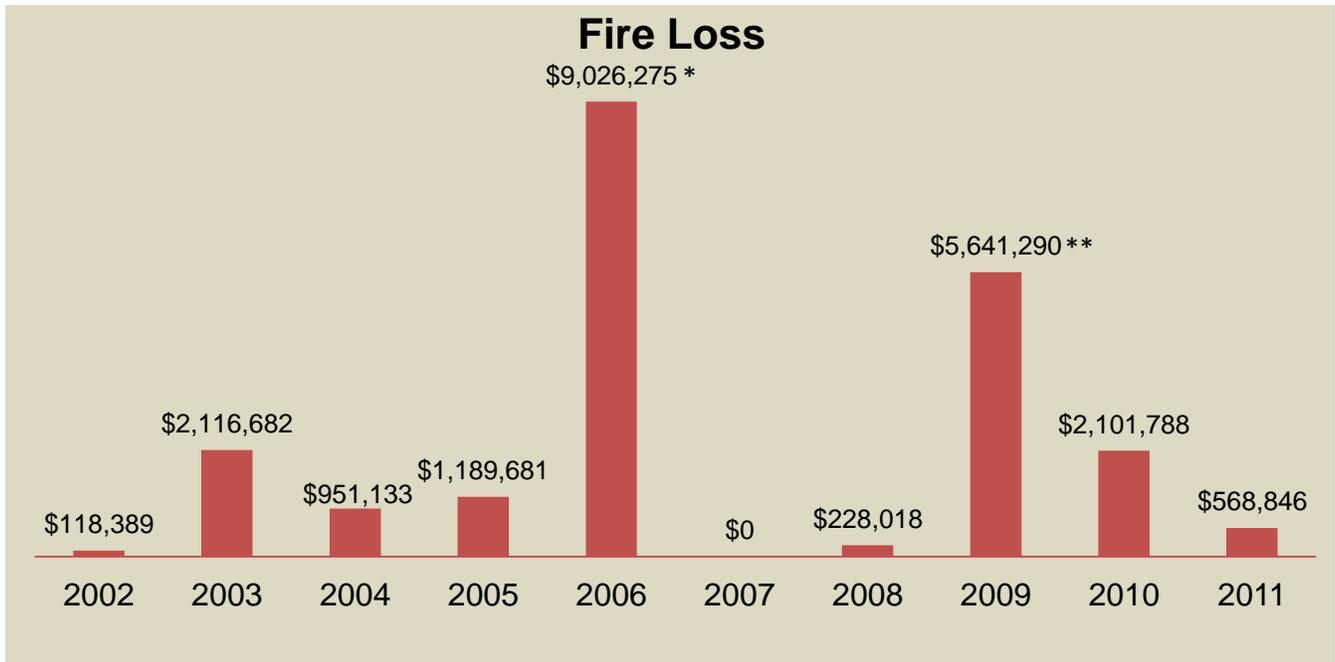
Fireworks Fatalities:

There were no fireworks related fatalities reported in 2011.



Sparkler Bombs

In 2011 we experienced a 90% rise in sparkler bomb incidents over the previous year. Sparkler bombs are high powered illegal explosive devices. They can be as powerful as a stick of dynamite, igniting accidentally or prematurely by exposure to heat or friction. This often unanticipated discharge is dangerous. In addition to the loud discharge, there will be shrapnel from the sparklers, materials used to make the bomb and anything close to the device. This shrapnel can cause life altering injuries, such as amputations and eye injuries.



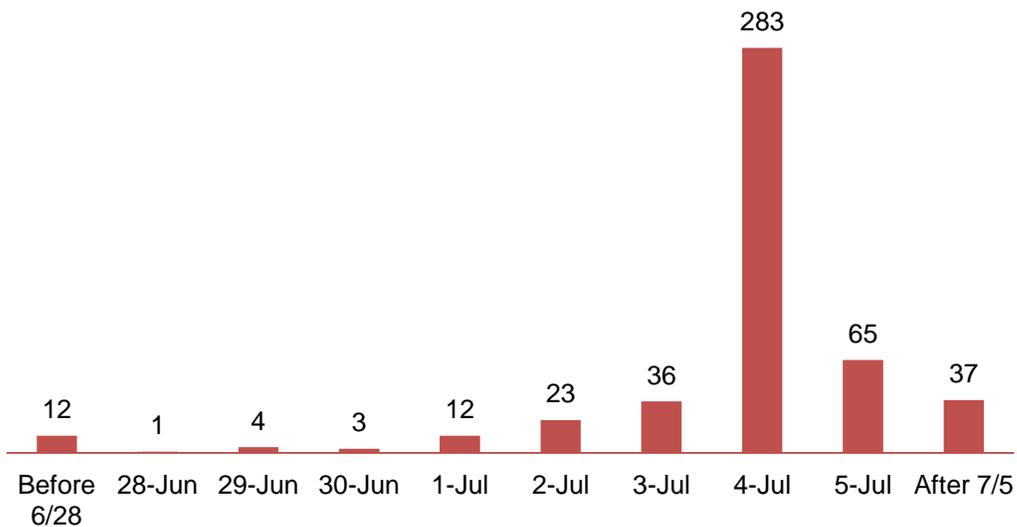
* 2006; \$8,852,350 of the total fire loss came from:

- 3 school fires – total of \$8,052,350 and,
- 4 residential fires – total of \$800,000.

** 2009; \$4,775,000 of the total fire loss came from:

- 6 residential fires – total of \$4,775,000 and,
- 1 wildland fire – total of \$250,000.

Incidents by Date



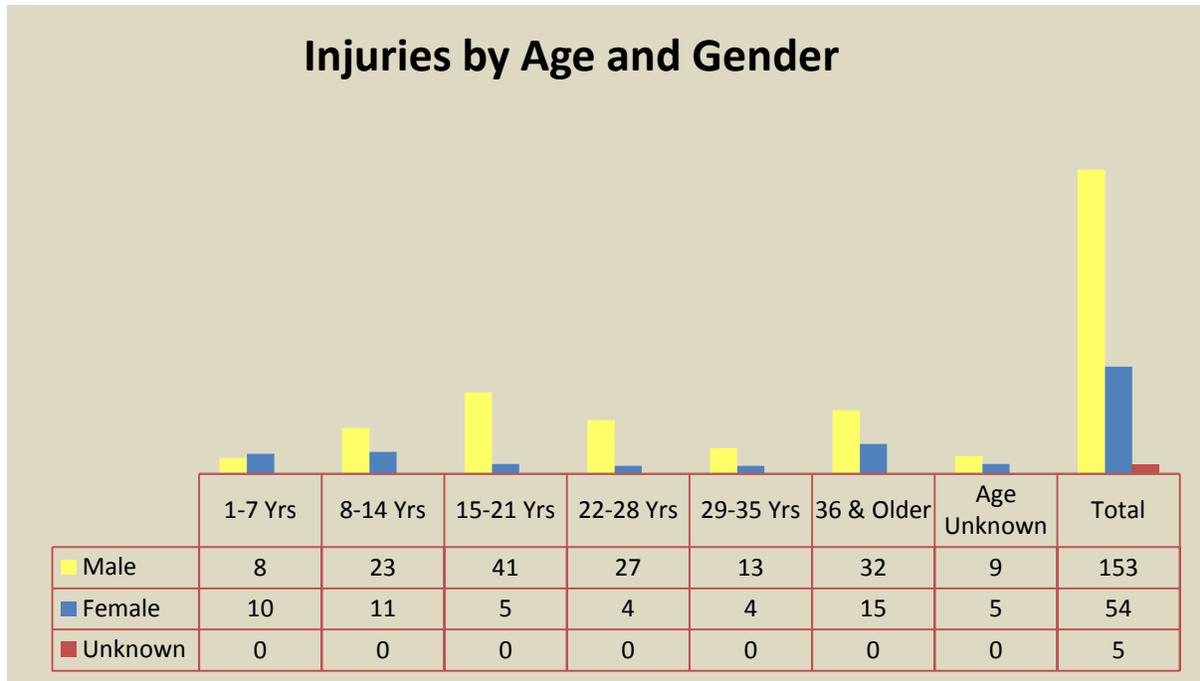
In 2011, fireworks related fire caused an estimated loss of \$568,846.

- Illegal fireworks were identified as the cause in 52 of the fires and caused \$293,152 of the reported dollar loss (20%).
- Legal fireworks were identified in 64 of the reported fires and accounted for \$69,694 of the total loss (24%).
- Unknown type of firework was identified in 148 reported fires and accounted for \$206,000 of the total loss (56%).

Table # 1								
Fires By Classification of Fireworks Device								
Property Type	Dollar Loss				Number of Fires			
	Illegal	Legal	Unknown	Total	Illegal	Legal	Unknown	Total
Commercial	\$91,852	\$ 0	\$ 0	\$91,852	2	0	1	3
Residential	\$64,550	\$66,544	\$31,500	\$162,594	10	5	11	26
School	\$100	\$ 0	\$ 0	\$100	2	1	0	3
Vehicle	\$6,000	\$ 0	\$20,550	\$26,550	2	0	2	4
Wildland or Vegetation	\$10,150	\$2,150	\$106,050	\$118,350	30	55	113	199
Other*	\$120,000	\$500	\$47,900	\$168,400	6	3	16	25
Unknown	\$ 0	\$ 0	\$ 0	\$ 0	0	0	5	0
Total	\$293,152	\$69,694	\$206,000	\$568,846	52	64	148	264

Wildland fires accounted for the largest number of fires at 199 or 75% and represent 21% of the fire loss. Residential structure fires accounted for 10% of the fires and nearly the largest amount of fire loss at 29%. There is a celebration in 2011 in that School fires accounted for only .01% of the total fires and less than .00018% of the fire loss (Table #1).

Fireworks–related injuries by age and gender show that male youth and young adults are most often injured. The lack of supervision of young children remains a significant factor in incidents where supervision was known. According to the Center for Disease Control, children are 11 times more likely to be injured by fireworks when they are unsupervised.



The leading type of injury reported was trauma, accounting for 47% of the total. The second leading injury type was burns at 46%. (Table #2)

Type of Injury	Legal Classification				Place Injured				
	Illegal	Legal	Unknown	Total		Illegal	Legal	Unknown	Total
Amputation	9	0	4	13	Hand or Arm	33	30	17	80
First Degree Burn	8	23	13	44	Head or Face	21	25	13	59
Second Degree Burn	16	26	9	51	Leg or Foot	16	8	3	27
Third Degree Burn	2	2	0	4	Multiple Locations	12	10	6	28
Trauma	51	30	19	100	Torso	4	8	6	18
Grand Total	86	81	45	212	Grand Total	86	81	45	212

Table #3 shows the types of fireworks involved in injury incidents. Illegal fireworks were the leading class causing 95 injury incidents, or 49%. Legal fireworks were responsible for 77 incidents, or 36%. Of the 77 incidents involving legal devices, multi-aerials caused 45%, followed by roman candles at 22%. Illegal devices causing injuries include Bottle Rockets at 12% and Public Display Mortars at 14%.

In 2011, there were 19 sparkler bomb incidents. As shown in Table #4, the leading cause of fireworks-related injuries is “Holding in Hand” at 31% and “Too Close to Lit Fireworks” at 28%.

Table 3 Injuries by Type of Device				
	Illegal	Legal	Unknown	Total
Altered Fireworks	2	0	0	2
Bottle Rockets	12	0	0	12
Cones and Fountains fireworks	0	5	0	5
Firecrackers and Chasers	11	0	0	11
Ground Spinners	3	0	0	3
Homemade Explosive Devices	24	0	0	24
M-80's, M-100's, Cherry Bombs	19	0	0	19
Missiles and Rockets	10	0	0	10
Multi Aerials / Mortars	14	35	1	50
Novelties	0	2	0	2
Roman Candles	0	17	0	17
Smoke Items	0	5	0	5
Sparklers (Sparkler Bombs recorded as Homemade)	0	13	0	13
Unknown	0	0	39	39
Grand Total	95	77	40	212

Table 4 Cause of Injury	
Action	Total
Duds-relighting or handling dud	5
Holding fireworks in hands	67
Leaning over fireworks	22
Tampering with fireworks	14
Throwing fireworks	10
Unsafe surface for lighting	13
Lighting fireworks	4
Other	12
Children with sparkler (20 months to 7 years)	4
Too close to lit fireworks	61
Unknown	0
Grand Total	212

The chart below provides a summary of the reports received in 2011 by county and agency type.

County	Fire Department			Fire Districts			Hospitals		Grand Total
	Fire	Injury	Total	Fire	Injury	Total	Injury	Total	
Adams	0	0	0	0	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0
Benton	2	0	2	4	1	5	5	5	12
Chelan	3	0	3	0	0	0	0	0	3
Clallam	0	0	0	3	0	3	0	0	3
Clark	12	2	14	5	0	5	12	12	31
Columbia	0	0	0	0	0	0	0	0	0
Cowlitz	0	1	1	0	1	1	10	10	12
Douglas	0	0	0	0	0	0	1	1	1
Ferry	0	0	0	0	0	0	0	0	0
Franklin	4	0	4	0	0	0	1	1	5
Garfield	0	0	0	0	0	0	0	0	0
Grant	0	0	0	0	12	12	3	3	15
Grays Harbor	4	1	5	0	0	0	2	2	7
Island	0	0	0	0	3	3	2	2	5
Jefferson	0	0	0	0	1	1	0	0	1
King	53	4	57	32	3	34	36	36	127
Kitsap	3	2	5	4	3	7	12	12	24
Kittitas	0	0	0	5	0	5	0	0	5
Klickitat	0	0	0	0	0	0	0	0	0
Lewis	4	0	4	0	0	0	0	0	4
Lincoln	0	0	0	0	0	0	0	0	0
Mason	0	0	0	1	1	2	5	5	7
Okanogan	1	0	1	0	0	0	0	0	1
Pacific	0	0	0	4	1	5	0	0	5
Pend Oreille	0	0	0	0	1	1	0	0	1
Pierce	0	0	0	24	1	25	26	26	51
San Juan	0	0	0	0	0	0	0	0	0
Skagit	1	0	1	1	0	1	6	6	8
Skamania	0	0	0	0	0	0	0	0	0
Snohomish	3	0	3	14	8	22	27	27	52
Spokane	5	0	5	2	0	2	4	4	11
Stevens	0	0	0	0	2	2	4	4	6
Thurston	4	0	4	6	0	6	2	2	12
Wahkiakum	0	0	0	0	0	0	0	0	0
Walla Walla	0	0	0	0	0	0	0	0	0
Whatcom	9	0	9	3	1	4	17	17	30
Whitman	2	0	2	0	0	0	1	1	3
Yakima	3	0	3	29	0	29	1	1	33
Grand Total	113	10	123	137	39	176	177	177	476