

Fire Fatality REPORT

2012



Prepared by the Washington State Patrol -
Office of the State Fire Marshal

JAY INSLEE
~~CHRISTINE O. GREGOIRE~~
Governor



JOHN R. BATISTE
Chief

STATE OF WASHINGTON
WASHINGTON STATE PATROL

General Administration Building • PO Box 42600 • Olympia, WA 98504-2600 • (360) 596-4000 • www.wsp.wa.gov

May 15, 2013

Dear Partners in Fire Safety:

Each fire and law enforcement agency that submitted information to the Office of State Fire Marshal on a fire related fatality that occurred in 2012 within their jurisdiction has made this report possible.

As noted in this report, Washington continued to see a decrease in fire related fatalities for the second year in a row, with a total of sixty two fatalities reported. This downward trend is a positive step in reducing these tragic losses within our communities. The data you provide is instrumental in determining needed changes to our state and national codes and in developing public education programs that can further reduce these deaths in our State.

Your continued support and participation enable us to identify the leading causes of fire and to work collectively in developing comprehensive fire prevention measures and strategies based on facts through identifying trends and areas of concern. Again, thank you for your continued support of our data collection efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "C. M. Duffy".

State Fire Marshal Charles M. Duffy
Fire Protection Bureau

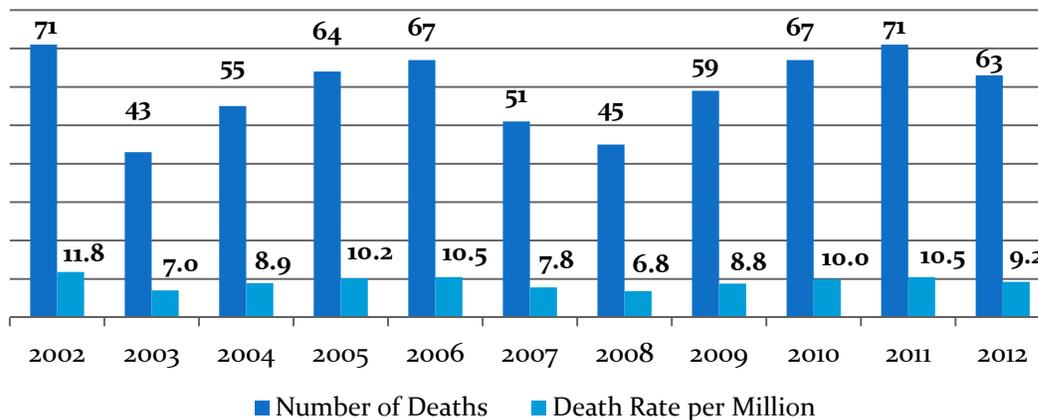


Data Sources

The data used for this report was received from fire and law enforcement agencies throughout Washington State and collected into a centralized database for analysis and report development in accordance with Revised Code of Washington [43.44.060](#).

Fire Fatalities

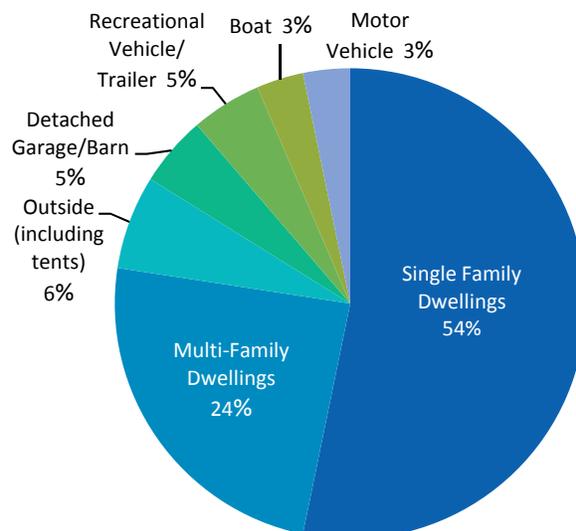
In 2012, fire agencies reported 63 fire fatalities to the Office of the State Fire Marshal. Compared to the previous year, fire fatalities decreased 11%, dropping the rate in Washington State to 9.2 fire deaths per million people (based upon current OFM population figures). According to the latest available statistics from the United States Fire Administration (2009 figures), the national fire death rate was 11.0 per million people. Washington State ranked 27th lowest in the nation.



Places Fire Fatalities Occurred in 2012

Fire fatalities occur most frequently where people sleep. In 2012, over 78% of the fire fatalities occurred in residential dwellings, and another 8% occurred in recreational vehicles, boats, or travel trailers.

Occupancy Categories	Total	% of Total
Single Family Dwellings	33	54%
Multi-Family Dwellings	15	23%
Outside (including tents)	4	6%
Detached Garage/Barn	3	5%
Recreational Vehicle/Travel Trailer	3	5%
Boat	2	3%
Motor Vehicle	2	3%
Grand Total	63	100.0%



2012 Fire Fatality Causes

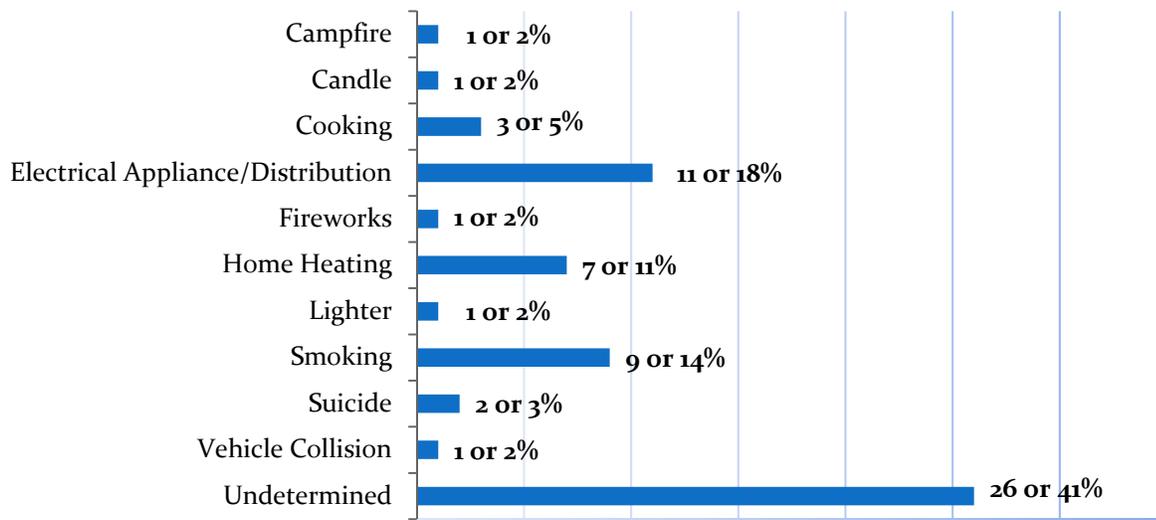
Of the fire fatalities reported in 2012, electrical related fires were the leading cause in those fires where a definitive cause was determined, resulting in approximately 18% of the total. Many electrical related fires are caused by misuse or poor maintenance of electrical equipment, improperly installed wiring, overloaded circuits, or the use of extension cords in place of permanent wiring.

Smoking related fires remain a leading contributing cause. High risk behaviors, such as smoking in sleeping or lounging areas; smoking while using medical oxygen; and smoking while under the influence of mind altering drugs or alcohol should be avoided.

Home heating fires are often related to the use of portable space heaters in lieu of built-in heating systems; improper installation of heating equipment; lack of maintenance or clearing of furnaces, chimneys or flues; and the use of accelerants to start fires. Candle related fires are often caused by candles coming in contact with combustibles, or candles burning for extended periods of time without supervision.

In the case of undetermined fire causes, the exact fire cause cannot be clearly identified by the fire investigator.

2012 Fire Fatalities by Category



Age and Gender of Fire Fatalities

Age and gender are factors that impact an individual's ability to escape a fire. The United States Fire Administration indicates men are 1.6 times more likely to die in fires than women. In addition, older males are 50% more likely to die in fires than women.

In 2012, fire agencies in Washington State reported approximately 62% of fire victims were male. In 2012, approximately 67% of the people that died in fires were age 50 or older. As people age, they may become unable to react quickly in emergency situations, they may take medications

that slow their ability to make rapid decisions, they may not be able to hear smoke alarms sounding, and they may be home alone at the time a fire starts.

Children are at significant risk in fire situations. Young children may not be capable of escaping or know the dangers of fire exposure. Their ability to escape may be dependent on other occupants. Infants cannot save themselves, and children in this age category may have limited fire escape skills or knowledge.

Age Group	Female		Male		Grand Total	% of Total
	Total	% of Total	Total	% of Total		
Undetermined	0	0%	1	2%	1	2%
10 & Under	0	0%	3	5%	3	5%
11 - 19	0	0%	3	5%	3	5%
20 - 29	1	2%	2	3%	3	5%
30 - 39	2	3%	3	5%	5	8%
40 - 49	3	5%	3	5%	6	10%
50 - 59	5	8%	7	11%	12	19%
60 - 69	5	8%	10	16%	15	24%
70 - 79	6	10%	4	6%	10	16%
80 & Older	2	3%	3	5%	5	8%
Grand Total	24	38%	39	62%	63	100%

2012 Multiple Deaths Incidents

January – Two people perished in a residential fire in Malaga. The cause of the fire was likely an electrical malfunction.

February – A father and his two young sons were killed in a gas fueled murder/suicide explosion at their Puyallup home.

March – A couple living aboard a houseboat in Bellingham died after their boathouse caught fire. The cause remains undetermined.

September – An accidental electrical fire ignited by a daisy chained extension cord supplying power to numerous appliances being stored underneath a mattress, killed two men in Kent.

November – A house fire near Goldendale left two residents dead. The source of ignition was home heating.

Fire Protection Devices

Fire protection devices – such as smoke alarms and fire sprinklers – play a key role in reducing the loss of life in fires. Smoke alarms are designed to detect smoke and provide early notification

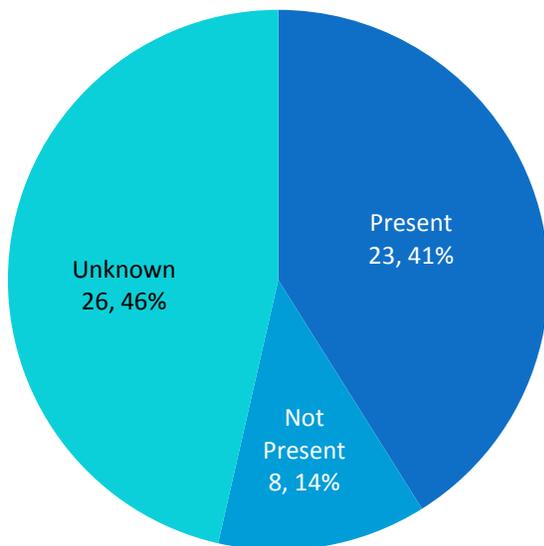
to building occupants. Fire sprinklers provide critical fire suppression and occupant protection, particularly for impaired individuals.

The charts and information below illustrate the features of fire protection reported for 57 of the 63 fire fatalities which occurred in buildings or recreational vehicles during 2012.

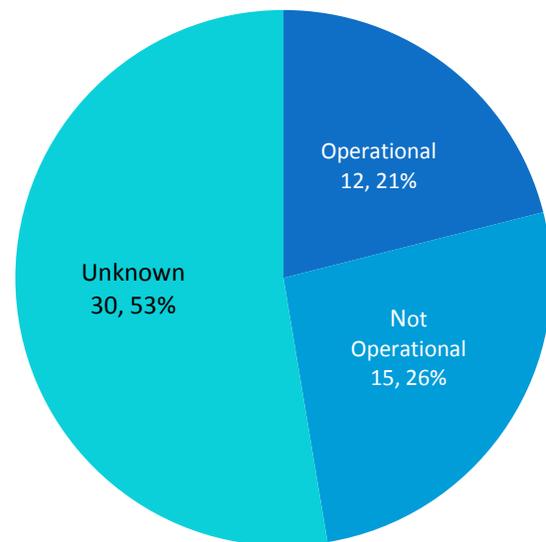
Findings for smoke alarms or detectors:

- 12 fire fatalities occurred in areas where smoke alarms or detectors were present and operational. Human factors – such as the person was asleep, under the influence of drugs or alcohol, or had physical or mental impairment – may have contributed to the individual not escaping the fire.
- Approximately 26% of the fire fatalities occurred where the smoke alarms or detectors were reported to be inoperable.

Presence of Detector/Alarm



Operation of Detector/Alarm



Findings for fire sprinklers:

- 2 fire fatalities occurred in rooms equipped with fire sprinkler suppression systems. Human factors – such as victim smoking, being physically disabled or possibly impaired by alcohol or drugs may have contributed to the individual not escaping the fire.