FIRE FATALITY REPORT

2015





WASHINGTON STATE PATROL

General Administration Building • PO Box 42642 • Olympia, WA 98504-2642 • (360) 596-3900 • www.wsp.wa.gov

April 1, 2016

TO: Partners in Fire Safety

FROM: State Fire Marshal Charles Duffy

SUBJECT: 2015 Fire Fatality Report

This is the 2015 Fire Fatality Report, a useful summary of the fire fatality incidents reported to the State Fire Marshal's Office by fire and law enforcement agencies in our state.

The information contained in this annual report details the following:

- There were 52 fire related fatalities reported in 2015.
- The number of fire related fatalities increased slightly; up 13% from 2014.
- Seventy-five percent of all fire related fatalities occurred in residential occupancies.
- When smoke alarms were present, they were operational only 39% of the time.
- Overall, adults age 40 or older face the greatest relative risk of dying in a fire.
- Children under the age of 10 accounted for 13.5% of all fire related fatalities.

I would like to extend special thanks to the many agencies in our state, who work extremely hard to manage, track, and report these incidents to our office in a timely manner.

The information outlined in this report provides awareness on the life-saving value and need for working fire protection devices.

Sincerely,

State Fire Marshal Charles M.

Fire Protection Bureau

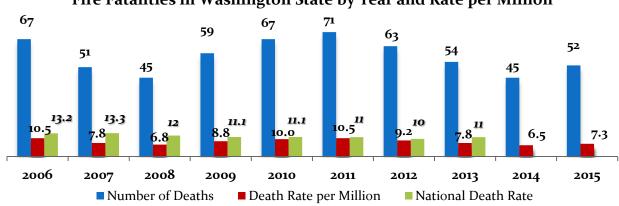


DATA SOURCES

The fire fatality 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. The primary purpose of this annual report is to help raise awareness about the danger and frequency of fire fatalities that occur in Washington State.

NUMBER OF FIRE FATALITIES

In 2015, there were 52 fire fatalities reported to the Office of the State Fire Marshal by fire agencies across the state of Washington. This represents a 13% increase compared to the previous year, placing Washington's fire fatality rate at 7.3 per million people¹. According to the latest available statistics from the United States Fire Administration (2013 figures), the national fire death rate was 11.0 per million people – Washington ranked 11th lowest in the nation.

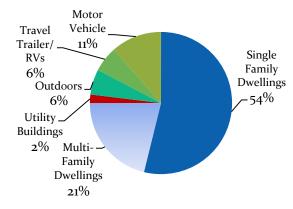


Fire Fatalities in Washington State by Year and Rate per Million

2015 AREA OF ORIGIN

Washington State statistics indicate that nearly all structure fire deaths occur in places where people live or sleep. In 2015, 75% of the fire fatalities occurred in residential occupancies. Single-family dwellings alone accounted for 54% of reported fire fatalities, including 9 deaths in mobile homes. Multi-family dwellings accounted for nearly 21% of all fire deaths.

Occupancy Categories	Total	% of Total
Single Family Dwellings	28	54%
Multi-Family Dwellings	11	21%
Utility Buildings	1	2%
Outdoor	3	6%
Travel Trailer/Recreational Vehicle	3	6%
Motor Vehicle	6	11%
Total	52	100%



¹ Annual population figures are determined by the Washington State Office of Financial Management for all cities and towns in the state on April 1 of each year.

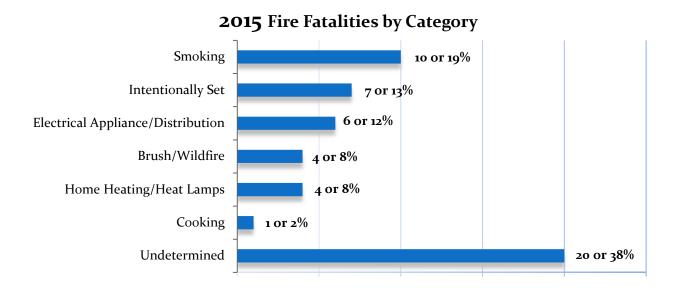
CAUSE OF FIRE IGNITION

The leading cause of fire ignition resulting in fatality is attributed to smoking-related fires, resulting in approximately 19% of the total fire fatalities in 2015. 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.

Intentionally set fires were the secondary leading cause of fire fatalities. These fires were either caused by persons committing suicide (5) or intentional act by another person (1). In some cases, psychological disturbances and impairments from drugs and/or alcohol were contributing risk factors.

The third leading cause of fire fatalities in 2015 resulted from electrical-related fires. 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.

In the cases of undetermined fires, the exact fire causes could not be clearly identified by the fire investigator.



RISK BY AGE AND GENDER

Age and gender are factors that impact an individual's ability to escape a fire. 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, or they may be home alone at the time a fire starts.

In 2015, thirteen percent of fire fatality victims were children ages 10 and under; the majority of these fires were related to unsafe home heating behaviors during the colder winter months. Children are at significant risk in fire situations as well. Young children may not be capable of escaping or knowing the dangers of fire exposure. Their ability to escape may be dependent upon other occupants.

Overall, approximately 60% of people that died in 2015 were age 40 or older; this category facing the greatest relative risk of dying in a fire. Like age, gender also plays a role in the risk of death. Over the past 10 years, state fire fatality figures indicate that more men die in fires than women. Fire fatality reports in 2015 indicated that approximately 52% of fire victims were male.

	Female		Male		Grand	
Age Group	Total	% of Total	Total	% of Total	Total	% of Total
10 & Under	5	9.6%	2	3.8%	7	13.5%
11 - 19	O	0.0%	O	0.0%	0	0.0%
20 - 29	2	3.8%	4	7.7%	6	11.5%
30 - 39	3	5.8%	5	9.6%	8	15.4%
40 - 49	O	0.0%	2	3.8%	2	3.8%
50 - 59	5	9.6%	3	5.8%	8	15.4%
60 - 69	2	3.8%	6	11.5%	8	15.4%
70 - 79	3	5.8%	3	5.8%	6	11.5%
80 & Older	5	9.6%	2	3.8%	7	13.5%
Total	25	48.1%	27	51.9%	52	100.0%

MULTIPLE DEATH INCIDENTS

January – Two Arlington men died from injuries they sustained when their mobile home caught fire. The source of ignition remains undetermined. It is unknown if there were smoke alarms present in the home.

February

- 1.) A morning house fire killed a Spokane man and woman. The occupants were known to smoke cigarettes in bed. Investigators say the fire originated in a bedroom between a mattress and a wall. The home did not have working smoke alarms.
- 2.) A mother and her two daughters were killed when a fire broke out on the back porch of their Winlock home. Investigators determined that heat lamps were located too close to combustibles for the family's chickens. Smoke alarms did alert occupants, however, age and sleeping were contributing factors.

July – Improper disposal of cigarettes is believed to have started an apartment fire that left two Colville boys dead. The apartment was equipped with smoke alarms, however, it is unknown if they were operational.

August

- 1.) A motorhome fire in Elk left two residents dead. The source of ignition remains undetermined. Smoke alarms were not present.
- 2) Three U.S. Forest Service firefighters died when their crew vehicle became entrapped by increased wildfire activity on the Twisp River Fire.

December – A family of three were killed near Wapato when their mobile home caught fire. The fire was likely due to electrical issues inside the home. Smoke alarms were not present.

FIRE FATALITIES & FIRE PROTECTION DEVICES

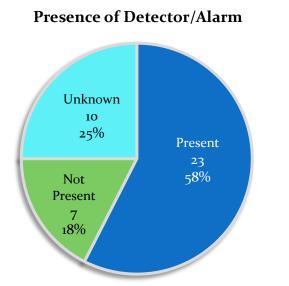
Properly installed and maintained fire protection devices such as smoke alarms and fire sprinklers play a key role in reducing the loss of life in fires. According to the United States Fire Administration, three out of five home fire deaths results from fires in properties without working smoke alarms.

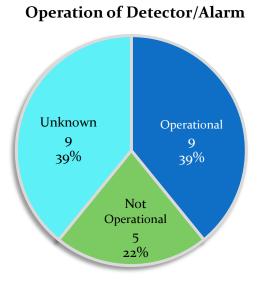
Smoke alarms are designed to detect smoke and provide early notification to building occupants. Fire sprinklers provide critical fire suppression and occupant protection, reducing the risk of dying in a home fire by 80%².

The charts and information listed below illustrate the features of fire protection reported for the 40 structure fire fatalities that occurred during 2015.

Findings for smoke alarms or detectors:

- 9 fire fatalities occurred in areas where smoke alarms or detectors were present and operational. Human factors such as the person's age, being asleep, under the influence of drugs or alcohol, or having physical or mental impairment may have contributed to the individual not escaping the fire.
- 5 fire fatalities occurred where the smoke alarms or detectors were reported to be inoperable.





Findings for fire sprinklers:

 One fire fatality occurred in a room equipped with a fire sprinkler suppression system. The room's sprinkler head was activated, containing fire damage to the room of origin. The 28 year old male was impaired by drug use.

² Source: National Fire Protection Association figures.

ACKNOWLEDGEMENTS

This annual report was produced through the energies and talents of the Fire Protection Bureau staff. To these individuals we offer our sincerest thanks for their assistance with the production and accuracy of this report. We would also like to offer a special thanks to the fire and law enforcement agencies for submitting their incident reports in a timely and professional manner. To submit questions or comments regarding this report, please email the following: fireworks@wsp.wa.gov

