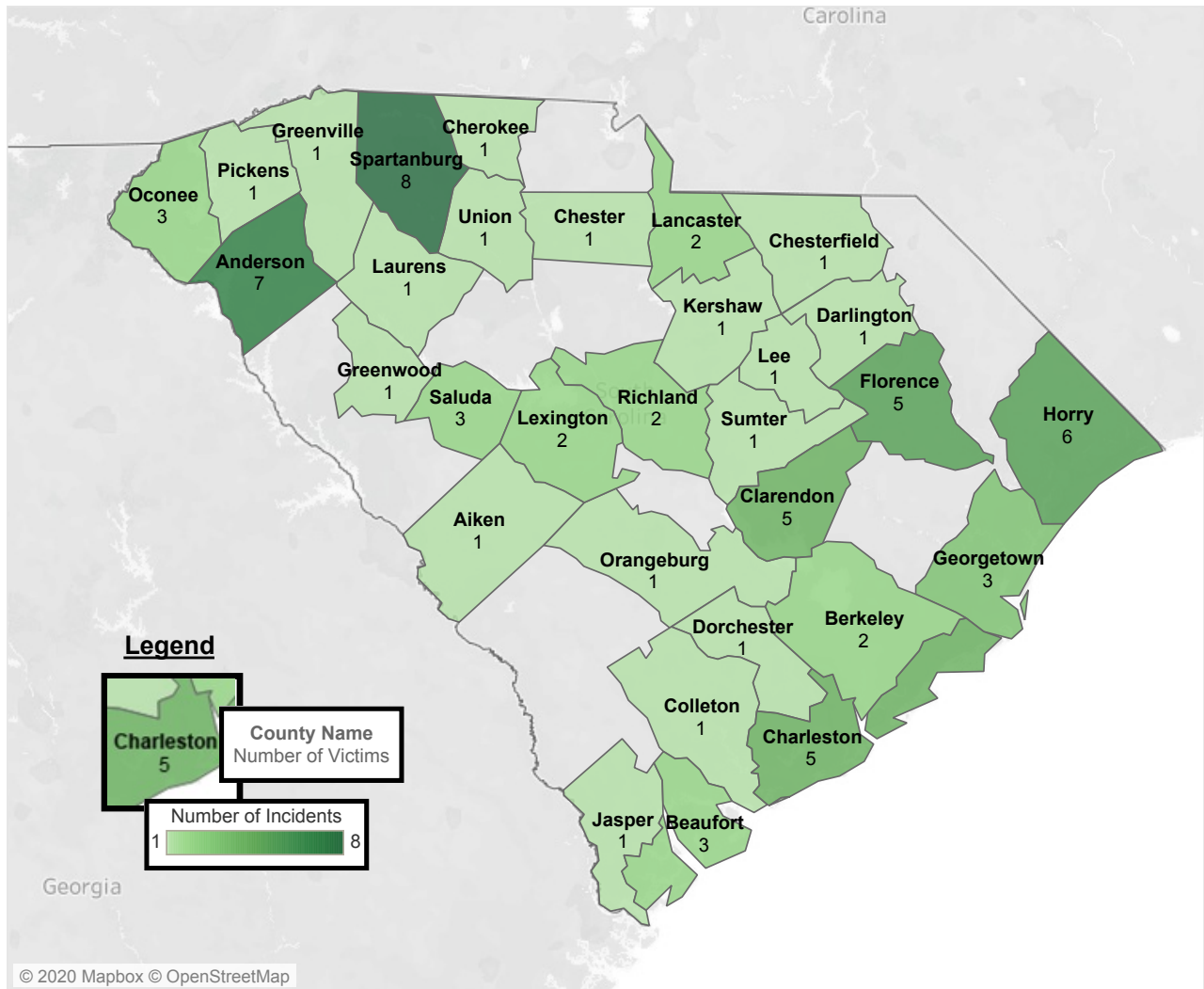


2019 Fire Fatality Summary Report

South Carolina Office of State Fire Marshal
Community Loss Education and Response (CLEAR) Team



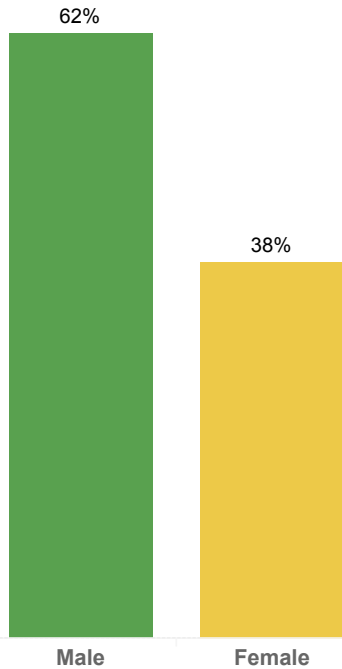
These findings are made possible by the research efforts of the CLEAR Team. In some cases, the percentages may not add up to 100% due to rounding. If you would like more information or outreach ideas based on the findings, please call South Carolina State Fire at (803) 896-9895.

This report version was last updated on May 4, 2020.

Fire Fatality Victim Profile

In 2019, there were 73 deaths from 67 incidents. The victims of fatal fires were reported in 32 of 46 counties, with the most incidents happening in Spartanburg, Anderson, Horry, and Florence counties. These counties, plus Clarendon and Charleston had the most victims. Most incidents had one victim; however, six incidents had two victims each. Victims were mostly male, and 65 percent were older than the age of 50. White victims accounted for about two-thirds of all victims, followed by black victims at 29 percent, and Hispanic victims at five percent. Victims were typically found in residences, specifically single-family dwellings and mobile homes.

Victim Gender



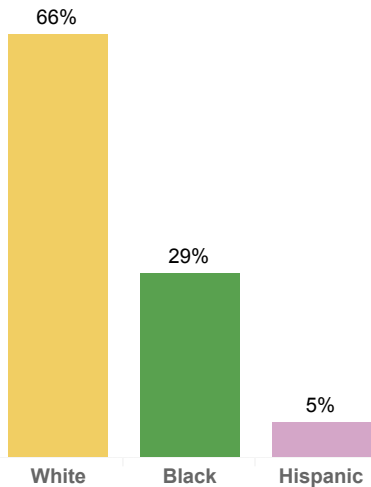
Incidents and Victims per County

County	Incidents	Victims
Spartanburg	8	8
Anderson	7	7
Horry	5	6
Florence	5	5
Clarendon	4	5
Charleston	4	5
Saluda	2	3
Oconee	2	3
Georgetown	3	3
Beaufort	2	3
Richland	2	2
Lexington	2	2
Lancaster	2	2
Berkeley	2	2
Union	1	1
Sumter	1	1
Pickens	1	1
Orangeburg	1	1
Lee	1	1
Laurens	1	1
Kershaw	1	1
Jasper	1	1
Greenwood	1	1
Greenville	1	1
Dorchester	1	1
Darlington	1	1
Colleton	1	1
Chesterfield	1	1
Chester	1	1
Cherokee	1	1
Aiken	1	1
Grand Total	67	73

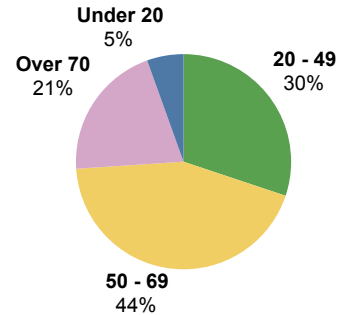
Occupancy Type

Single Family Dwelling	58%
Mobile Home	24%
Vehicle	12%
Multi-Family Dwelling	1%
Retail Business	1%
Outdoor Area	1%
Small Storage	1%

Victim Race



Victim Age

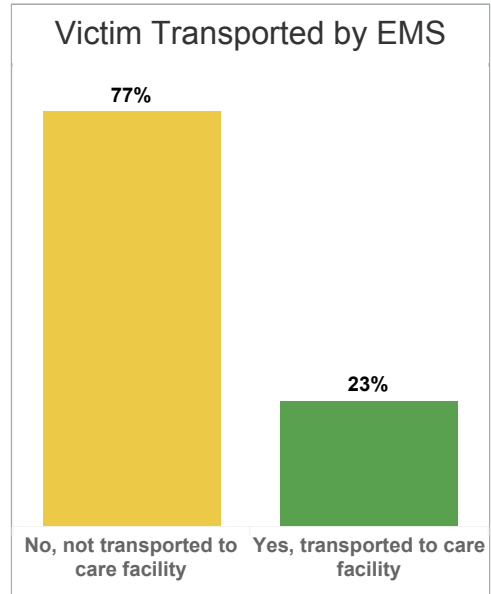
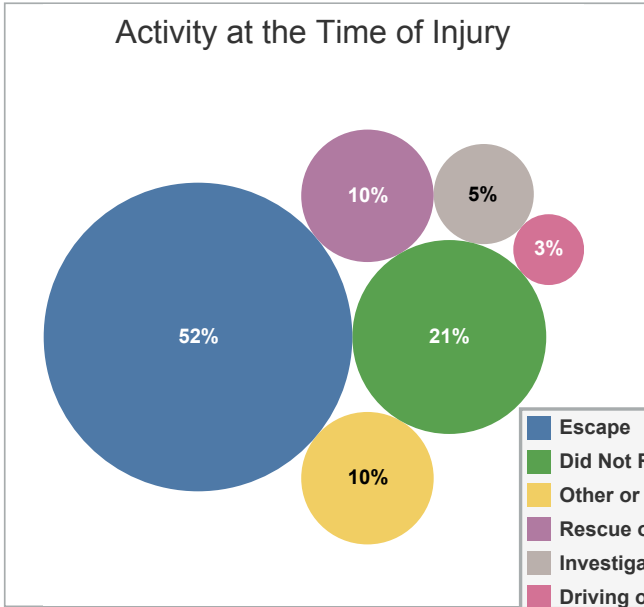


Median Age of Victims = 56

Multiple Fatality Incidents

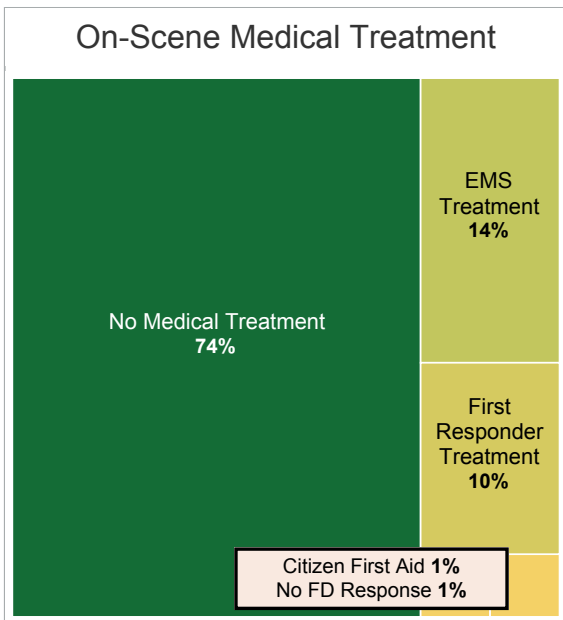
One Victim	91%
More than One Victim	9%

Fire Fatality Victim Profile



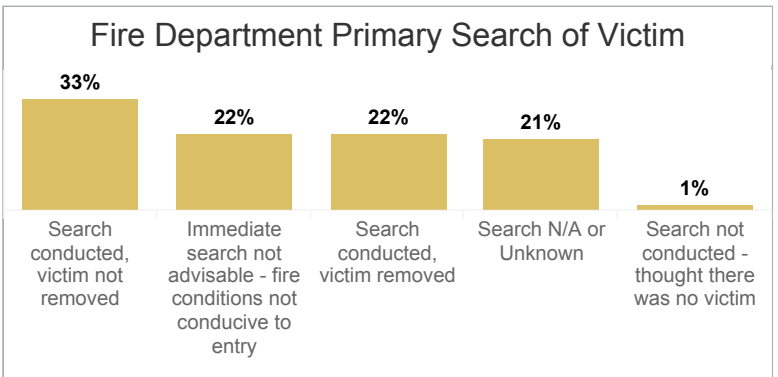
Victims were generally found to be attempting escape when they were injured. Fifty-one percent of victims attempted an escape, while only six percent of victims were successful in their attempt. Twenty percent did not have time to respond to the emergency before succumbing. In 77% cases, the victim was pronounced deceased at the fire scene. In 29 cases (42%), citizens attempted to rescue victims. Prior to fire department arrival, unsafe conditions did not allow for citizens to assist the victim in escaping in about one in five cases. In 22 percent of cases, the first department could not attempt rescue during initial attack, due to dangerous conditions. Victims were only removed during search and rescue operations in one out of about every 4.5 fatal fires.

The CLEAR Team was notified about fire fatalities within 24 hours of the death 78 percent of the time, and responded on-scene 54 percent of the time. This response allows us to understand more about why some fires are fatal and connect with fire departments and their communities to prevent further tragedies.



Civilian Entry Attempt

No - Civilians were around, but no attempts to enter were made	25%
Yes - Civilians made an attempt, but no entry was made	25%
Yes - Civilians were able to successfully enter	18%
No - No civilians were around	16%
Not Applicable or Unknown	11%
Other	5%

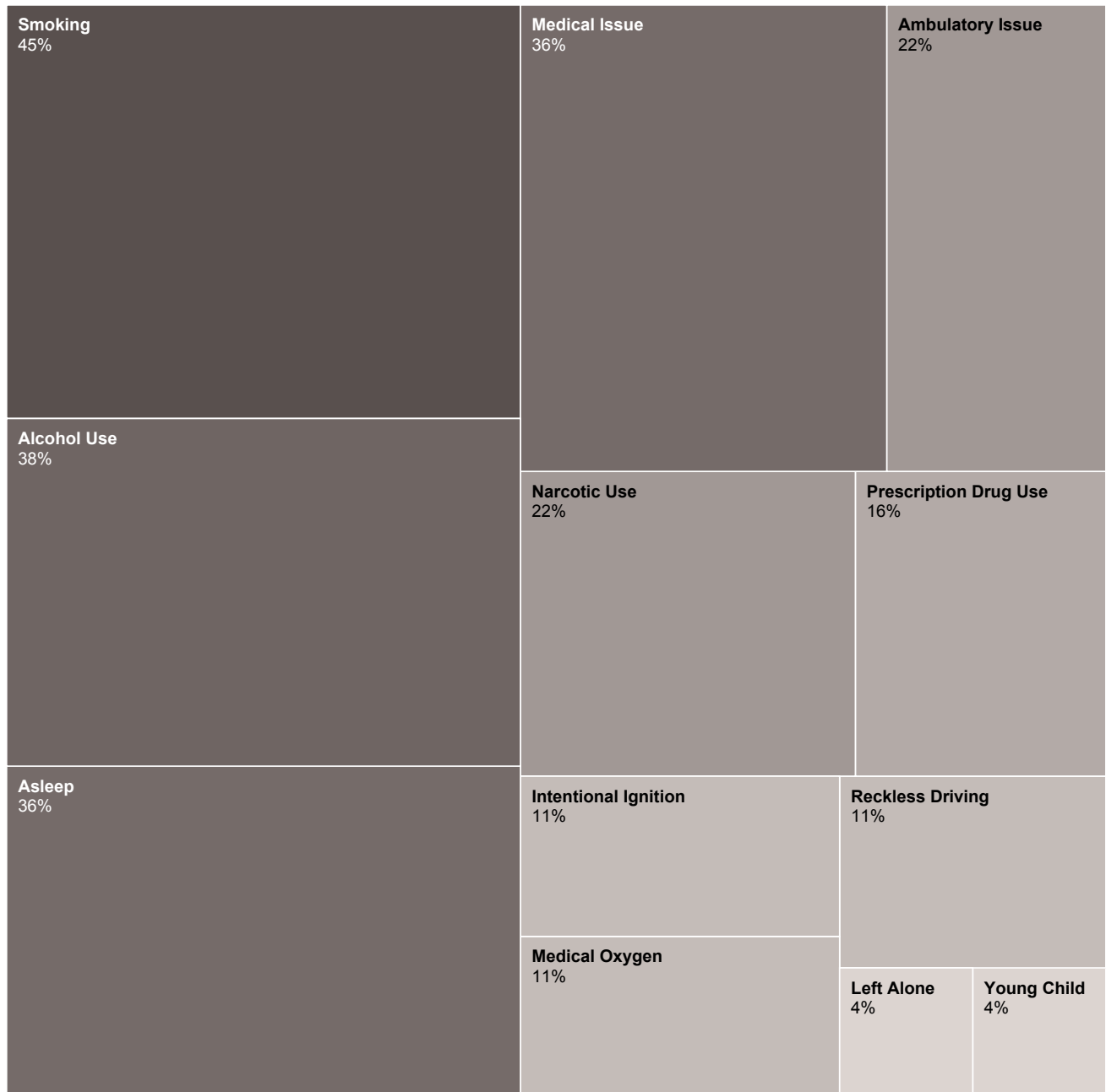


Human Factors Profile

Human factors were deemed present in 82 percent of all incidents, with 72 percent of incidents having more than one human factor present. The human factors below account for some of the factors seen in this year's incidents; an inability to be notified of an emergency, an inability to go to a safe area, and risky behaviors contributed to a person's demise in the event of a fire.

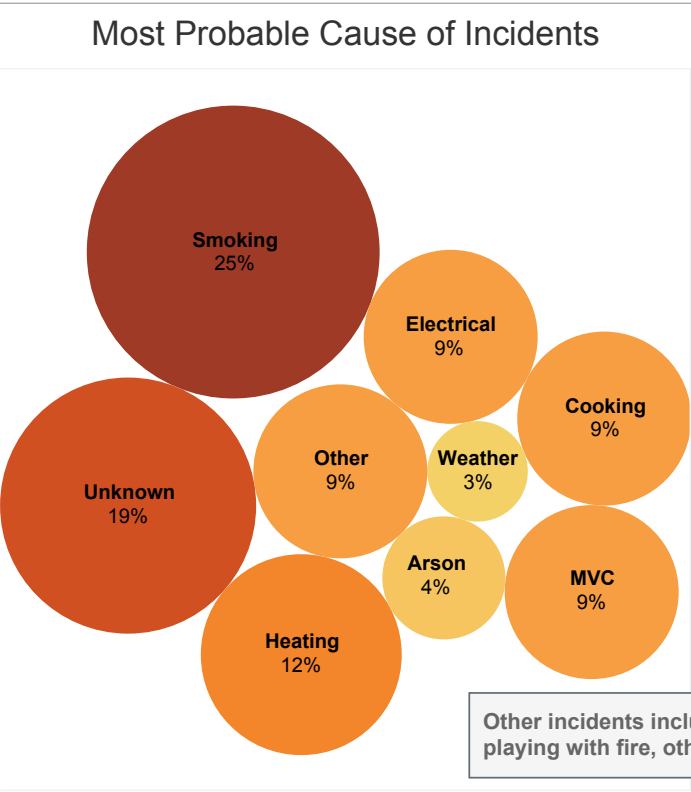
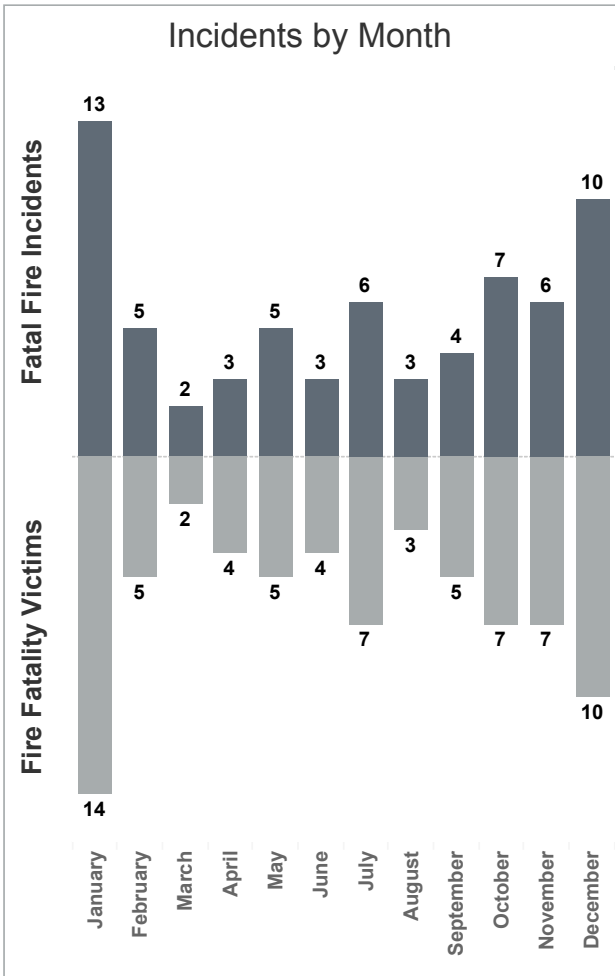
One-hundred percent of vehicle-related and open area-related fire fatalities had at least one human factor which prevented the victim from surviving the fire.

Five incidents had medical oxygen as a known human factor, and 100 percent of those incidents had smoking as an additional human factor present.



Fatal Incidents Profile

When cause could be determined, fatal incidents were most likely caused by improperly discarded smoking materials or malfunctioning or improperly-used heaters. Incidents occurred on all days of the week, with an above average amount on Tuesday and Friday. Fatal incidents generally occurred during overnight hours, from 12 a.m. to 6 a.m., and in January and December.

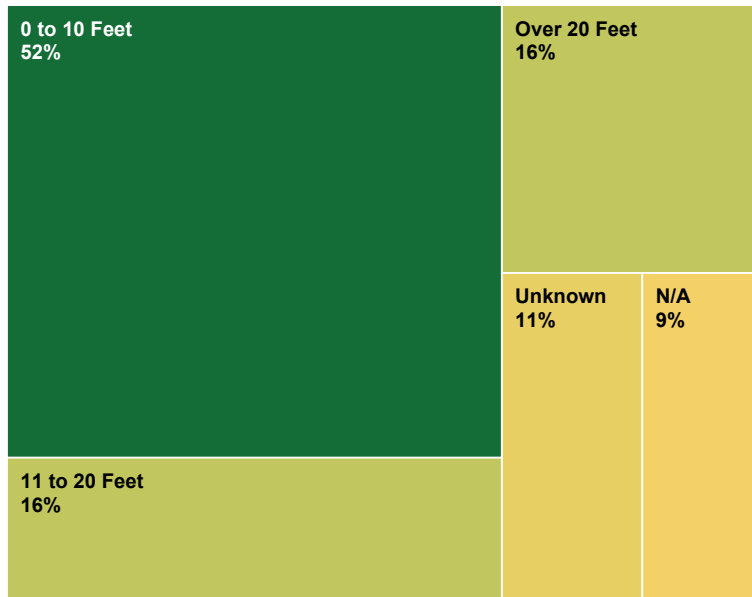


Days and Times of Incidents Occurring

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Grand Total
12 AM to 3 AM	2		3	2	1	3	3	14
3 AM to 6 AM	2	2	2	1	2	1	1	11
6 AM to 9 AM							2	2
9 AM to 12 PM		1	1	1	1	3	2	9
12 PM to 3 PM			2	1	1	3		7
3 PM to 6 PM	1		1		1	4	1	8
6 PM to 9 PM			3	1	1	1		6
9 PM to 12 PM			2			4	1	7
Grand Total	5	3	14	6	7	19	10	64

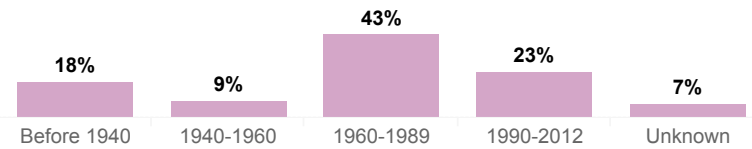
Homes with Fatal Incidents Profile

Victim's Distance from an Egress

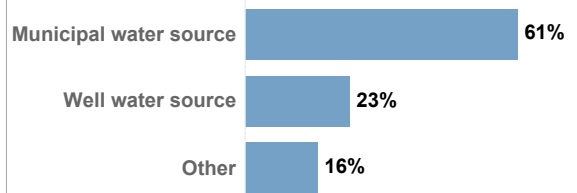


Eighty-five percent of fatal fires occurred in residences. These homes, which are mostly owned, tend to be 30-50 years old, with most being smaller than 1,500 square feet. These homes are often supplied with city or municipal water. Smoke alarms were not always determined to be present, and if they were (35% of the time), they did not necessarily alert the occupants to an emergency. Only in five percent of fatal fires did an alarm that was present also alert the occupants. Notification by an alarm saved two occupants in two separate fires. Code and safety issues were present in 75 percent of incidents, with 40 percent of incidents having more than one issue present. In 51 percent of incidents it was known the home did not have any smoke alarms present.

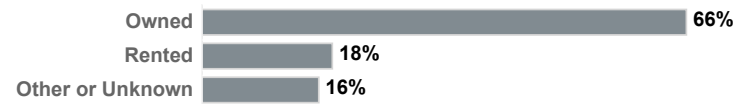
Age of Homes



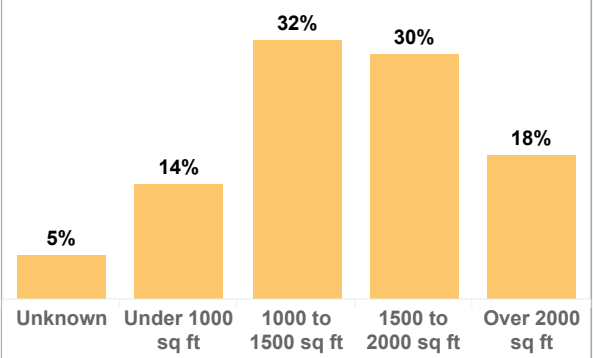
Water Source



Ownership Status of Homes



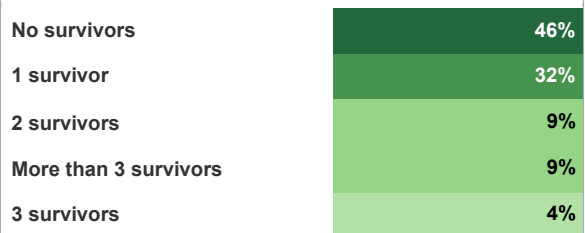
Size of Homes



Code & Safety Issues

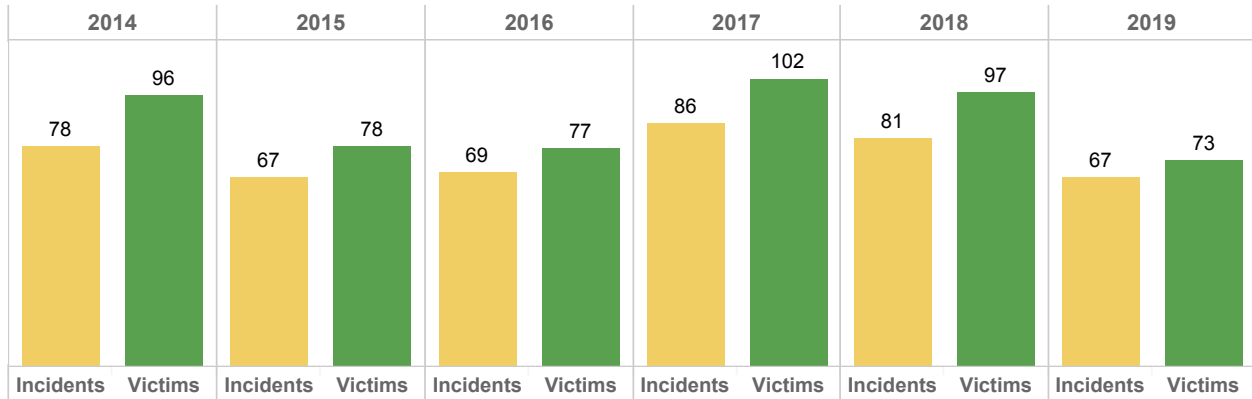
No Smoke Alarms	51%
Hoarding Conditions	37%
Issues with Egress	23%
Improper Storage of Materials	23%
Electrical Risk	21%
Trip Hazards	19%
Derelict Conditions	16%
Blocked Exits	16%
Poor Construction	9%
No Power to Property	9%
Other	7%
Issues with Smoke Alarms	7%
Unpermitted Structure	5%
Issues with Heaters	5%

Survivors in Fatal Home Incidents



Annual and Historical Fire Fatality Information

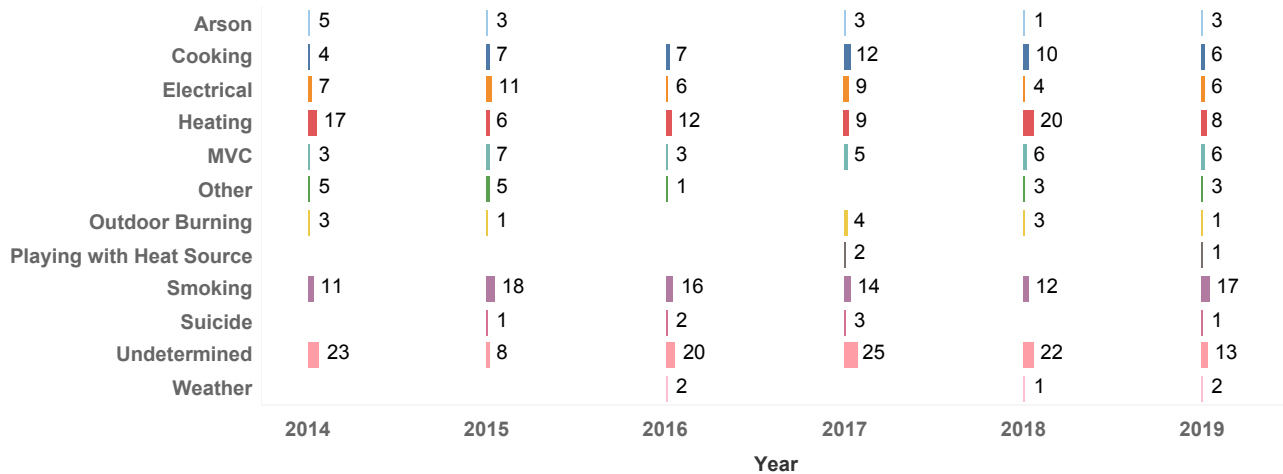
Number of Fatal Incidents and Fire Death Victims from 2014-2019



Fire deaths and fatal fires have fluctuated over the past five years. In 2014-2018, the average number of fire victims per year is 90. During the same time frame, the average number of fatal fires per year is 76. There is a 18 percent decrease in fire deaths in 2019 compared to the average of the past five years. There is a 12 percent decrease in fatal fires in 2019 compared to the average of the past five years. While it is unknown what is responsible for this one-year decrease in fire deaths and fatal fires, possibilities include an increased presence of smoke alarms and community risk reduction for our citizens.

From 2014 to 2019, the number of "undetermined" cause of incidents decreased as researchers were better able to attribute a most probable cause. One cause of fatal fires that increased from 2014 to 2019 was smoking, from 11 fires to 17 fires. Heating fires decreased from 17 fires to eight fires.

Most Probable Cause of Fatal Fires from 2014-2019



*Other = Explosions and Other Car Fires (not MVC-related)

Detailed Fatality Information

Data contained in this report or on this site is collected, compiled, and reported for research and educational purposes only. The contents of any report or data herein is not intended to be used as a definitive conclusion related to a fire's origin and cause or a decedent's manner of death. Therefore, data contained in this report or on this site does not replace nor supersede investigative reports for origin and cause or manner of death.

January

Incident Date	County	Occupancy Type	Age	Gender	Race
1/3/19	Clarendon	Vehicle	24	Male	White
1/5/19	Berkeley	Single-Family Dwelling	77	Female	Black
	Florence	Mobile Home	68	Male	White
	Spartanburg	Mobile Home	68	Male	White
1/6/19	Horry	Single-Family Dwelling	51	Female	White
1/16/19	Laurens	Single-Family Dwelling	42	Male	White
1/17/19	Beaufort	Mobile Home	21	Male	Hispanic
			28	Female	Hispanic
1/18/19	Colleton	Single-Family Dwelling	63	Female	White
1/21/19	Spartanburg	Single-Family Dwelling	56	Female	Black
1/22/19	Charleston	Single-Family Dwelling	55	Male	White
	Cherokee	Single-Family Dwelling	47	Male	White
1/27/19	Florence	Mobile Home	52	Male	Hispanic
1/31/19	Orangeburg	Vehicle	48	Male	White

February

Incident Date	County	Occupancy Type	Age	Gender	Race
2/1/19	Anderson	Mobile Home	78	Male	White
2/5/19	Chesterfield	Single-Family Dwelling	57	Male	Black
2/19/19	Pickens	Single-Family Dwelling	64	Male	White
2/25/19	Jasper	Single-Family Dwelling	31	Female	Black
2/26/19	Georgetown	Multi-Family Dwelling	30	Male	White

March

Incident Date	County	Occupancy Type	Age	Gender	Race
3/14/19	Lexington	Single-Family Dwelling	69	Male	White
3/29/19	Florence	Single-Family Dwelling	31	Male	Black

April

Incident Date	County	Occupancy Type	Age	Gender	Race
4/2/19	Lancaster	Single-Family Dwelling	78	Female	White
4/5/19	Saluda	Single-Family Dwelling	1	Male	White
			63	Female	White
4/12/19	Spartanburg	Vehicle	1	Female	Black

May

Incident Date	County	Occupancy Type	Age	Gender	Race
5/3/19	Greenwood	Single-Family Dwelling	59	Female	White
5/5/19	Anderson	Single-Family Dwelling	69	Male	White
5/17/19	Lancaster	Vehicle	86	Male	Black
5/24/19	Darlington	Mobile Home	54	Female	White
5/31/19	Sumter	Mobile Home	82	Female	White

June

Incident Date	County	Occupancy Type	Age	Gender	Race
6/7/19	Georgetown	Single-Family Dwelling	63	Male	Black
	Horry	Mobile Home	61	Male	White
6/29/19	Clarendon	Mobile Home	29	Female	White
			67	Male	White

July

Incident Date	County	Occupancy Type	Age	Gender	Race
7/13/19	Oconee	Mobile Home	25	Male	White
			79	Male	White
	Union	Retail Business	16	Male	Black
7/19/19	Richland	Single-Family Dwelling	54	Female	Black
7/20/19	Anderson	Mobile Home	64	Male	White
7/23/19	Horry	Single-Family Dwelling	28	Male	White
7/26/19	Anderson	Single-Family Dwelling	56	Male	White

August

Incident Date	County	Occupancy Type	Age	Gender	Race
8/5/19	Aiken	Mobile Home	39	Male	White
8/14/19	Chester	Single-Family Dwelling	97	Female	White
8/16/19	Clarendon	Vehicle	41	Female	Black

September

Incident Date	County	Occupancy Type	Age	Gender	Race
9/5/19	Charleston	Single-Family Dwelling	75	Female	White
			80	Male	White
9/17/19	Spartanburg	Vehicle	55	Male	Hispanic
9/19/19	Kershaw	Single-Family Dwelling	79	Female	White
9/28/19	Florence	Single-Family Dwelling	38	Male	White

October

Incident Date	County	Occupancy Type	Age	Gender	Race
10/1/19	Florence	Small Storage	46	Female	White
10/8/19	Charleston	Mobile Home	71	Male	Black
10/9/19	Richland	Single-Family Dwelling	50	Male	White
10/11/19	Saluda	Mobile Home	41	Male	Black
10/19/19	Greenville	Mobile Home	39	Female	White
10/24/19	Berkeley	Mobile Home	59	Female	Black
10/27/19	Dorchester	Single-Family Dwelling	29	Male	Black

November

Incident Date	County	Occupancy Type	Age	Gender	Race
11/1/19	Horry	Vehicle	17	Female	White
			62	Female	White
11/5/19	Spartanburg	Single-Family Dwelling	69	Male	White
11/20/19	Lee	Single-Family Dwelling	56	Male	Black
11/26/19	Anderson	Outdoor Area	89	Male	White
	Oconee	Single-Family Dwelling	27	Male	White
11/30/19	Clarendon	Single-Family Dwelling	69	Female	Black

December

Incident Date	County	Occupancy Type	Age	Gender	Race
12/3/19	Beaufort	Single-Family Dwelling	58	Male	White
12/8/19	Anderson	Single-Family Dwelling	27	Male	Black
12/11/19	Horry	Vehicle	71	Male	White
12/18/19	Spartanburg	Single-Family Dwelling	63	Female	White
12/20/19	Anderson	Single-Family Dwelling	34	Female	White
	Charleston	Single-Family Dwelling	75	Female	Black
	Spartanburg	Single-Family Dwelling	64	Male	White
		Single-Family Dwelling	61	Female	White
12/24/19	Lexington	Single-Family Dwelling	51	Male	Black
12/27/19	Georgetown	Single-Family Dwelling	83	Male	Black