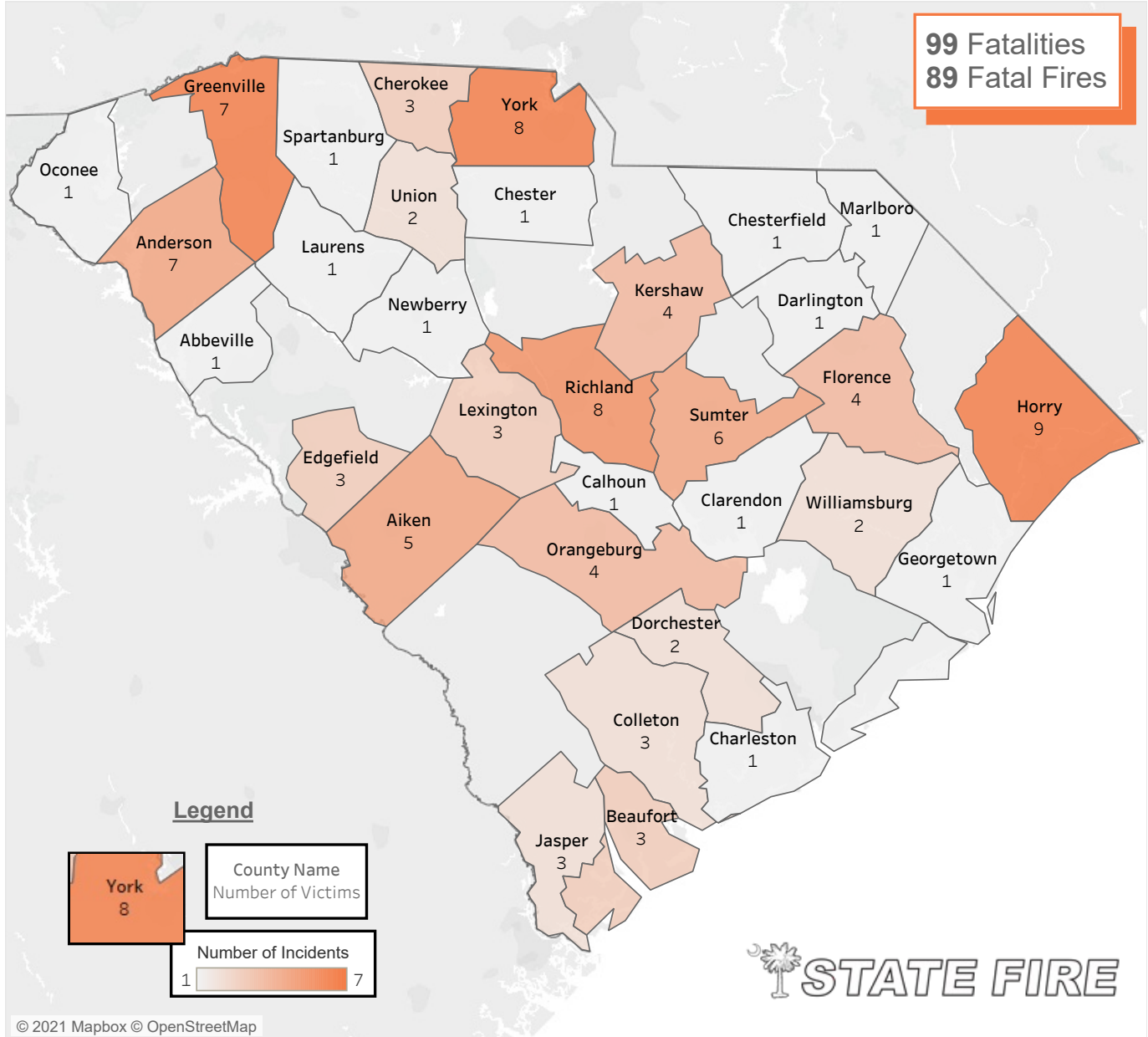


2020 Fire Fatality Summary Report

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

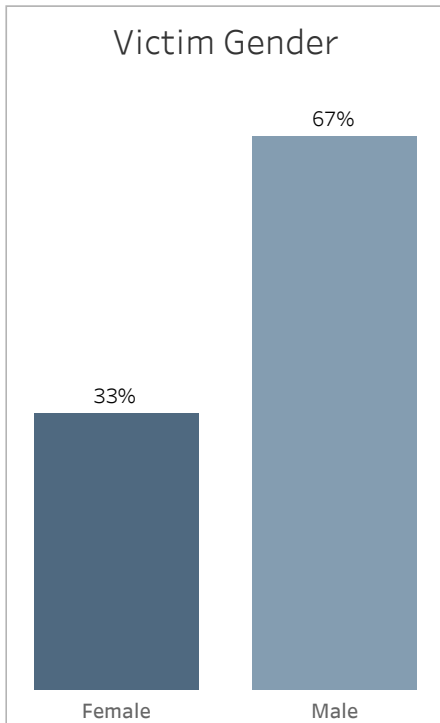


These findings are made possible by the research efforts of the CLEAR Team. In some cases, the percentages may not add up to 100% due to rounding. If you would like more information or outreach ideas based on the findings, please call South Carolina State Fire at (803) 896-9800.

This report version was last updated on June 3, 2021.

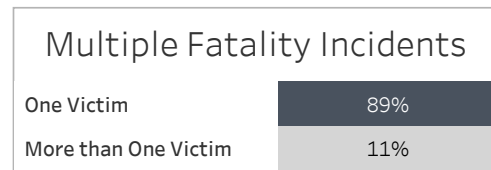
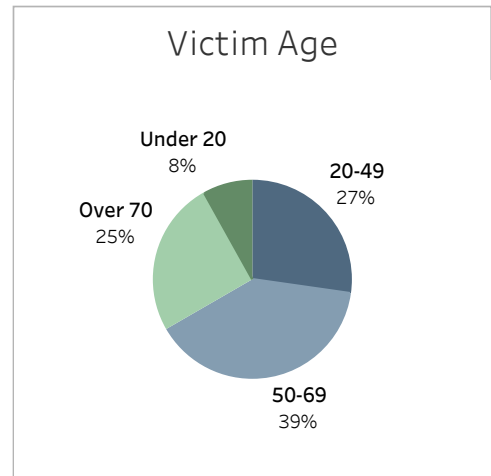
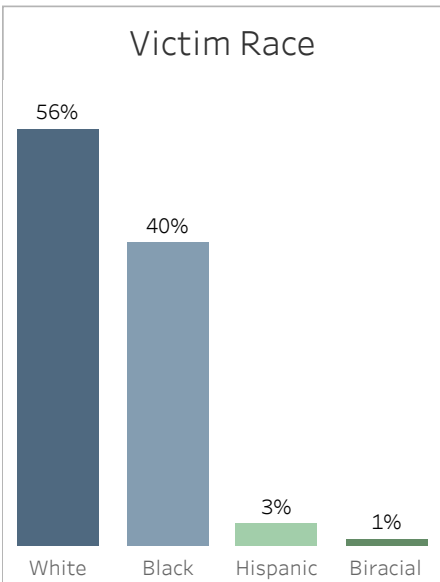
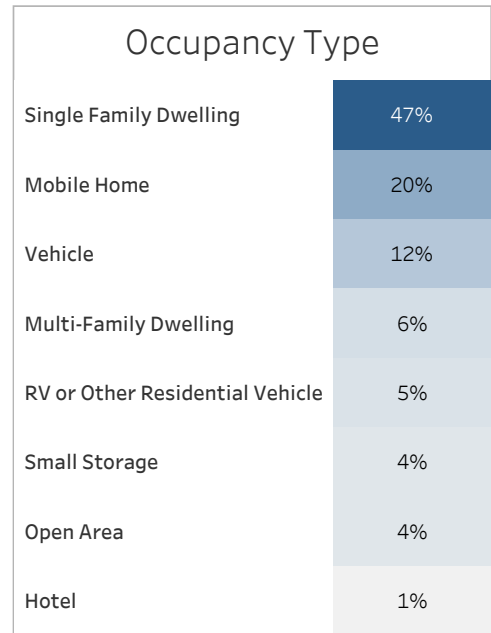
Fire Fatality Victim Profile

In 2020, there were 99 deaths from 89 incidents. The victims of fatal fires were reported in 32 of 46 counties, with most incidents happening in Greenville, Horry, and York counties. These counties, plus Anderson and Richland, had the most victims. Most incidents had one victim; however, eight incidents had two victims each. Victims were mostly male and 65 percent were older than the age of 50. White victims accounted for more than half of all victims, followed by Black victims at 40 percent, and Hispanic victims at three percent. Victims were typically found in residences, specifically single-family dwellings and mobile homes, although a number were found in vehicles converted to permanent residences.

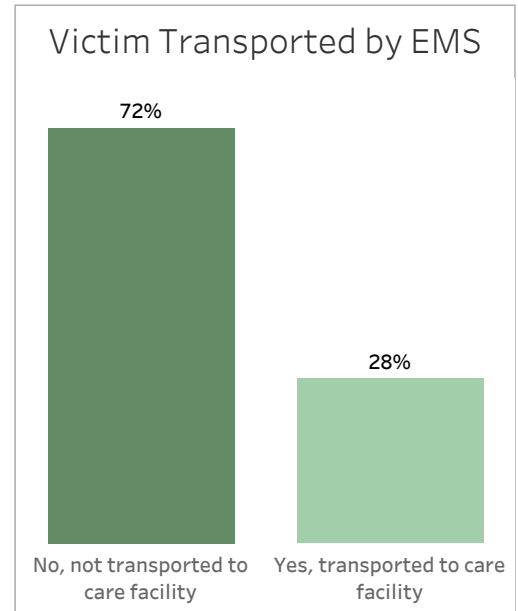
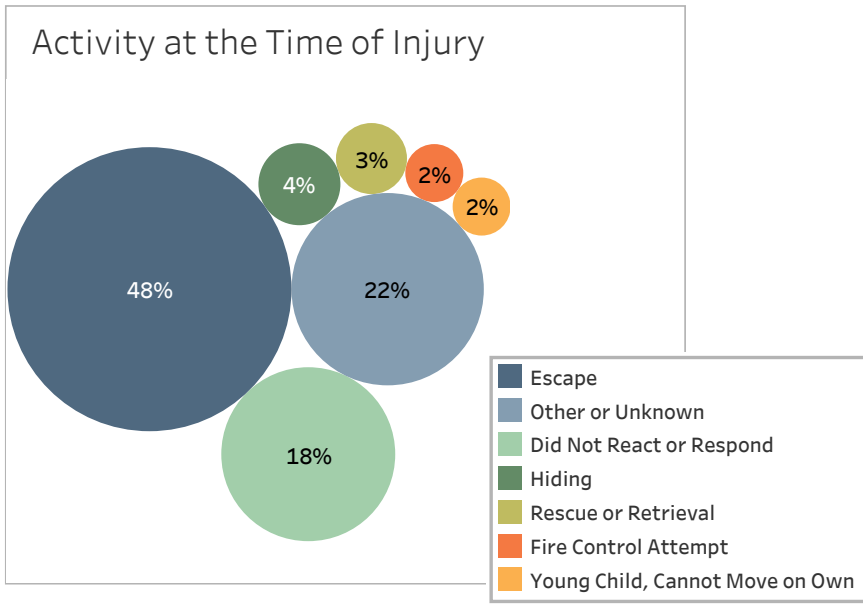


Incidents and Victims Per County

County	Incidents	Victims
Abbeville	1	1
Aiken	5	5
Anderson	5	7
Beaufort	3	3
Calhoun	1	1
Charleston	1	1
Cherokee	3	3
Chester	1	1
Chesterfield	1	1
Clarendon	1	1
Colleton	2	3
Darlington	1	1
Dorchester	2	2
Edgefield	3	3
Florence	4	4
Georgetown	1	1
Greenville	7	7
Horry	7	9
Jasper	2	3
Kershaw	4	4
Laurens	1	1
Lexington	3	3
Marlboro	1	1
Newberry	1	1
Oconee	1	1
Orangeburg	4	4
Richland	6	8
Spartanburg	1	1
Sumter	5	6
Union	2	2
Williamsburg	2	2
York	7	8



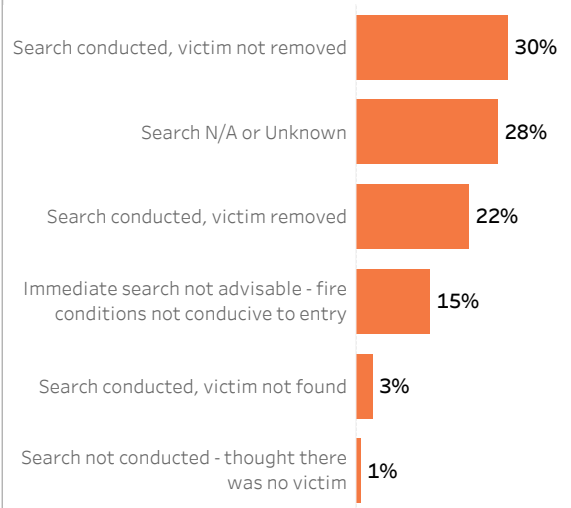
Fire Fatality Victim Profile



Victims were generally found to be attempting escape when they were injured. Forty-eight percent of victims attempted an escape, while only six percent of victims were successful in their attempt. Eighteen percent did not have time to respond to the emergency before succumbing. In 72 percent of cases, the victim was pronounced deceased at the fire scene. However, citizens attempted to rescue victims in 21 percent of cases. Prior to fire department arrival, unsafe conditions did not allow for citizens to assist the victim in escaping in about one in seven incidents. Fifteen percent of the time, the fire 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 five fatal fires.

The CLEAR Team was notified about fire fatalities within 24 hours of the death 73 percent of the time and responded on-scene 58 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.

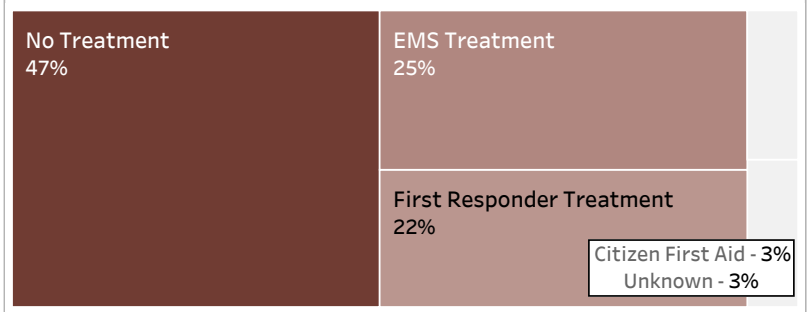
Fire Department Primary Search of Victim



Civilian Entry Attempt

No - Civilians were around, but no attempts to enter were made	32%
No - No civilians were around	23%
Not applicable or unknown	23%
Yes - Civilians made an attempt, but no entry was made	14%
Yes - Civilians were able to successfully enter	7%

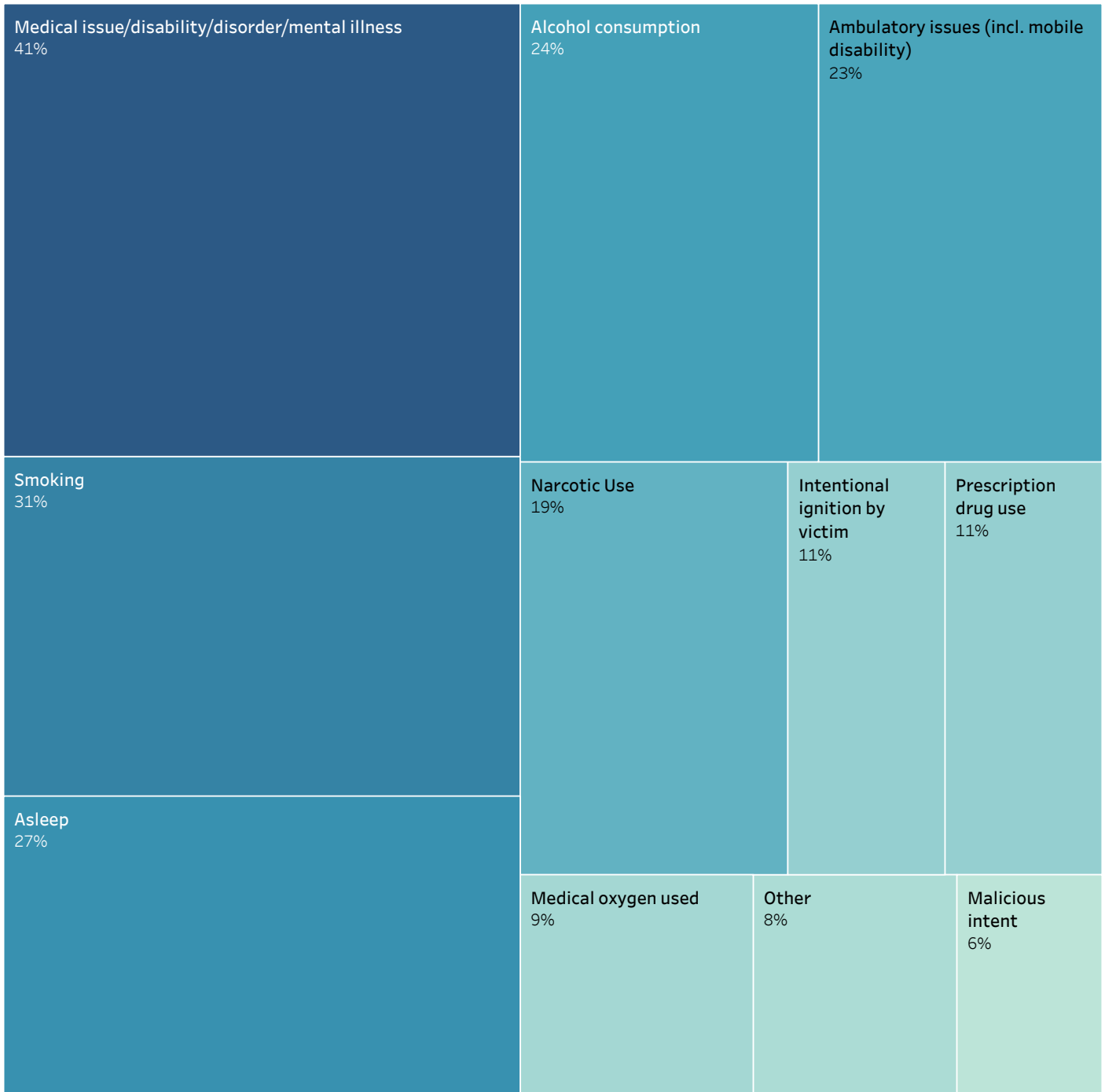
On-Scene Medical Treatment



Human Factors Profile

Human factors were deemed present in 81 percent of all incidents, with 60 percent of incidents having more than one human factor present. The factors below account for some 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.

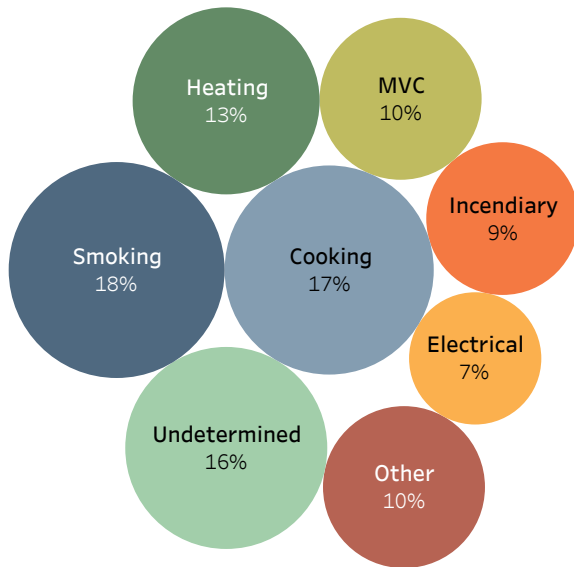
Close proximity to flammable material was present in five percent of incidents. Improper use of flammable material and intentional ignition by someone other than the victim were each present in three percent of all incidents. Speeding, impaired driving, unaccompanied individuals, and young children were each present in two percent of all incidents.



Fatal Incidents Profile

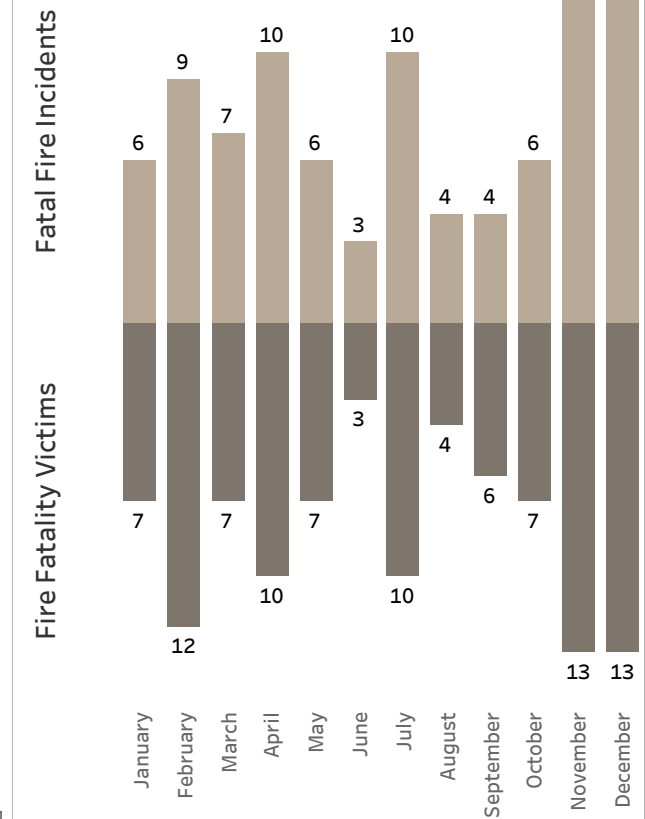
When cause could be determined, fatal incidents were most likely caused by improperly smoking materials or unattended cooking. Incidents occurred all days of the week, with an above average amount on Friday and Saturday. Fatal incidents generally occurred during the overnight hours, from 9 p.m. to 6 a.m., and in November and December.

Most Probable Cause of Incidents



Other incidents include: outdoor burning, playing with fire, other vehicle fires, and explosion.

Incidents by Month



Days and Times of Incidents Occurring

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
12 AM to 3 AM	2	1		4	1	3	3	14
3 AM to 6 AM	4				6	1	3	14
6 AM to 9 AM		2	2	1	1			6
9 AM to 12 PM				1	3	1	1	6
12 PM to 3 PM	1	2	2	2		5	2	14
3 PM to 6 PM	1	1	1	1	2	2	2	10
6 PM to 9 PM	1	1	1	1	2		3	9
9 PM to 12 AM	1	4	4	2	2	1	2	16
Total	10	11	10	12	17	13	16	89

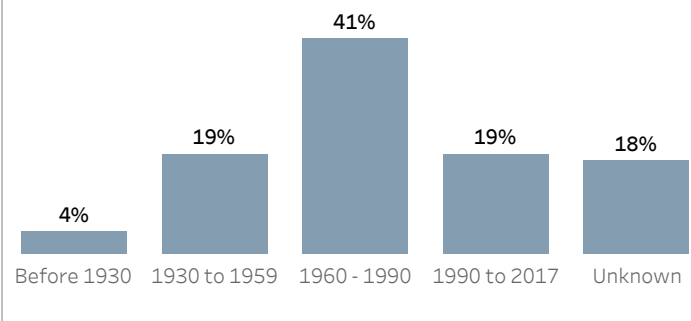
Homes with Fatal Incidents Profile

Victim's Distance from an Egress

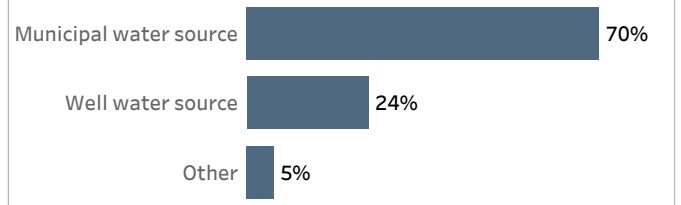


Eighty-four percent of fatal fires occurred in residences. These homes, which are mostly owned, tend to be 30-50 years old, with most being smaller than 1,500 square feet. These homes are often supplied with city or municipal water. Smoke alarms were only known to be present in 32 percent of home fires. In 11 percent of incidents, an alarm which was present also alerted the occupants. Notification by an alarm saved seven occupants in four separate fires. Code and safety issues were present in 65 percent of incidents, with 28 percent of incidents having more than one issue present. In 39 percent of incidents, it was known the home did not have any smoke alarms present.

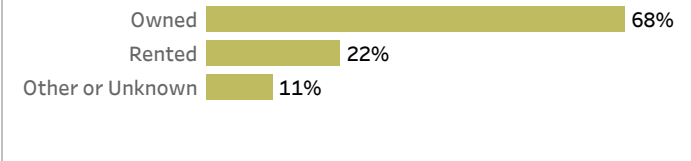
Age of Homes



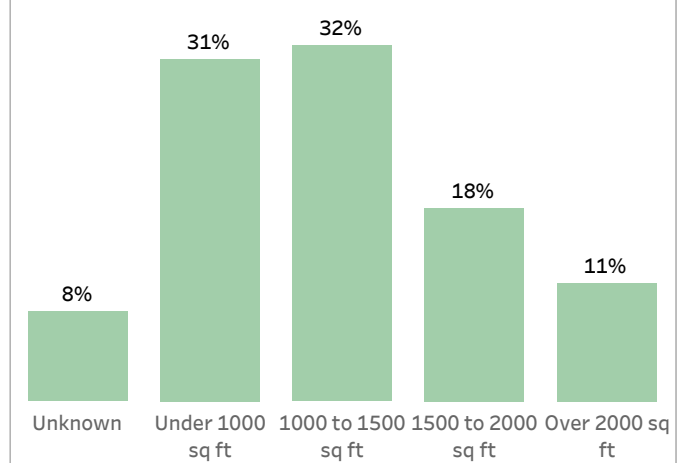
Water Source



Ownership Status of Homes



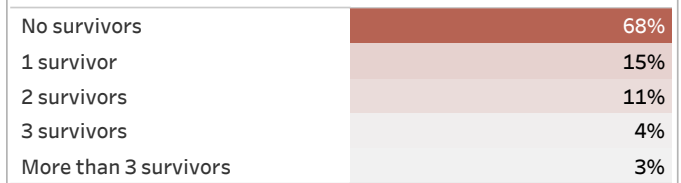
Size of Homes



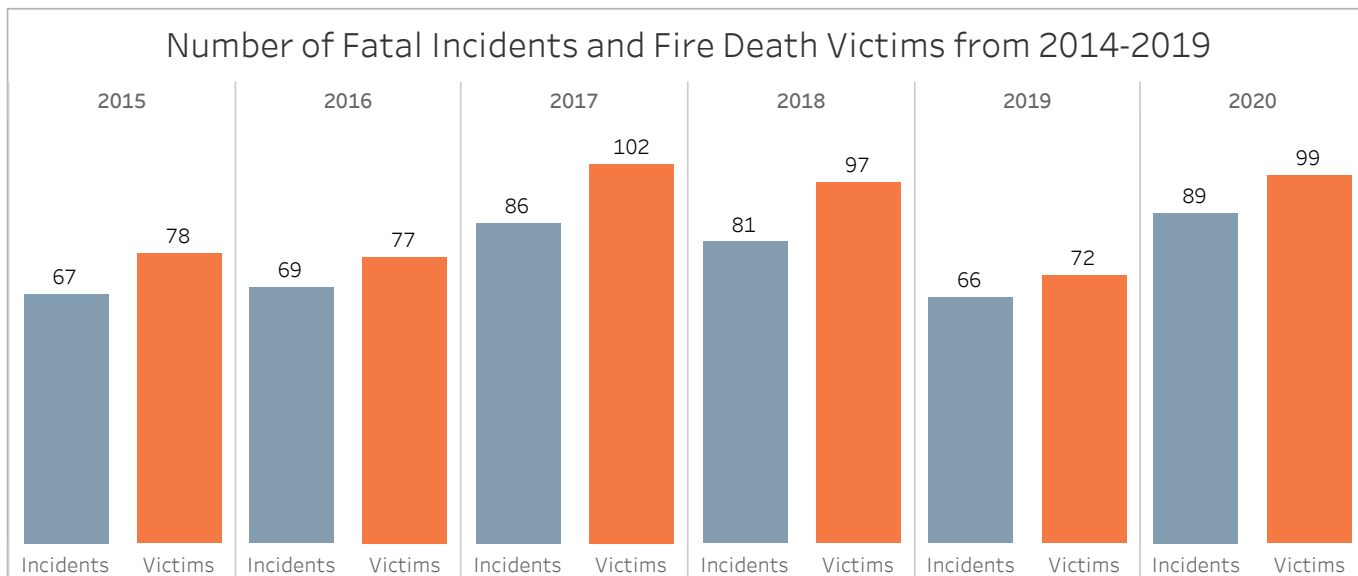
Code & Safety Issues

No Smoke Alarms	39%
Hoarding Conditions	20%
Electrical Risk	15%
Other	14%
Improper Storage of Materials	14%
Derelict Conditions	11%
Blocked Exits	11%
Issues with Egress	9%
Trip Hazards	8%
No Power to Property	8%
Poor Construction	4%

Survivors in Fatal Home Incidents

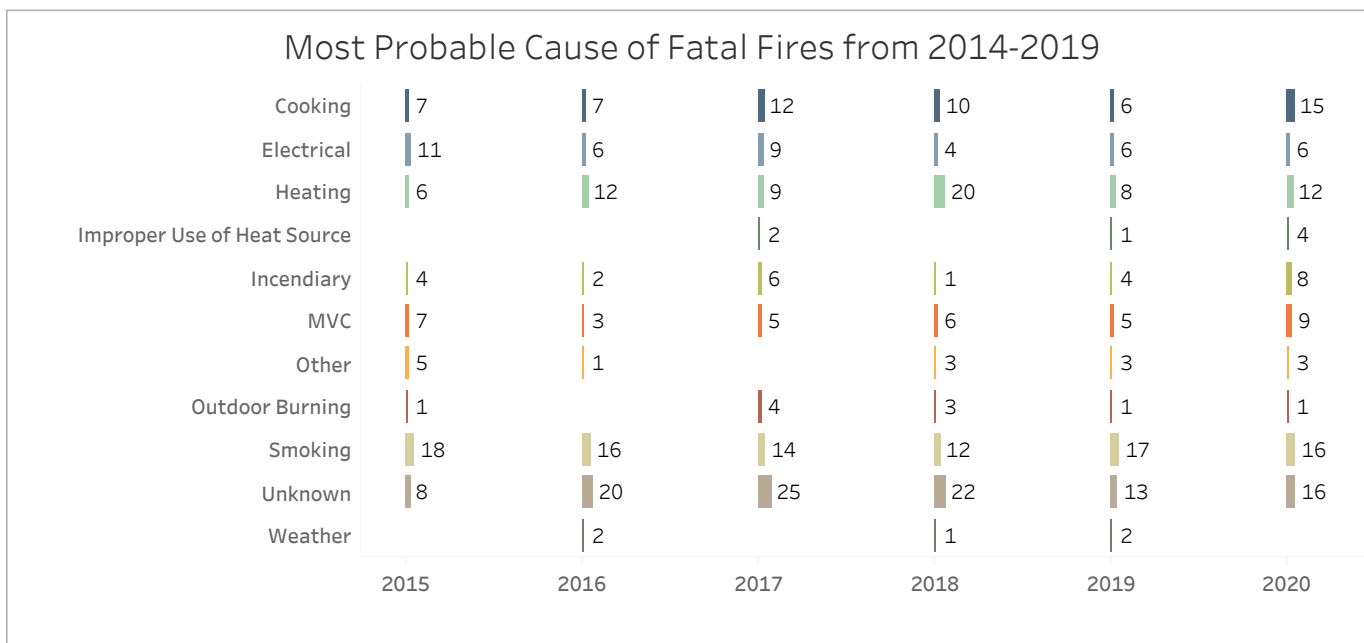


Annual and Historical Fire Fatality Information



Fire deaths and fatal fires have fluctuated over the past five years. Between 2015 - 2019, the average number of fire victims per year is 85. During the same time frame, the average number of fatal fires per year is 74. There is a 16 percent increase in fire deaths in 2020 compared to the average of the past five years. There is a 20 percent increase in fatal fires in 2020 compared to the average of the past five years. What is responsible for this increase in fire deaths and fatal fires is unknown, possibilities include better reporting of incidents by fire departments and more people living in places not meant for permanent residency.

From 2015 to 2020, the number of "undetermined" cause of incidents generally decreased as researchers were better able to attribute a most probable cause. Two causes of fatal fires that increased from 2015 to 2020 include cooking fires, from seven fires to 15 fires, and incendiary fires (suicides, arsons, and other intentionally set fires), from four fires to eight fires.



Detailed Fatality Information

January

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
1/1/20	Beaufort	Undetermined	RV or Other Residential ..	61	Male	White
1/8/20	Beaufort	Undetermined	Single Family Dwelling	57	Male	White
1/9/20	Beaufort	Heating	RV or Other Residential ..	68	Male	Black
	Greenville	Undetermined	Multi-Family Dwelling	67	Male	White
1/17/20	Anderson	Smoking	Single Family Dwelling	54	Female	White
				56	Male	White
1/20/20	Cherokee	Heating	Single Family Dwelling	32	Female	White

February

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
2/8/20	Jasper	Other	Vehicle	45	Male	Black
				62	Male	Black
2/10/20	Edgefield	Undetermined	Mobile Home	77	Female	White
2/11/20	Sumter	Heating	Mobile Home	32	Female	Black
				83	Male	Black
2/14/20	Anderson	Cooking	Single Family Dwelling	29	Female	White
2/15/20	Anderson	Other	Single Family Dwelling	21	Female	White
				29	Male	White
2/22/20	Dorchester	Heating	Single Family Dwelling	73	Male	Black
2/25/20	York	Cooking	Single Family Dwelling	64	Male	White
2/28/20	Calhoun	MVC	Vehicle	31	Male	Black
	Edgefield	Smoking	Single Family Dwelling	82	Female	White

March

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
3/5/20	Sumter	Heating	Mobile Home	64	Male	Black
3/11/20	Florence	Cooking	Single Family Dwelling	55	Male	Black
3/15/20	Greenville	MVC	Vehicle	18	Male	White
3/16/20	Newberry	Undetermined	Single Family Dwelling	59	Male	White
3/21/20	Greenville	Smoking	Single Family Dwelling	68	Female	White
3/26/20	Charleston	Undetermined	Single Family Dwelling	78	Male	Black
3/31/20	Greenville	Undetermined	RV or Other Residential Vehicle	44	Male	White

April

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
4/2/20	Jasper	Heating	Single Family Dwelling	71	Male	Black
4/6/20	Aiken	Smoking	Mobile Home	62	Male	White
4/7/20	Sumter	Smoking	Multi-Family Dwelling	48	Male	White
4/9/20	Lexington	Incendiary	Mobile Home	33	Male	Biracial
4/15/20	Anderson	Undetermined	Single Family Dwelling	36	Female	White
	York	Other	Single Family Dwelling	77	Female	White
4/16/20	Chester	Other	Single Family Dwelling	56	Male	Black
4/18/20	Orangeburg	Cooking	Single Family Dwelling	46	Male	Black
4/21/20	Aiken	Cooking	Mobile Home	3	Male	Black
4/28/20	Chesterfield	MVC	Vehicle	39	Male	Black

May

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
5/1/20	Greenville	Cooking	Single Family Dwelling	72	Female	White
5/2/20	Greenville	Smoking	Single Family Dwelling	64	Male	Black
5/7/20	Kershaw	Smoking	Mobile Home	11	Male	White
5/8/20	Horry	Incendiary	Open Area	60	Male	White
5/10/20	York	Smoking	Mobile Home	75	Male	White
5/20/20	Richland	Smoking	Single Family Dwelling	50	Female	White
				59	Male	White

June

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
6/13/20	Horry	MVC	Vehicle	28	Female	Black
6/22/20	York	Cooking	Single Family Dwelling	89	Female	White
6/27/20	Horry	Incendiary	Hotel	37	Male	White

July

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
7/5/20	Florence	Cooking	Single Family Dwelling	69	Male	Black
	Orangeburg	Other	Mobile Home	84	male	White
7/6/20	Anderson	MVC	Vehicle	64	Male	White
7/9/20	Florence	Cooking	Single Family Dwelling	72	Male	Black
	Richland	Undetermined	RV or Other Residential Vehicle	69	Male	White
7/10/20	Aiken	Other	Single Family Dwelling	94	Female	Black
7/11/20	Aiken	Incendiary	Single Family Dwelling	10	Male	White
7/15/20	Colleton	Incendiary	Small Storage	55	Female	White
7/22/20	Sumter	Other	Open Area	39	Male	Black
7/26/20	Williamsburg	Cooking	Single Family Dwelling	42	Male	White

August

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
8/8/20	Spartanburg	Smoking	Mobile Home	57	Female	Black
8/19/20	York	Electrical	Multi-Family Dwelling	57	Female	White
8/21/20	Oconee	Smoking	Single Family Dwelling	71	Male	White
8/22/20	Aiken	Other	Mobile Home	58	Male	White

September

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
9/3/20	Horry	Smoking	Single Family Dwelling	44	Female	White
				68	Female	White
9/7/20	Colleton	Electrical	Mobile Home	53	Female	White
				54	Female	White
9/10/20	Georgetown	MVC	Vehicle	3	Female	White
9/25/20	Horry	Smoking	Multi-Family Dwelling	69	Female	White

October

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
10/3/20	Cherokee	Incendiary	Single Family Dwelling	30	Male	White
10/10/20	Williamsburg	Cooking	Single Family Dwelling	2	Male	Hispanic
10/16/20	Richland	Cooking	Mobile Home	49	Male	Black
10/18/20	Edgefield	Smoking	Multi-Family Dwelling	85	Male	Black
	Horry	MVC	Vehicle	29	Male	Hispanic
				44	Female	Hispanic
10/19/20	Dorchester	Electrical	Single Family Dwelling	74	Male	White

November

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
11/1/20	York	Electrical	Mobile Home	48	Male	White
				81	Female	White
11/2/20	Clarendon	Smoking	RV or Other Residential Vehicle	75	Male	White
11/3/20	Richland	Electrical	Single Family Dwelling	74	Female	Black
	Sumter	Cooking	Mobile Home	51	Female	Black
11/16/20	Darlington	Heating	Single Family Dwelling	77	Male	Black
	Lexington	Cooking	Single Family Dwelling	91	Female	White
11/19/20	Union	Incendiary	Mobile Home	46	Male	Black
11/20/20	Greenville	Undetermined	Single Family Dwelling	79	Male	White
	Richland	Heating	Small Storage	59	Male	Black
11/22/20	Kershaw	Heating	Single Family Dwelling	69	Male	Black
11/25/20	Union	Undetermined	Single Family Dwelling	6	Female	White
11/28/20	Orangeburg	Undetermined	Single Family Dwelling	22	Male	White

December

Incident Date	County	Most Probable Cause	Occupancy Type	Age	Gender	Race
12/3/20	Orangeburg	Incendiary	Open Area	61	Male	Black
12/4/20	Kershaw	Heating	Small Storage	62	Male	Black
12/5/20	Florence	Electrical	Single Family Dwelling	43	Male	Black
12/8/20	Kershaw	MVC	Vehicle	51	Male	Black
12/9/20	Abbeville	Heating	Single Family Dwelling	65	Male	Black
12/17/20	Cherokee	MVC	Vehicle	63	Male	White
	Lexington	Smoking	Small Storage	73	Male	White
12/19/20	Richland	Undetermined	Single Family Dwelling	52	Female	Black
				57	Male	Black
12/20/20	Laurens	Cooking	Multi-Family Dwelling	4	Female	Black
12/23/20	Marlboro	Undetermined	Mobile Home	32	Male	Black
12/29/20	Horry	Other	Open Area	81	Male	White
12/31/20	York	Heating	Single Family Dwelling	79	Female	Black