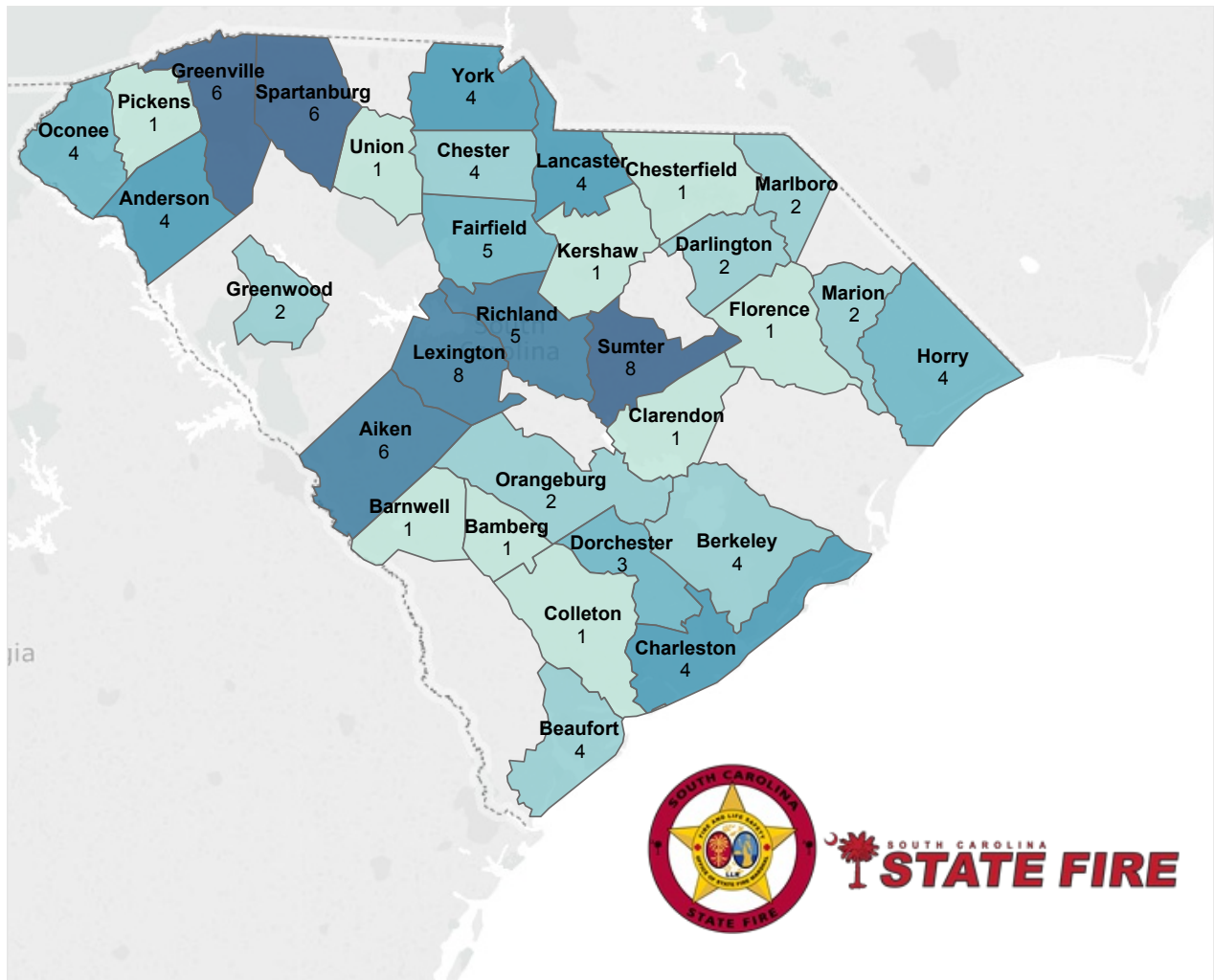


# 2017 Fire Fatality Summary Report

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



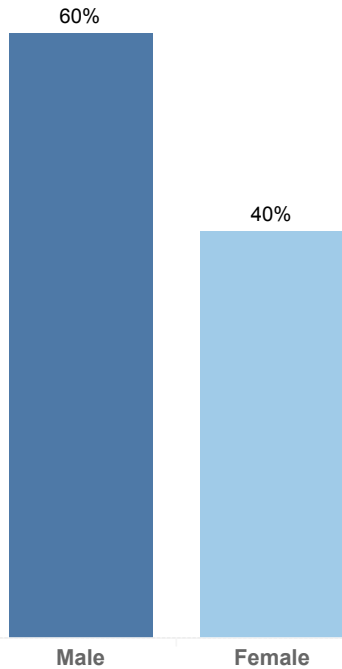
These findings are made possible by the research efforts of the CLEAR Team. In some cases, the percentages may not add up to 100% due to rounding. If you would like more information or outreach ideas based on the findings, please call South Carolina State Fire at (803) 896-9895.

This report version was last updated on April 5, 2018.

# Fire Fatality Victim Profile

In 2017, there were 102 deaths from 86 incidents. The victims of fatal fires were reported in 31 of 46 counties, with the most incidents happening in Greenville, Spartanburg, and Sumter counties. Aiken and Lexington counties had a fewer number of incidents but more victims per incident. Most incidents had one victim; however, four incidents had three or more fatalities. Victims were mostly male, and 61 percent were older than the age of 50. White victims accounted for approximately half of all victims, followed by black victims at 39 percent. Victims were typically found in residences, specifically single-family dwellings and mobile homes.

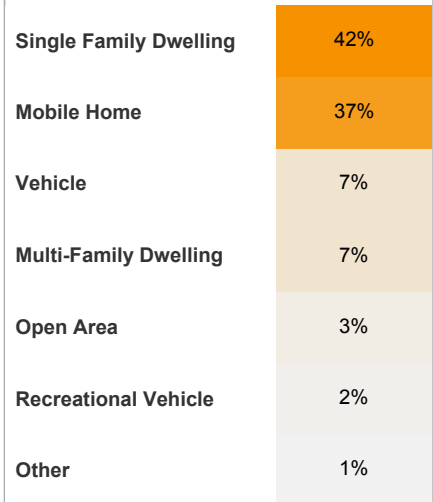
### Victim Gender



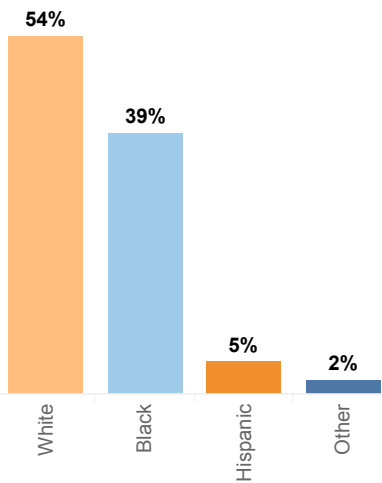
### Incidents and Victims per County

County	Incidents	Victims
Aiken	5	6
Anderson	4	4
Bamberg	1	1
Barnwell	1	1
Beaufort	2	4
Berkeley	2	4
Charleston	4	4
Chester	2	4
Chesterfield	1	1
Clarendon	1	1
Colleton	1	1
Darlington	2	2
Dorchester	3	3
Fairfield	3	5
Florence	1	1
Greenville	6	6
Greenwood	2	2
Horry	3	4
Kershaw	1	1
Lancaster	4	4
Lexington	5	8
Marion	2	2
Marlboro	2	2
Oconee	3	4
Orangeburg	2	2
Pickens	1	1
Richland	5	5
Spartanburg	6	6
Sumter	6	8
Union	1	1
York	4	4
<b>Grand Total</b>	<b>86</b>	<b>102</b>

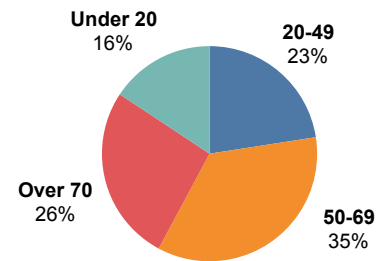
### Occupancy Type



### Victim Race



### Victim Age

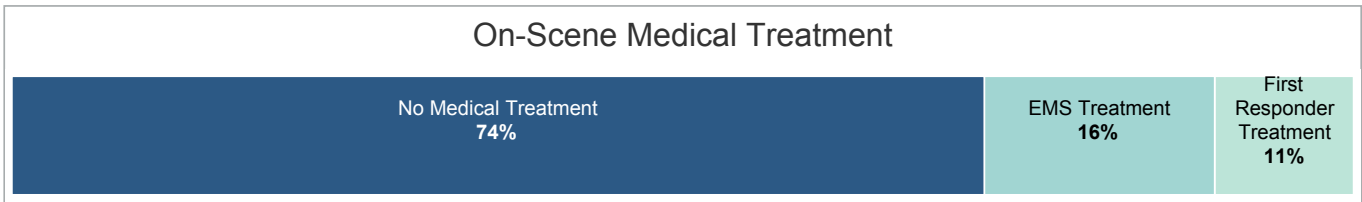
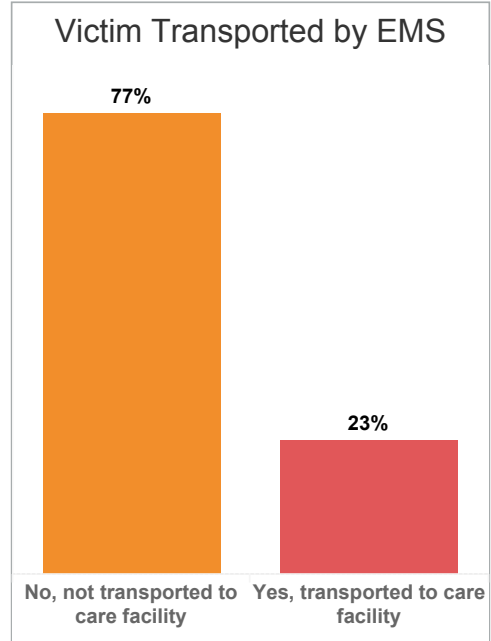
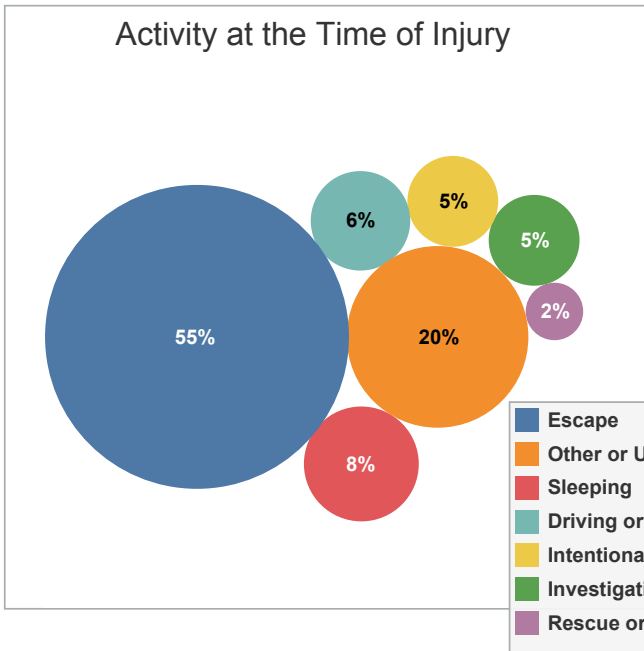


Median Age of Victims = 56

### Multiple Fatality Incidents

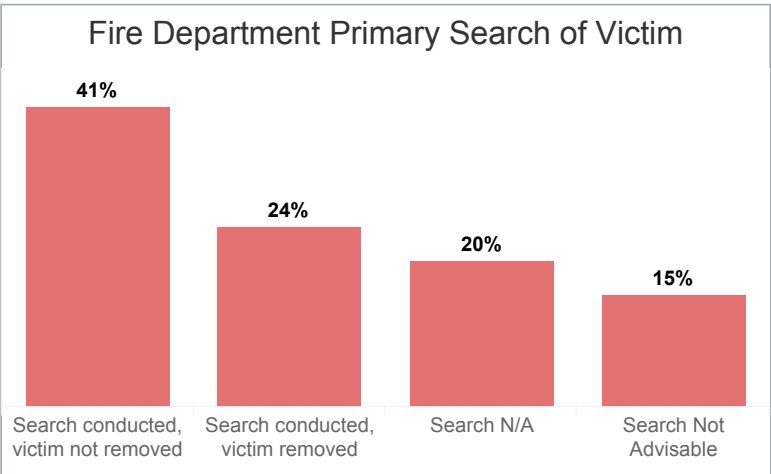
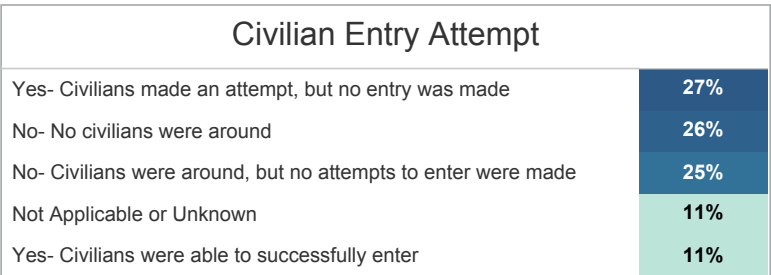


# Fire Fatality Victim Profile



Victims were generally found to be attempting escape when they were injured. Fifty-five percent of victims attempted an escape, while only four percent of victims were successful in their attempt. Eight percent did not awaken to an emergency before succumbing. In three out of four cases, the victim was pronounced deceased at the fire scene. In 39 cases (38%), citizens attempted to rescue victims. Prior to fire department arrival, unsafe conditions did not allow for citizens to assist the victim in escaping. In 15 percent of cases, the fire department could not search for the victim due to conditions. Victims were only removed during search and rescue operations in one out of every four fatal fires.

The CLEAR Team was notified about fire fatalities within 24 hours of the death 87 percent of the time, and responded on-scene 55 percent of the time. This allows us to understand more about why some fires are fatal and connect with fire departments and their communities to prevent further tragedies.



# Human Factors Profile

Human factors were deemed present in 84 percent of all incidents, with 56 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 can contribute to a person's demise in the event of a fire.

All vehicle-related and open area-related fire fatalities had at least one human factor which contributed to an improper response to the emergency.

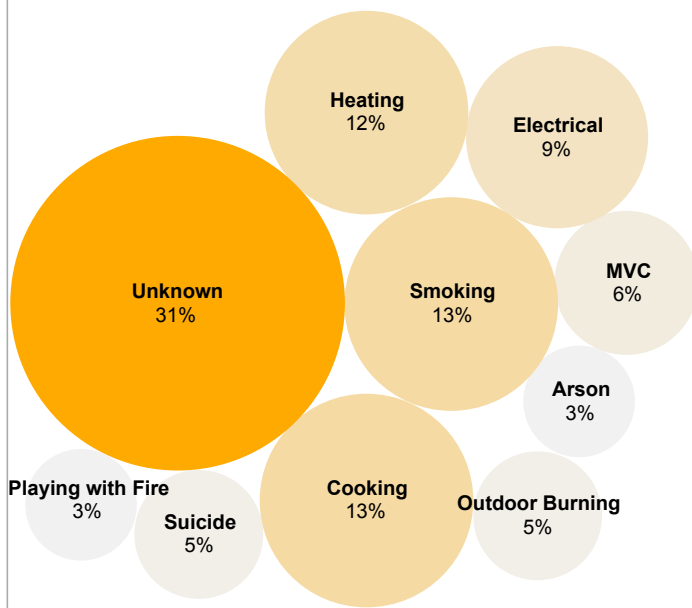
Nine incidents had medical oxygen as a known human factor, and eighty-nine percent of those incidents had smoking as an additional human factor present.



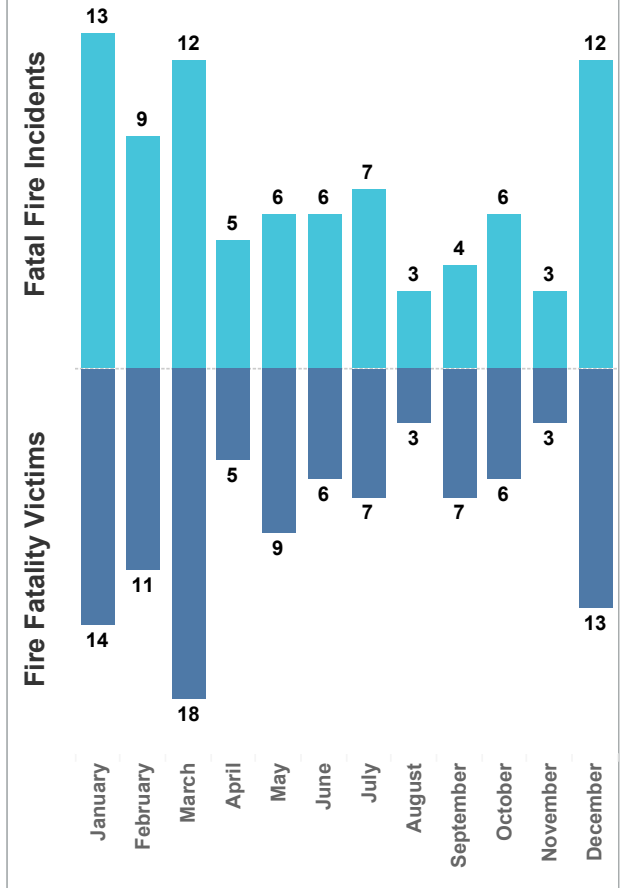
# Fatal Incidents Profile

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

## Most Probable Cause of Incidents



## Incidents by Month

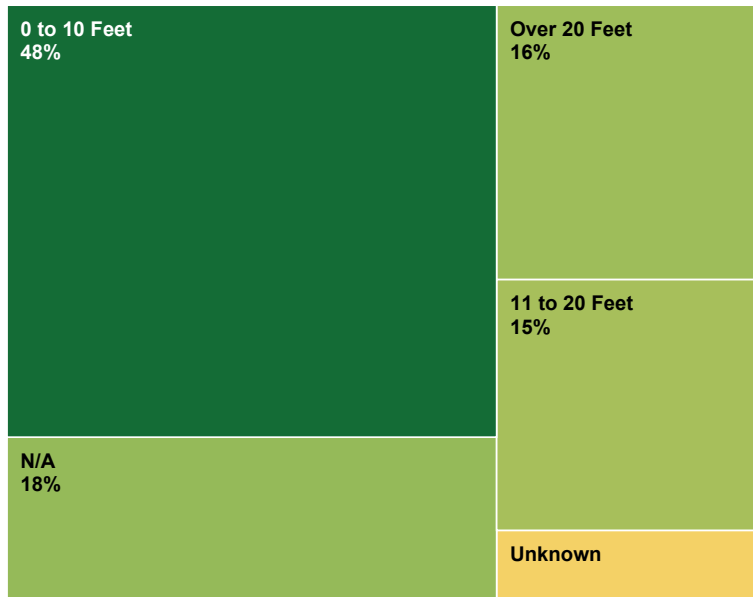


## Days and Times of Incidents Occurring

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Grand Total
12 AM to 3 AM	5	4	2	2	1	1		15
3 AM to 6 AM	3	1		1	1	4		10
6 AM to 9 AM	2	1		1	1		2	7
9 AM to 12 PM	3		1	1	2	2	4	13
12 PM to 3 PM	1	2	3	1	2		1	10
3 PM to 6 PM		1		1	1	2	3	8
6 PM to 9 PM	1	3	1	1	1	2	1	10
9 PM to 12 PM	4	2	1	2	2	2		13
<b>Grand Total</b>	<b>19</b>	<b>14</b>	<b>8</b>	<b>10</b>	<b>11</b>	<b>13</b>	<b>11</b>	<b>86</b>

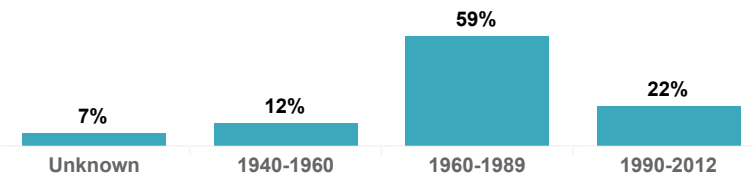
# Homes with Fatal Incidents Profile

## Victim's Distance from an Egress

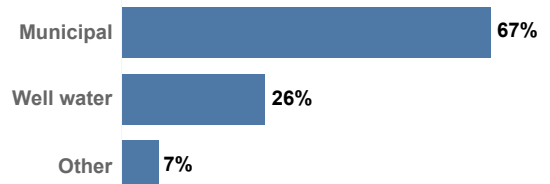


Eighty-five percent of fatal fires occurred in residences. These homes, which are mostly owned, tend to be 30-50 years old, with most being smaller than 1,500 square feet. These homes are often supplied with city or municipal water. Smoke alarms were not always determined to be present, and if they were (38% of the time), they did not necessarily alert the occupants to an emergency. Only in eight percent of fatal fires did an alarm that was present also alerted the occupants. Notification by an alarm saved four occupants in three separate fires. Code and safety issues were present in 59 percent of incidents, with 17 percent of incidents having more than one issue present. 24 percent of the incidents known to not have any smoke alarms.

## Age of Homes



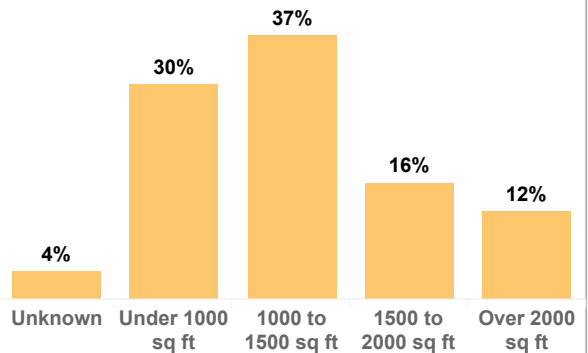
## Water Source



## Ownership Status of Homes



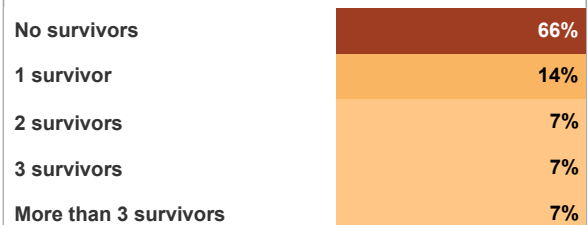
## Size of Homes



## Known Code & Safety Issues

No Smoke Alarms	24%
Blocked Exits	15%
Improper Storage of Materials	12%
Issues with Egress	12%
Trip Hazards	10%
Electrical Risk	8%
No Power to Property	6%
Derelict Conditions	3%

## Survivors in Fatal Home Incidents



# Detailed Fatality Information

## January

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
1/8/17	Greenville	Heating	Single Family Dwelling	89	Male	White
	Sumter	Electrical	Single Family Dwelling	81	Male	Black
1/11/17	York	Heating	Single Family Dwelling	73	Male	Black
1/12/17	Sumter	Electrical	Single Family Dwelling	82	Female	Black
				88	Female	Black
1/19/17	Greenville	Outdoor Burning	Open Area	84	Male	White
1/20/17	Spartanburg	Undetermined	Mobile Home	71	Male	White
1/27/17	Dorchester	Undetermined	Single Family Dwelling	46	Male	White
	Greenville	Cooking	Single Family Dwelling	38	Male	Black
	Spartanburg	Arson	Single Family Dwelling	13	Female	White
		Heating	Mobile Home	75	Male	White
1/29/17	Anderson	MVC	Vehicle	36	Male	Hispanic
1/30/17	Richland	Arson	Multi-Family Dwelling	80	Female	White
	Union	Heating	Mobile Home	88	Male	Black

## February

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
2/4/17	York	Cooking	Mobile Home	63	Male	White
2/6/17	Greenville	Undetermined	Recreational Vehicle	27	Male	White
	Greenwood	Heating	Mobile Home	54	Male	White
2/10/17	Chester	Cooking	Mobile Home	62	Female	White
					Male	White
	Greenville	Smoking	Mobile Home	70	Male	White
2/20/17	Marlboro	Smoking	Mobile Home	70	Male	White
2/22/17	Anderson	Cooking	Single Family Dwelling	41	Male	White
2/26/17	Oconee	Undetermined	Mobile Home	49	Male	White
				53	Male	Hispanic

## March

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
3/2/17	Berkeley	Smoking	Mobile Home	14	Female	Black
				24	Male	White
				44	Female	Black
3/4/17	Lancaster	Undetermined	Single Family Dwelling	56	Male	Black
	Lexington	Undetermined	Single Family Dwelling	64	Female	White
3/6/17	Beaufort	Smoking	Mobile Home	53	Female	White
3/7/17	Sumter	Outdoor Burning	Open Area	67	Female	Black
3/8/17	Aiken	Electrical	Single Family Dwelling	66	Female	Black
3/16/17	Darlington	Heating	Mobile Home	61	Male	White
3/19/17	Marion	Cooking	Single Family Dwelling	84	Female	Black
3/20/17	Marion	Outdoor Burning	Mobile Home	71	Male	White
3/21/17	Lexington	Undetermined	Single Family Dwelling	0	Male	White
				9	Female	White
				34	Female	White
				42	Male	White
3/25/17	Chester	MVC	Recreational Vehicle	23	Male	White
				53	Male	White
3/29/17	York	Outdoor Burning	Open Area	71	Male	White

## April

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
4/8/17	Lancaster	Smoking	Single Family Dwelling	57	Female	White
4/14/17	Sumter	Smoking	Single Family Dwelling	65	Female	White
4/16/17	Spartanburg	MVC	Vehicle	43	Male	Black
4/23/17	Oconee	MVC	Vehicle	18	Male	White
4/30/17	Bamberg	Undetermined	Mobile Home	58	Male	White

## May

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
5/7/17	Fairfield	Arson	Single Family Dwelling	6	Male	Black
				8	Female	Black
				29	Male	Black
5/9/17	Horry	Undetermined	Mobile Home	37	Male	White
				62	Female	White
5/12/17	Lexington	Undetermined	Mobile Home	7	Male	Biracial
5/25/17	Florence	Suicide	Mobile Home	71	Male	Hispanic
5/27/17	York	Suicide	Single Family Dwelling	57	Female	White
5/29/17	Richland	MVC	Vehicle	6	Female	Black



## June

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
6/6/17	Lexington	Playing with Fire	Single Family Dwelling	6	Female	Black
6/10/17	Spartanburg	Smoking	Mobile Home	57	Female	White
6/11/17	Chesterfield	Electrical	Multi-Family Dwelling	90	Male	White
6/19/17	Aiken	Undetermined	Mobile Home	54	Male	White
6/24/17	Charleston	Undetermined	Mobile Home	12	Male	White
6/27/17	Orangeburg	Undetermined	Single Family Dwelling	62	Female	Black

## July

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
7/2/17	Pickens	Electrical	Single Family Dwelling	61	Female	White
7/5/17	Richland	Cooking	Single Family Dwelling	62	Male	Black
7/6/17	Charleston	Playing with Fire	Single Family Dwelling	2	Female	Black
7/13/17	Lexington	Undetermined	Mobile Home	56	Male	White
7/21/17	Marlboro	Smoking	Other	73	Female	Black
7/25/17	Spartanburg	Undetermined	Multi-Family Dwelling	43	Male	White
7/26/17	Kershaw	Playing with Fire	Vehicle	5	Male	White

## August

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
8/11/17	Anderson	Smoking	Mobile Home	22	Male	Black
8/14/17	Horry	Electrical	Mobile Home	70	Female	Hispanic
8/16/17	Anderson	Cooking	Single Family Dwelling	74	Male	White

## September

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
9/2/17	Barnwell	Undetermined	Mobile Home	56	Female	White
9/8/17	Beaufort	Undetermined	Mobile Home	4	Female	Black
				10	Male	Black
				23	Male	Black
9/30/17	Aiken	Under Investigation	Single Family Dwelling	38	Female	White
				69	Male	White
	Berkeley			Smoking	Single Family Dwelling	68

## October

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
10/4/17	Aiken	Suicide	Mobile Home	47	Female	Black
10/8/17	Charleston	Cooking	Multi-Family Dwelling	53	Male	Black
	Richland	Undetermined	Single Family Dwelling	61	Female	White
	Sumter	Electrical	Mobile Home	67	Male	Black
10/15/17	Lancaster	Cooking	Single Family Dwelling	33	Male	Black
10/30/17	Orangeburg	Heating	Single Family Dwelling	86	Male	Black

## November

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
11/14/17	Greenville	Undetermined	Mobile Home	56	Female	Hispanic
11/27/17	Lancaster	Undetermined	Single Family Dwelling	83	Female	White
11/30/17	Clarendon	Heating	Single Family Dwelling	70	Female	Black

## December

Incident Date	County	Most Probable Cause	Occupancy	Age	Gender	Race
12/4/17	Darlington	Undetermined	Single Family Dwelling	1	Female	Black
12/5/17	Charleston	Undetermined	Single Family Dwelling	84	Female	Asian
12/7/17	Richland	Cooking	Multi-Family Dwelling	58	Male	Black
12/8/17	Greenwood	Suicide	Vehicle	45	Female	White
12/11/17	Dorchester	Heating	Single Family Dwelling	68	Male	Black
12/13/17	Colleton	Undetermined	Mobile Home	71	Female	White
	Dorchester	Electrical	Mobile Home	29	Male	Black
12/17/17	Aiken	Cooking	Single Family Dwelling	50	Male	White
	Fairfield	Heating	Single Family Dwelling	74	Male	Black
	Horry	Smoking	Multi-Family Dwelling	64	Male	White
12/28/17	Fairfield	Undetermined	Mobile Home	55	Female	White
	Sumter	Undetermined	Single Family Dwelling	68	Female	Black
				71	Male	Black