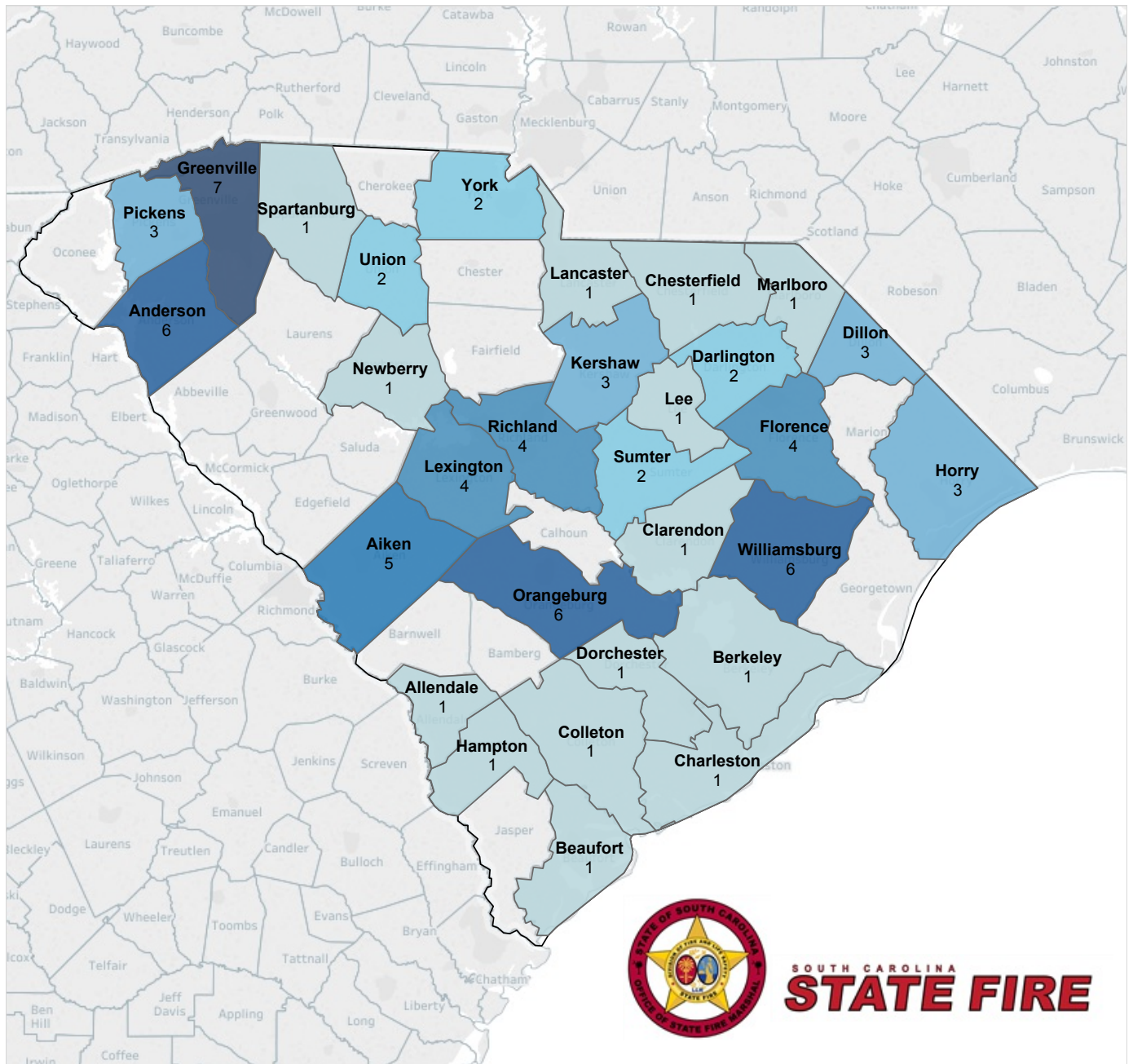


2016 Fire Fatality Summary Report

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

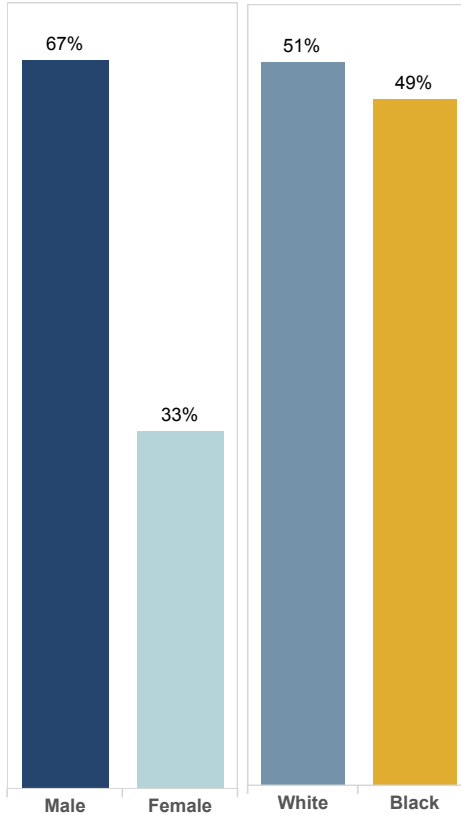


These report findings are made possible by the research efforts of the CLEAR Team. In some cases, the percentages may not add to 100% due to rounding. If you would like more information or outreach ideas based on the findings, please call SC State Fire (803) 896-9895.

2016 Fire Fatality Victim Profile

In 2016, victims of fatal fires were reported in 30 of 46 counties, with the most incidents happening in Anderson, Greenville, Orangeburg, and Williamsburg counties. Victims were mostly male, and 71 percent were older than the age of 50. Black victims and White victims were reported in nearly equal numbers. Most incidents had one victim, although no incidents this year had more than two victims. Victims were found in residences, specifically single family dwellings and mobile homes.

Gender of Victims **Race of Victims**



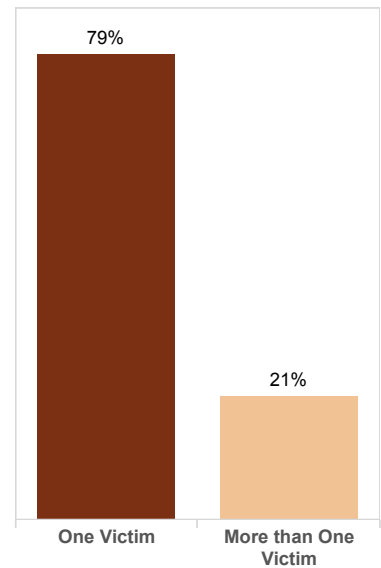
Incidents and Victims per County

| County | Incidents | Victims |
|--------------|-----------|---------|
| Aiken | 4 | 5 |
| Allendale | 1 | 1 |
| Anderson | 6 | 6 |
| Beaufort | 1 | 1 |
| Berkeley | 1 | 1 |
| Charleston | 1 | 1 |
| Chesterfield | 1 | 1 |
| Clarendon | 1 | 1 |
| Colleton | 1 | 1 |
| Darlington | 2 | 2 |
| Dillon | 2 | 3 |
| Dorchester | 1 | 1 |
| Florence | 3 | 4 |
| Greenville | 6 | 7 |
| Hampton | 1 | 1 |
| Horry | 3 | 3 |
| Kershaw | 2 | 3 |
| Lancaster | 1 | 1 |
| Lee | 1 | 1 |
| Lexington | 4 | 4 |
| Marlboro | 1 | 1 |
| Newberry | 1 | 1 |
| Orangeburg | 5 | 6 |
| Pickens | 2 | 3 |
| Richland | 4 | 4 |
| Spartanburg | 1 | 1 |
| Sumter | 2 | 2 |
| Union | 2 | 2 |
| Williamsburg | 5 | 6 |
| York | 2 | 2 |

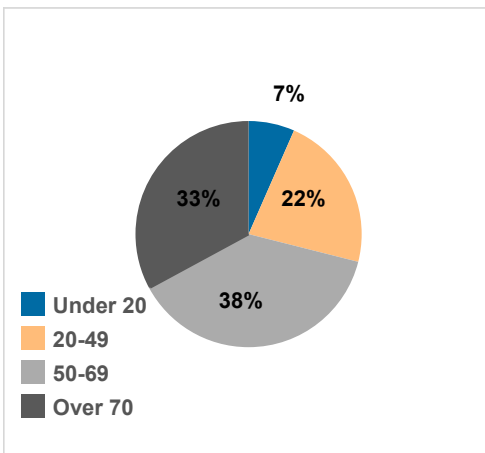
Where are Incidents Happening?

| | |
|------------------------|-----|
| Single Family Dwelling | 58% |
| Mobile Home | 33% |
| Vehicle | 6% |
| Storage Structure | 1% |
| Recreational Vehicle | 1% |
| Duplex | 1% |
| Commercial (Hotel) | 1% |

Percent of Fatal Incidents Involving More than One Fatality

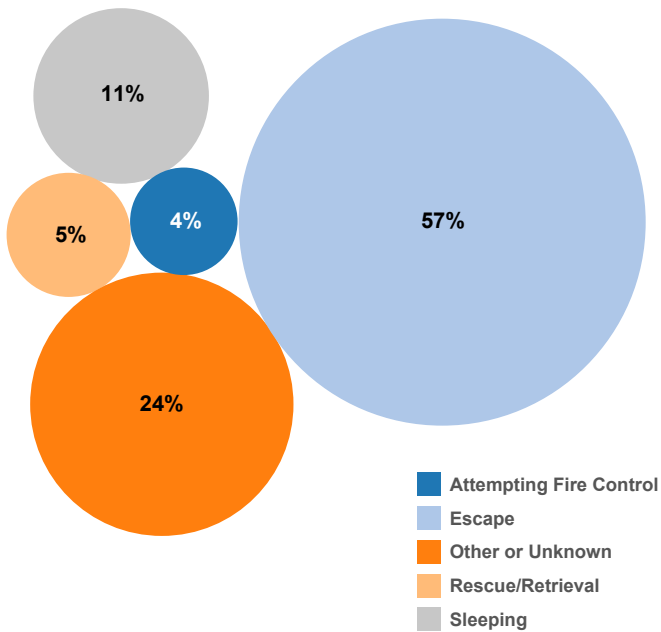


Age of Victims



2016 Fire Fatality Victim Profile

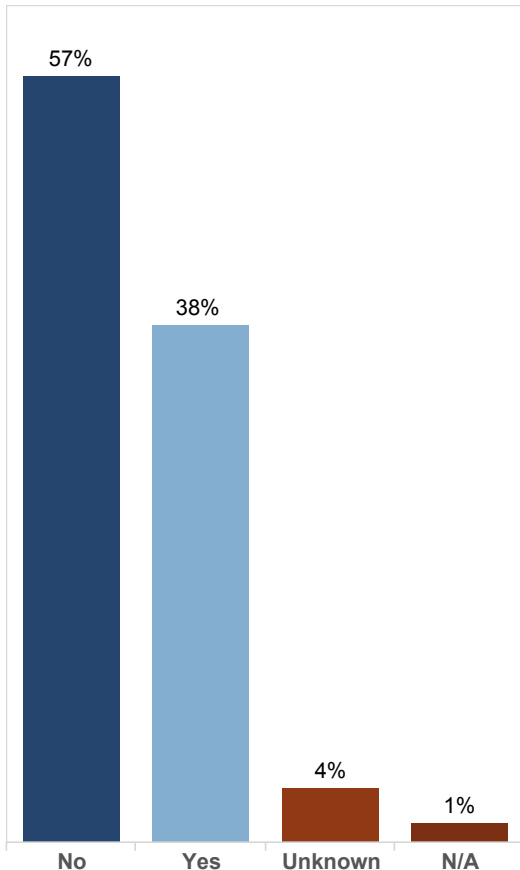
Activity at the Time of Injury



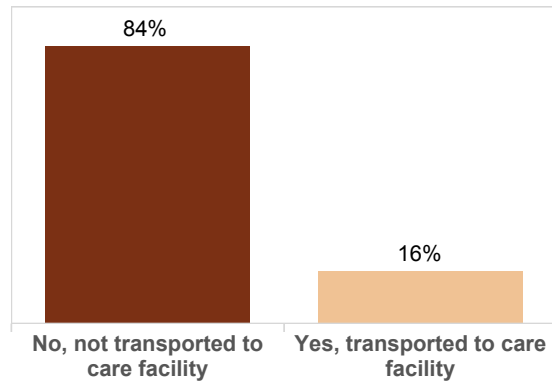
Victims were generally found to be attempting escape when they were injured. In most cases, the victim was pronounced deceased at the fire scene. In 43 cases (38%), citizens attempted to rescue victims. Prior to fire department arrival, unsafe conditions did not allow for citizens to assist the victim in escaping.

Research into these cases showed 88 percent of victims had some factor that increased their risk of perishing in a fire, such as reduced awareness of the fire or inability to escape from the fire. The most common factors affecting awareness were smoking, being affected by alcohol, and a mobile disability.

Did a Citizen Attempt a Rescue of the Victim?



Was the Victim Transported to the Hospital?



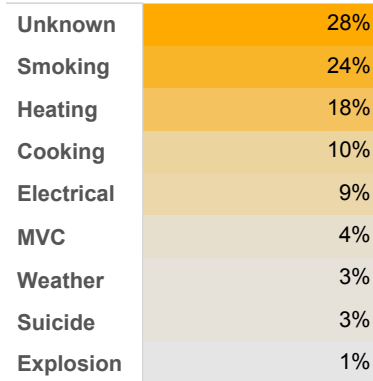
How Many Victims were Affected by

| | |
|----------------------------------|-----|
| Smoking | 30% |
| Alcohol | 32% |
| Drug Use | 13% |
| Cognitive Disability or Dementia | 8% |
| Mental Illness | 8% |
| A Mobile Disability | 26% |
| Other Medical Issues | 16% |

2016 Fatal Incidents Profile

When cause could be determined, fatal incidents were most likely caused by improperly discarded smoking materials or malfunctioning or improperly-used space heaters. Heater-related deaths were more prevalent during cold weather days. Cooking and weather-related incidents happened in temperatures greater than 50 degrees Fahrenheit. Incidents occurred on all days of the week, with an above average amount on Friday and Saturday. Fatal incidents generally occurred during overnight hours, from 9 p.m. to 6 a.m., and in December and January.

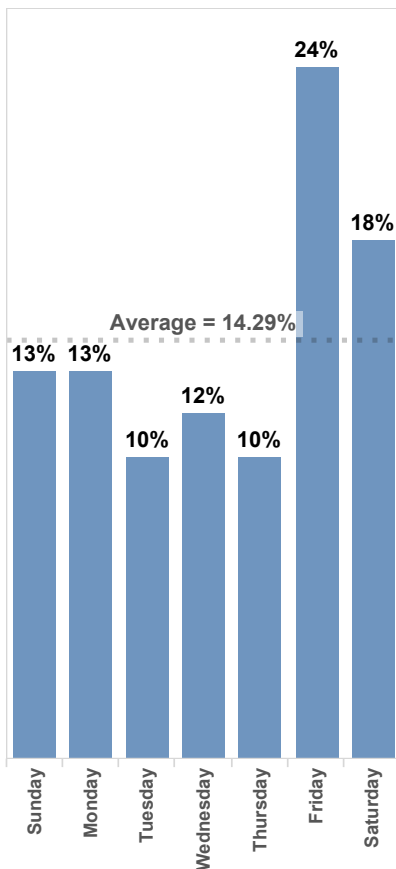
What was the most probable cause of fatal incidents?



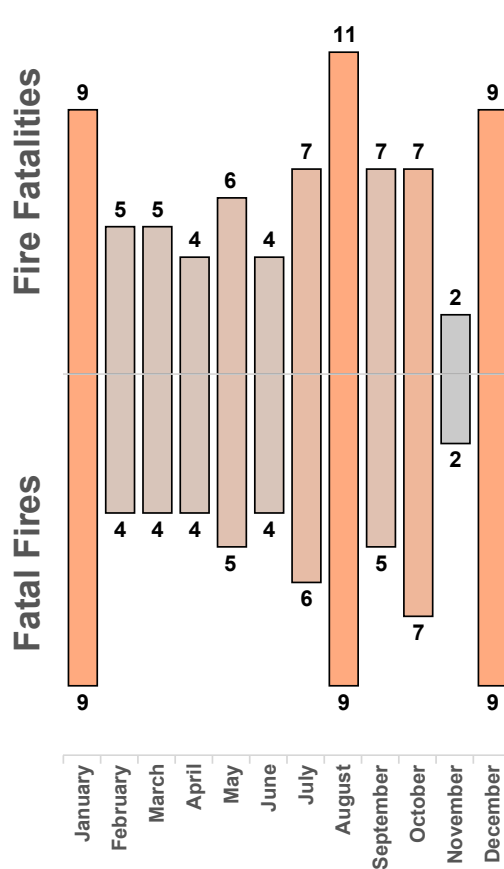
What is the relationship between weather temperature and fatal incidents?

| Weather Temperature | Cooking | Electrical | Explosion | Heating | MVC | Smoking | Suicide | Unknown | Weather |
|------------------------|---------|------------|-----------|---------|-----|---------|---------|---------|---------|
| Very Cold (Below 32 F) | | | | 1 | | | | 1 | |
| Cold (32-50 F) | | 2 | | 12 | | 4 | | 4 | |
| Mild (50-70 F) | 5 | 1 | 1 | | | 8 | 1 | 7 | |
| Warm (70-80 F) | 2 | 1 | | | 3 | 3 | | 6 | 2 |
| Hot (Over 80 F) | 2 | 2 | | | 1 | 2 | 1 | 3 | 1 |

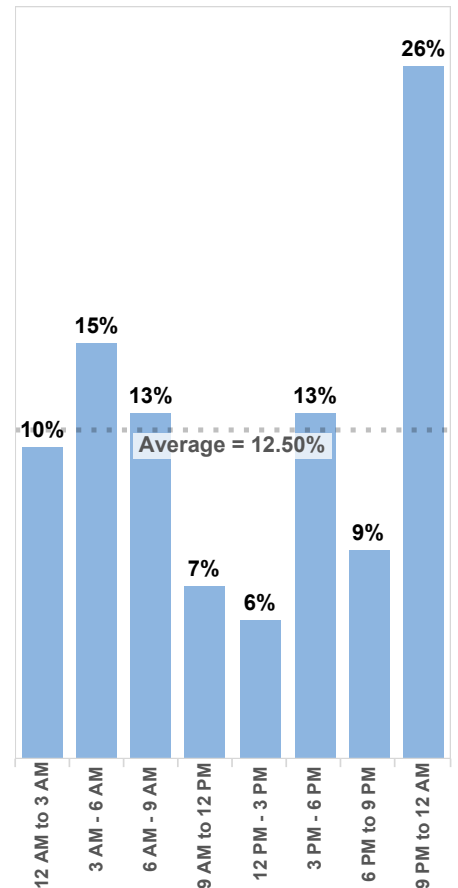
Which day of the week did fatal incidents occur?



Which month did fatal incidents occur?

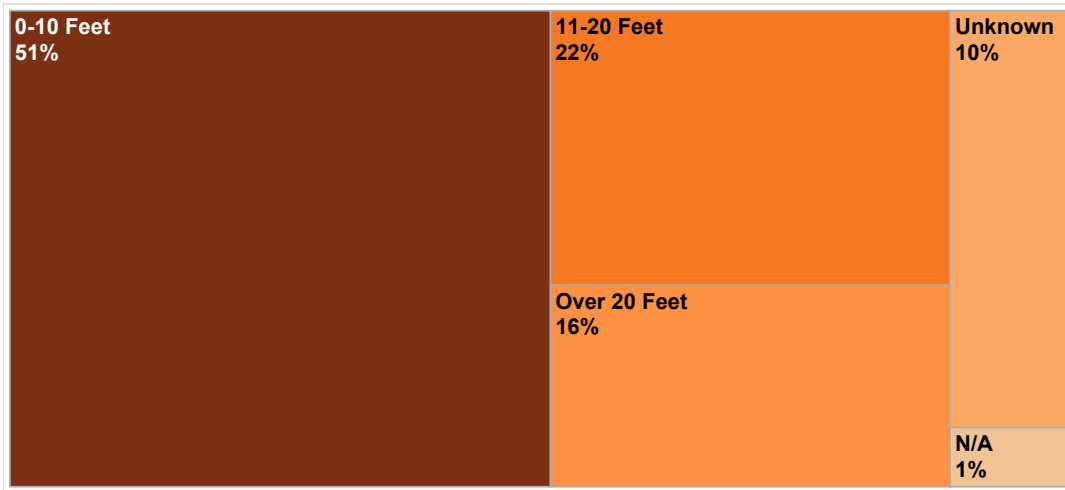


Which time did fatal incidents occur?

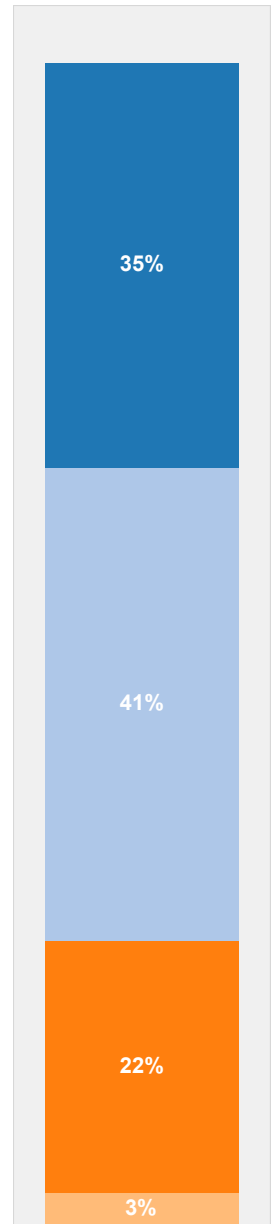


2016 Homes with Fatal Incidents Profile

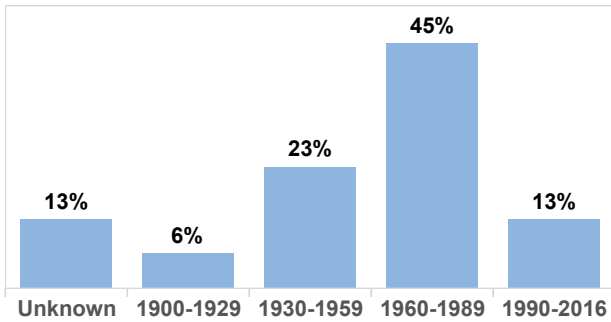
How close to an egress were victims found in homes?



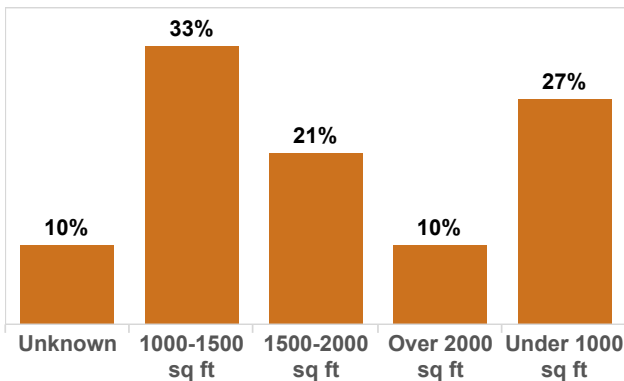
How did the fire department find the victim in homes?



How old are homes?



How large are homes?

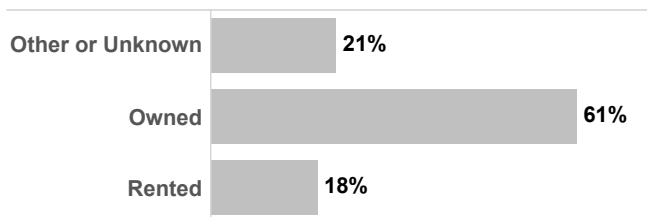


Fire Department Search and Rescue

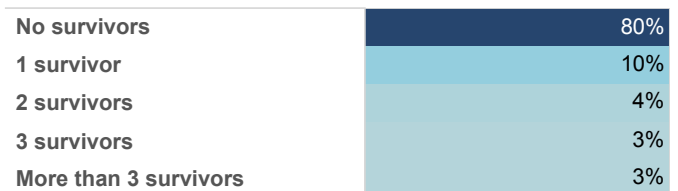
- Conditions not suitable for search
- Search conducted, victim not removed
- Search conducted, victim removed
- Victim removed prior to FD arrival

Nine out of 10 fatal fires occur in residences. These homes, which are mostly owned, tend to be 30-50 years old, with most smaller than 1500 square feet. When a victim is found inside the home, he/she is found within 10 feet of an exit. Because of conditions, firefighters are often unable to search for the victim. If a house fire occurs it is unlikely that there are survivors, often due to conditions which prevent rescue by firefighters.

Were homes rented or owned?



Did any fatal incidents in homes have survivors?



2016 Detailed Fatality Information

January

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|--------------|------------------------|-----------------------------|-----|--------|-------|
| 01/02/16 | Greenville | Single Family Dwelling | Smoking | 51 | Female | White |
| 01/04/16 | Orangeburg | Single Family Dwelling | Heating | 45 | Male | White |
| 01/08/16 | Richland | Single Family Dwelling | Heating | 76 | Female | Black |
| 01/10/16 | Darlington | Single Family Dwelling | Heating | 30 | Male | Black |
| 01/19/16 | Pickens | Single Family Dwelling | Heating | 81 | Female | White |
| 01/19/16 | Colleton | Single Family Dwelling | Heating | 76 | Male | Black |
| 01/20/16 | York | Single Family Dwelling | Electrical | 71 | Male | White |
| 01/20/16 | Union | Single Family Dwelling | Unknown | 65 | Male | Black |
| 01/23/16 | Williamsburg | Mobile Home | Heating | 42 | Male | Black |

February

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|-------------|------------------------|-----------------------------|-----|--------|-------|
| 02/07/16 | Horry | Single Family Dwelling | Smoking | 77 | Male | White |
| 02/19/16 | Spartanburg | Single Family Dwelling | Smoking | 69 | Male | White |
| 02/20/16 | Florence | Single Family Dwelling | Heating | 64 | Female | Black |
| | | | | 84 | Male | Black |
| 02/28/16 | Anderson | Single Family Dwelling | Heating | 5 | Female | White |

March

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|--------------|------------------------|-----------------------------|-----|--------|-------|
| 03/12/16 | Greenville | Commercial (Hotel) | Smoking | 49 | Male | White |
| 03/19/16 | Lexington | Single Family Dwelling | Unknown | 54 | Female | White |
| 03/20/16 | Williamsburg | Single Family Dwelling | Unknown | 66 | Female | White |
| | | | | 67 | Male | White |
| 03/22/16 | Aiken | Duplex | Smoking | 76 | Female | White |

April

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|----------|----------------------|-----------------------------|-----|--------|-------|
| 04/03/16 | Berkeley | Recreational Vehicle | Explosion | 51 | Male | White |
| 04/04/16 | York | Mobile Home | Electrical | 48 | Male | White |
| 04/08/16 | Beaufort | Storage Structure | Suicide | 71 | Male | Black |
| 04/29/16 | Horry | Mobile Home | Smoking | 40 | Male | White |

May

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|------------|------------------------|-----------------------------|-----|--------|-------|
| 05/05/16 | Anderson | Single Family Dwelling | Cooking | 48 | Male | White |
| 05/13/16 | Hampton | Single Family Dwelling | Unknown | 86 | Female | Black |
| 05/22/16 | Sumter | Mobile Home | Electrical | 52 | Male | Black |
| 05/24/16 | Greenville | Single Family Dwelling | Cooking | 10 | Male | Black |
| | | | | 11 | Female | Black |
| 05/28/16 | Newberry | Mobile Home | Unknown | 48 | Male | White |

June

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|--------------|------------------------|-----------------------------|-----|--------|-------|
| 06/10/16 | Dorchester | Single Family Dwelling | Smoking | 68 | Male | Black |
| 06/18/16 | Williamsburg | Mobile Home | Cooking | 66 | Female | Black |
| 06/22/16 | Lexington | Vehicle | MVC | 35 | Male | White |
| 06/22/16 | Aiken | Single Family Dwelling | Smoking | 69 | Male | Black |

July

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|------------|------------------------|-----------------------------|-----|--------|-------|
| 07/05/16 | Florence | Single Family Dwelling | Unknown | 92 | Female | White |
| 07/05/16 | Richland | Single Family Dwelling | Electrical | 38 | Female | White |
| 07/16/16 | Orangeburg | Single Family Dwelling | Weather | 1 | Male | Black |
| | | | | 77 | Female | Black |
| 07/27/16 | Greenville | Single Family Dwelling | Unknown | 90 | Male | Black |
| 07/28/16 | Clarendon | Single Family Dwelling | Cooking | 65 | Female | Black |
| 07/28/16 | Orangeburg | Single Family Dwelling | Cooking | 40 | Female | White |

August

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|------------|------------------------|-----------------------------|-----|--------|-------|
| 08/05/16 | Lexington | Single Family Dwelling | Suicide | 61 | Male | White |
| 08/05/16 | Aiken | Single Family Dwelling | Unknown | 83 | Female | White |
| 08/08/16 | Marlboro | Single Family Dwelling | Unknown | 44 | Male | White |
| 08/08/16 | Anderson | Single Family Dwelling | Electrical | 91 | Male | Black |
| 08/15/16 | Greenville | Single Family Dwelling | Unknown | 78 | Male | Black |
| 08/19/16 | Orangeburg | Vehicle | MVC | 48 | Male | White |
| 08/22/16 | Dillon | Single Family Dwelling | Unknown | 60 | Male | Black |
| | | | | 69 | Male | Black |
| 08/26/16 | Pickens | Mobile Home | Smoking | 70 | Female | White |
| | | | | 83 | Female | White |
| 08/26/16 | Lancaster | Single Family Dwelling | Weather | 54 | Female | White |

September

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|--------------|------------------------|-----------------------------|-----|--------|-------|
| 09/01/16 | Chesterfield | Mobile Home | Unknown | 36 | Male | White |
| 09/02/16 | Florence | Single Family Dwelling | Unknown | 50 | Male | Black |
| 09/16/16 | Aiken | Mobile Home | Cooking | 85 | Female | Black |
| | | | | 86 | Male | Black |
| 09/24/16 | Kershaw | Vehicle | MVC | 27 | Male | Black |
| | | | | 46 | Male | Black |
| 09/24/16 | Orangeburg | Mobile Home | Smoking | 40 | Male | Black |

October

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|--------------|------------------------|-----------------------------|-----|--------|-------|
| 10/02/16 | Charleston | Mobile Home | Cooking | 71 | Male | Black |
| 10/08/16 | Anderson | Single Family Dwelling | Electrical | 75 | Male | White |
| 10/12/16 | Anderson | Mobile Home | Smoking | 62 | Female | White |
| 10/12/16 | Williamsburg | Mobile Home | Smoking | 69 | Male | Black |
| 10/13/16 | Lee | Single Family Dwelling | Unknown | 75 | Male | White |
| 10/28/16 | Sumter | Mobile Home | Smoking | 80 | Male | Black |
| 10/30/16 | Lexington | Single Family Dwelling | Smoking | 63 | Female | White |

November

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|----------|------------------------|-----------------------------|-----|--------|-------|
| 11/09/16 | Anderson | Single Family Dwelling | Smoking | 71 | Female | White |
| 11/28/16 | Horry | Single Family Dwelling | Unknown | 51 | Male | White |

December

| Date of Incident | County | Occupancy | Most Probable Cause of Fire | Age | Gender | Race |
|------------------|--------------|------------------------|-----------------------------|-----|--------|-------|
| 12/02/16 | Williamsburg | Mobile Home | Heating | 61 | Male | Black |
| 12/06/16 | Kershaw | Mobile Home | Unknown | 60 | Male | White |
| 12/09/16 | Allendale | Mobile Home | Unknown | 60 | Male | Black |
| 12/10/16 | Richland | Single Family Dwelling | Unknown | 51 | Male | Black |
| 12/11/16 | Union | Single Family Dwelling | Heating | 65 | Male | White |
| 12/12/16 | Darlington | Mobile Home | Smoking | 60 | Female | White |
| 12/12/16 | Dillon | Single Family Dwelling | Unknown | 55 | Male | White |
| 12/15/16 | Greenville | Single Family Dwelling | Heating | 3 | Male | Black |
| 12/22/16 | Richland | Single Family Dwelling | Heating | 84 | Male | Black |