



# Medical Facility Fires (2014-2016)

For each year from 2014 to 2016, an estimated 5,800 medical facility fires were reported to fire departments in the United States. It is estimated that these fires caused five deaths, 150 injuries and \$56 million in property loss per year.<sup>1</sup>

The average number of fatalities per 1,000 medical facility fires reported to the National Fire Incident Reporting System (NFIRS) from 2014 to 2016 was 0.8. During the same time period, the number of injuries per 1,000 fires was 17.6. Additionally, the amount of dollar loss per medical facility fire was \$13,360.<sup>2</sup>

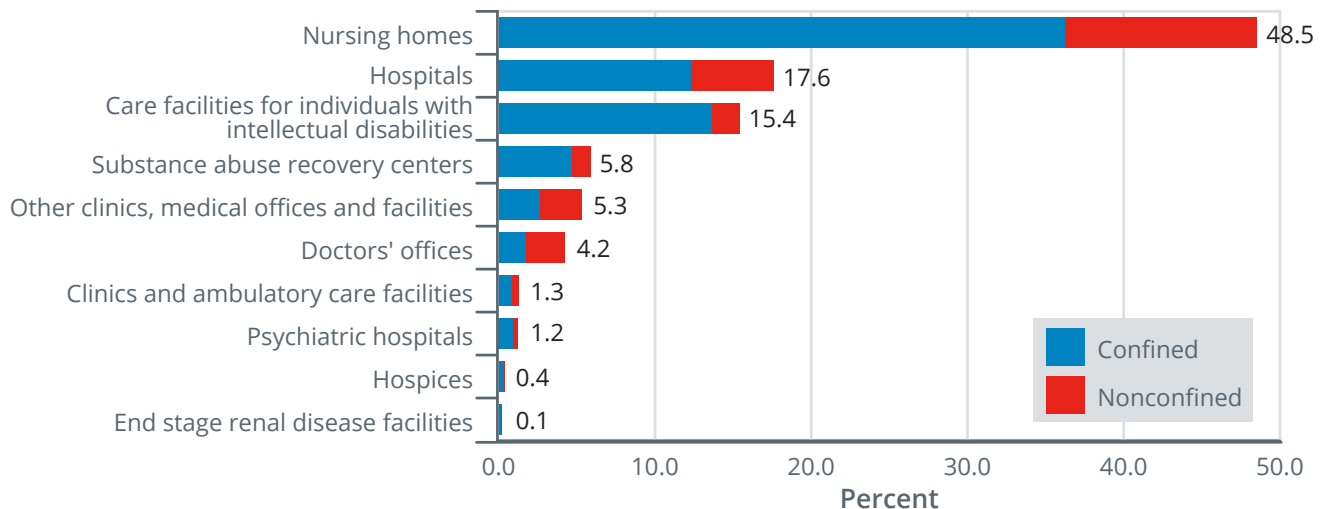
### Loss measures for medical facility fires (three-year average, 2014-2016)

Loss measure	Medical facility fires
<b>Average loss:</b>	
Fatalities/1,000 fires	0.8
Injuries/1,000 fires	17.6
Dollar loss/fire	\$13,360

Source: NFIRS 5.0.

From 2014 to 2016, nearly half of all medical facility fires occurred in nursing homes and, of those, 75 percent were confined fires. Confining fires are smaller fires that rarely result in death, serious injury or large content losses.<sup>3</sup> Nonconfined fires — larger and more serious fires — represented the remaining 25 percent of nursing home fires. This distribution mirrors that of medical facilities as a whole, where 73 percent of the fires were confined and 27 percent were nonconfined. Indeed, in most other facility types, the majority of fires, ranging from 56 to 88 percent, were confined fires. The notable exception to this trend was in doctors' offices, where the majority of fires, 60 percent, were nonconfined. It is possible that more of these larger building fires occurred in doctors' offices because there are long periods of time in the evening and early morning hours when there is no one on staff at the location.

### Medical facility fires by type of facility (2014-2016)

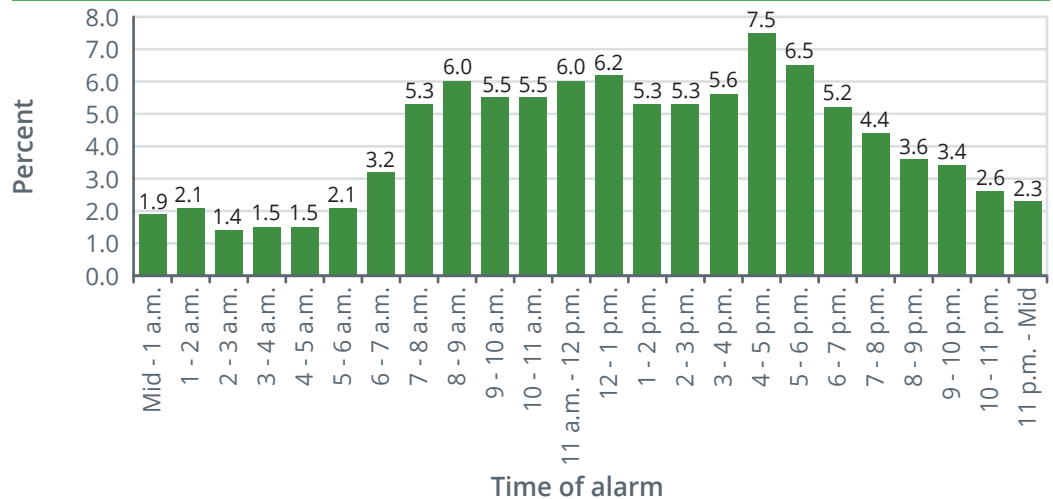


Source: NFIRS 5.0.

Notes: Total does not add up to 100 percent due to rounding.

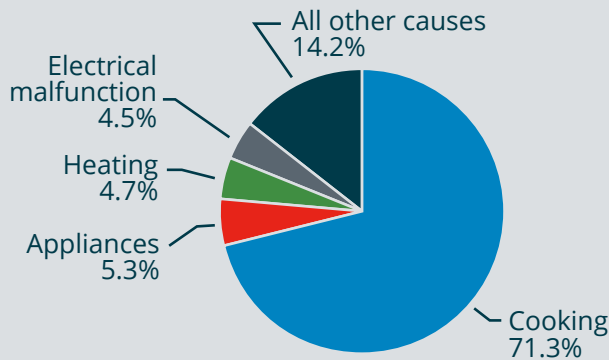
Medical facility fires occurred most frequently during the mid-to-late morning as well as the late afternoon and early evening hours, peaking from 4 to 5 p.m. at 8 percent. These periods of high fire incidence coincide with meal preparation times in hospitals and nursing homes.

### Medical facility fires by time of alarm (2014-2016)



Source: NFIRS 5.0.  
Note: Total does not add up to 100 percent due to rounding.

### Causes of medical facility fires (2014-2016)

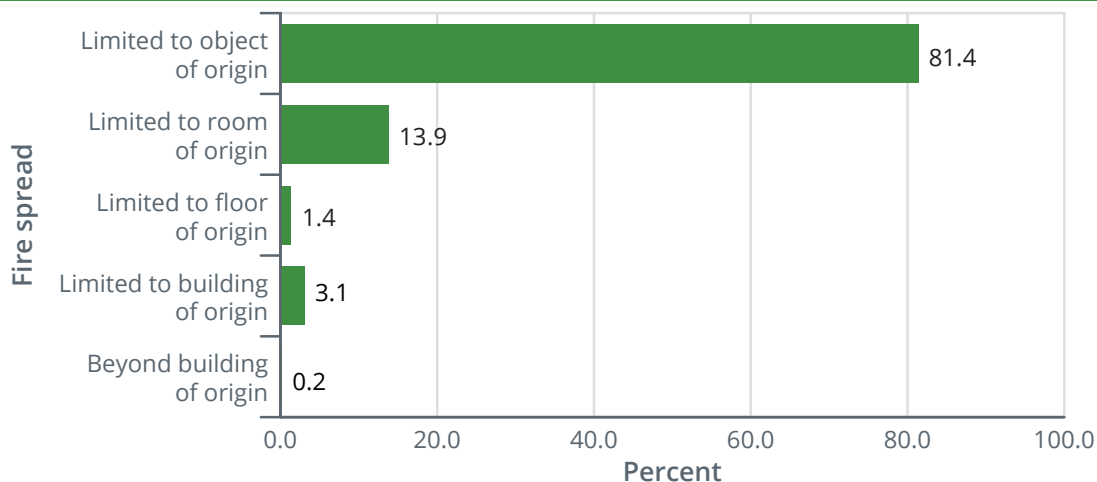


The leading causes of all medical facility fires were: cooking (71 percent), appliances (5 percent), heating (5 percent) and electrical malfunction (5 percent). While cooking was the leading cause of medical facility fires overall, it only accounted for 6 percent of the nonconfined medical facility fires. At 21 percent, “appliances” was the leading cause category of nonconfined fires, followed by electrical malfunction (18 percent), intentional actions (9 percent), heating (7 percent), other unintentional or careless actions (7 percent), and other heat (7 percent).

Source: NFIRS 5.0.  
Note: Percentages are adjusted for those fires with unknown values of cause. Eight percent of medical facility fires had unknown values of cause.

Of the medical facility fires, 81 percent were limited to the object of origin. Only 5 percent extended beyond the room of origin.

### Extent of fire spread in medical facility fires (2014-2016)



Source: NFIRS 5.0.

For more information on medical providers, including fire safety inspections and quality of care data, visit: <https://www.medicare.gov/forms-help-resources/find-compare-doctors-hospitals-other-providers>. For information on fire prevention, visit <https://www.usfa.fema.gov/prevention/outreach/>.

For additional fire statistics, visit <https://www.usfa.fema.gov/data/statistics/>.

Sources: NFIRS 5.0 and the National Fire Protection Association.

- Notes:
1. Medical facilities are defined by Property Use Codes 311 to 343. Fires are defined as a subset of nonresidential building fires in NFIRS by using Incident Types 111 to 123 (excluding Incident Type 112). For Incident Types 113 to 118, the Structure Type is 1, 2 or null, and for Incident Types 111 and 120 to 123, the Structure Type is 1 or 2. Aid Types 3 (mutual aid given) and 4 (automatic aid given) were excluded to avoid counting a single incident more than once.
  2. Average loss for fatalities and injuries is computed per 1,000 fires. Average dollar loss is computed per fire and rounded to the nearest \$10. The 2014 and 2015 dollar-loss values were adjusted to 2016 dollars. The average loss measures computed from the NFIRS data alone in the table differ from the average loss measures computed from national estimates. The fire death rate computed from national estimates is  $(1,000 \times (5/5,800)) = 0.9$  deaths per 1,000 medical facility fires, and the fire injury rate is  $(1,000 \times (150/5,800)) = 25.9$  injuries per 1,000 medical facility fires.
  3. In NFIRS, confined fires are defined by Incident Types 113 to 118.