# **Fire Related Injuries – Data Brief** The Statewide Incident Reporting Network

#### Background

According to the United States (US) Fire Administration, there were 1,298,000 fires in the US in 2014. These fires resulted in 3,275 deaths, 15,775 injuries, and cost over \$11.6 billion nationwide. Approximately 40% of these fires occur outside, 40% occur in residential or non-residential buildings, and 20% occur in vehicles or other locations. Cooking is the most common cause of fires that occur in residential or non-residential buildings. Men are more likely to die or be injured in fires than women<sup>1</sup>. In 2014, the state of Vermont was below the national average in both death and injury rates per number of fires<sup>2</sup>.

This data brief describes data and trends of fire-related injuries to Vermont residents in Vermont from 2014 to 2016 that resulted in Emergency Medical Services (EMS) being activated.

Data were gathered from the Statewide Incident Reporting Network (SIREN), Vermont's pre-hospital electronic documentation database. For more information about SIREN, including its strengths and limitations, please see the "What is SIREN?" document on the Health Department website.

#### Overall

From 2014 to 2016 there were 178 injuries in Vermont to Vermont residents related to fires that resulted in an EMS call. This represents a rate of 9.5 per 100,000 Vermonters. 79.8% of these injuries required transport by EMS.

### **Chief Complaint**

Of the fire-related injuries resulting in an EMS call in Vermont from 2014 to 2016, the vast majority (72%) had a chief compliant related to burns. Approximately 14% had a chief complaint of smoke inhalation, while approximately 6% had a chief complaint of pain.



# Location of Injury

Of the fire-related injuries resulting in an EMS call, 63% occurred at a home or residence.



Percent of Fire-Related Injury Location in Vermont, 2014-2016

<sup>1</sup> US Fire Administration, US Fire Statistics, https://www.usfa.fema.gov/data/statistics/#causesR

<sup>2</sup> US Fire Administration, Vermont Fire Loss/Fire Department Profile, https://www.usfa.fema.gov/data/statistics/states/vermont.html





### Gender

From 2014 to 2016, males living in Vermont had over two times the rate of fire-related injuries as females living in Vermont (13.4 vs. 5.7 per 100,000 people); this difference in rate by gender was statistically significant.



## Age

Vermonters under the age of 15 had statistically lower rates of fire-related injury than those over the age of 15. The highest rate of fire-related injury was seen among those 24 to 44 years of age; however, this difference was not statistically significant.



# Rate (per 100,000) of Fire-Related Injuries by Age Category, 2014-2016

# County

Rates of fire-related injury were similar across Vermont counties. Data for many counties had to be suppressed due to low numbers, and for this reason a graph displaying this data was not included. For those counties where rates could be calculated, most were around 1.0 per 10,000 residents.

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