

Fires Caused by Spontaneous Combustion or Chemical Reaction Fact Sheet

Fires where the heat source was coded as spontaneous combustion or chemical reaction accounted for an average of 14,070 fires per year between 2005 and 2009. These included

- 3,200 structure fires
- 1,150 vehicle fires
- 5,250 outside non-trash and unclassified fires
- 4,460 outside trash or rubbish fires

Structure Fires Caused by Spontaneous Combustion or Chemical Reaction By Property Use 2005-2009



- In home structure fires, the garage was the most common area of origin (20% of fires) and oily rags were the most common item first ignited (35%).
- In storage properties, agricultural crops, including fruits and vegetables were the item first ignited in 20% of fires. Hay or straw as the most common type of material first ignited (15%) in storage properties.
- One-quarter of fires in mercantile or business properties occurred in laundry or dry cleaning facilities.
- One-quarter of the fires in manufacturing properties began with oily rags.

WHAT IS SPONTANEOUS COMBUSTION?: Spontaneous combustion is a byproduct of spontaneous heating, a process by which a material increases in temperature without drawing heat from its surroundings. If the material reaches its ignition temperature, spontaneous ignition or combustion occurs.

Additional resources can be found at www.nfpa.org