

# Norfolk Insider

City of Norfolk, NE

[www.ci.norfolk.ne.us](http://www.ci.norfolk.ne.us)

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## “Fire Flashover”



When Assistant Fire Chief Jim Dooley began his career in fire 20 years ago, it took 30 minutes from when a fire started until the entire room was engulfed in flames. Because of the composition of home furnishings today, it now takes an average of only four minutes from when the first flame begins until the entire room is burning.

“There is an ever increasing potential for loss of life in one and two family dwellings. House fires today burn so hot and they burn so fast that it may be hard for occupants to escape in

time,” said Scott Cordes, City of Norfolk Fire Chief.

Flashover is a term that describes what occurs when the majority of the exposed surfaces in a space is heated to the melting point and emits flammable gases. An example would be when a sofa has a match fall on it which starts it on fire. As it burns, the smoke rises and spreads to the ceiling and walls of the room. As the heat from the burning sofa heats up the walls, ceilings and other furnishings start melting and giving off flammable gasses which can ignite. That explosion of flame from the gasses is a flashover and quickly burns everything in the room.

“Our homes are furnished with synthetic furniture and pressed board tables and dressers. These items will burn much quicker than the solid wood furnishings of the past. It’s not so much anymore how we build a house. It’s what we put in the house,” Cordes said.

Cordes recommends that people make sure they have working smoke alarms in their homes and also an evacuation plan for everyone in the home. In that plan, there should be a ready escape plan out of the home and an assigned meeting place outside of the home.

“Dwelling fires burn hot, burn fast and flashover comes early. Structural collapse often occurs more readily so it’s ever more important to evacuate a burning house quickly,” Cordes said.

Because fires burn faster there is more danger of structural damage becoming an issue. Cordes said that fire fighters are more aware of floors giving way and ceilings caving in as they enter a burning structure.

“The fact is we have excellent builders in the area that construct outstanding new homes. Once built, we often put furnishings in the house that raises the risk index immediately; that being significantly more flammable items,” Cordes said.

There are online videos demonstrating how fast a fire can engulf a room. In a controlled test fire on a living room, it took less than a minute for the room to be completely engulfed in flames.

[http://www.metacafe.com/watch/682670/from\\_living\\_room\\_to\\_inferno\\_in\\_under\\_2\\_minutes/](http://www.metacafe.com/watch/682670/from_living_room_to_inferno_in_under_2_minutes/).

For more information on fire safety, go to the Norfolk Fire Department website at [www.ci.norfolk.ne.us/fire](http://www.ci.norfolk.ne.us/fire).