

# This Is Fire! A Factsheet on the Nature of Fire

very day Americans experience the horror of fire. But most people don't understand fire. Only when we know the true nature of fire can we prepare ourselves and our families. Each year more than 4,000 Americans die and more than 25,000 are injured in fires, many of which could be prevented.

The United States Fire Administration (USFA), a division of the Federal Emergency Management Agency (FEMA), believes that fire deaths can be reduced by teaching people the basic facts about fire. Below are some simple facts that explain the particular characteristics of fire.

## FIRE IS FAST! THERE IS LITTLE TIME!

In less than 30 seconds a small flame can get completely out of control and turn into a major fire. It only takes minutes for thick black smoke to fill a house. In minutes, a house can be engulfed in flames. Most fires occur in the home when people are asleep. If you wake up to a fire, you won't have time to grab valuables because fire spreads too quickly and the smoke is too thick. There is only time to escape.

### FIRE IS HOT!

HEAT IS MORE THREATENING THAN FLAMES.

A fire's heat alone can kill. Room temperatures in a fire can be 100 degrees at floor level and rise to 600 degrees at

eye level. Inhaling this super hot air will scorch your lungs. This heat can melt clothes to your skin. In five minutes a room can get so hot that everything in it ignites at once: this is called flashover.

#### **FIRE IS DARK!**

FIRE ISN'T BRIGHT, IT'S PITCH BLACK.

Fire starts bright, but quickly produces black smoke and complete darkness. If you wake up to a fire you may be blinded, disoriented and unable to find your way around the home you've lived in for years.

#### FIRE IS DEADLY!

SMOKE AND TOXIC GASES KILL MORE PEOPLE THAN FLAMES DO.

Fire uses up the oxygen you need and produces smoke and poisonous gases that kill. Breathing even small amounts of smoke and toxic gases can make you drowsy, disoriented and short of breath. The odorless, colorless fumes can lull you into a deep sleep before the flames reach your door. You may not wake up in time to escape.

#### **FIRE SAFETY TIPS**

IN THE EVENT OF A FIRE, REMEMBER TIME IS THE BIGGEST ENEMY AND EVERY SECOND COUNTS!

Escape first, then call for help. Develop a home fire escape plan and designate a meeting place outside. Make sure everyone in the family knows two ways to escape from every room. Practice feeling your way out with your eyes closed. Never stand up in a fire, always crawl low under the smoke and try to keep your mouth covered. Never return to a burning building for any reason; it may cost you your life.

Finally, having a working smoke alarm dramatically increases your chances of surviving a fire. And remember to practice a home escape plan frequently with your family.



For More Information Contact: The United States Fire Administration Office of Fire Management Programs 16825 South Seton Avenue Emmitsburg, MD 21727

Or visit the USFA website: www.usfa.fema.gov

Visit our Kid's Page: www.usfa.fema.gov/kids

