

#### How to Use this Guide

This instructor's guide follows the five video segments of the "Fire Is..." program. For each section, you will find discussion points, critical concepts and suggested activities to use with your class. A pre-test and post—test are available on line. The answer guide for both tests

This guide is available for download on www.njfiresafety.com.

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# Fire Is...

Realistic Fire Education for Students in Grades 5-7

## A New Approach to Fire and Life Safety

Studies have shown that most fire safety education is geared towards children in preschool and grades K—3. The approach most often uses "fun" activities like visiting firehouses and giving out coloring books and stickers. After third grade, most children don't receive any further fire safety education, so they do not know the reality of fire. The "Fire Is..." series has been developed to provide older children (grades 5-7) additional fire safety education, presented in a realistic manner that is informative, but not scary.

In addition to using a realistic approach, the "Fire Is..." program is designed to be used in the schools and , most

especially, at home with parents, guardians and/or other caregivers. Parent involvement in the Fire and Life Safety Education process is critical to the success of the program, as most parents



received the "old style" of fires safety education and have formed their idea of fire from movies and television. Movies and television shows DO NOT provide a realistic depiction of fire, they use dramatic special effects to make an ex-

citing, but misleading, show. Additionally, while schools hold fire drills, most parents do not and they need to so that their family can evacuate safely during a home fire.

New Jersey is the first state to tackle this issue on a statewide basis.

This program was supported with a grant from the State of New Jersey Office of Homeland Security and Preparedness to the New Jersey Firefighter's Benevolent Association. The goal is to reach directly into homes where parents and children together can learn the lessons of fire safety in conjunction with direction from schools and fire services.

#### **Coalition Members**

New Jersey Firefighters' Mutual Benevolent Association Atlantic Regional Firefighter's Burn Foundation New Jersey Division of Fire Safety New Jersey Fire Prevention and Protection Association New Jersey Association of School Administrators Safe Kids New Jersey Fire Is... Page 2



## According to the USA Fire Administration:

- Fires and related burns are the third leading cause of unintentional injuries to children.
- Each year, an average of 3,650 children age 14 or younger are injured or killed in residential fires.
- Forty percent of these casualties are under the age
- Children playing with fires and smoking are the leading cause of child fire casualties.
- The younger the child, the more likely child play was involved in the start of the fire. In short, when children play with fire, they tend to hurt or kill themselves.
- Mattresses, bedding, clothing not being worn, curtains, and other "soft goods" are the primary materials first ignited in fires that result in child casualties

## Fire Is...Black (16.51 minutes)

#### DISCUSSION POINTS

Smoke rises to ceiling and is trapped.

Smoke thickens, turns black and lowers to the ground.

Thick smoke irritates your throat and makes you cough.

Smoke affects vision—your eyes burn and tear and you can't see.

#### CRITICAL CONCEPTS

Firefighters must crawl below smoke in fire so they can see.

Smoke gets very hot and will burn your throat and lungs if you breathe it.

Don't stand up in the smoke.

Get down low below the smoke and get out.

Have an escape plan.

#### **SUGGESTED ACTIVITIES**

Have students describe fire scenes they have seen in movies or on TV. Have them identify what's wrong in the show.

Discuss the materials needed for a fire to burn and where they are typically found.

- Oxygen in the air around us at all times.
- Fuel anything that can burn.
   Found throughout our environment. Ask students to name different things in the room which are fuels.
- Heat anything that can ignite a fuel. Ask students to name different heat sources.

## Fire Is... Hot (15.45 minutes)

#### **DISCUSSION POINTS**

Tiny flames grow rapidly into large fires.

Heat rises to the ceiling and gets trapped, then the room gets even hotter.

The temperature in a room can rise to hundreds of degrees and melt plastics and glass.

Everything in a house or school can catch fire if the temperature is high enough.

#### CRITICAL CONCEPTS

The coolest part of the room will be on the floor.

Get down on the floor and go as fast as you can. GET LOW AND GO!

Before opening a door, put your hand on the door ( not the handle) to feel the temperature. If the door is warn or hot, do not open it.

#### **SUGGESTED ACTIVITIES**

Show students pictures of different household rooms (bedroom, kitchen, living room, garage). Set a timer for 1 minute and have them list all the things in the room that can catch fire.

Have students research how hot fire can get. Have them compare this information to other temperatures they know (body temperature, boiling water, ice,).

## Fire Is...Fast (14.03 minutes)

#### DISCUSSION POINTS

A tiny flame can flare out of control in seconds.

A single match or spark can burn down an entire building.

Fires spread rapidly and can move faster than people.

In a real fire you only have a few minutes to escape.

#### CRITICAL CONCEPTS

Never try and fight the fire.

Never hide from a fire or a firefighter.

If you can't get out, get to the closest window and make a lot of noise.

#### SUGGESTED ACTIVITIES

Have students write a paragraph about what they learned in this video segment.

Have students create a glossary of fire terms with illustrations.

Discuss the main causes of residential fires:

- Children Playing with Fire
- Children and Teens Smoking
- Heating Systems
- Cooking Accidents
- Electrical Problems
- Appliance Malfunctions
- Unattended Open Flames

## GET OUT AND STAY OUT!

Remember to escape first, then notify the fire department using the 911 system or proper local emergency number in your area. Never go back into a burning building for any reason.

## Fire Is...Gas and Smoke (20.02 minutes)

#### DISCUSSION POINTS

Smoke detectors are your first line of defense, because when you go to sleep your nose goes to sleep. You need a smoke detector to wake you.

Smoke is the most dangerous part of the fire.

More people die in fires from the smoke than from burns.

Smoke contains poisons that can make you sick.

Smoke hurts your throat. Hot smoke can burn your lungs.

You can't see through smoke.

#### CRITICAL CONCEPTS

Get under the smoke as fast as you can.

Move fast and get out!

Have an escape plan.

#### SUGGESTED ACTIVITIES

Have students wear a blindfold and spin them around. See how long it takes them to find the door to escape (use a stopwatch to time them). This is what's it is like to try and escape from a smoke filled room.

Have students make a list of 5 things in their house that are "low" (less than three feet tall) to use as a guide.

Have students label a drawing of the human body and circle in red all the parts of the body that are affected by smoke during a fire.



Smoke contains poison from the chemicals that are released when household items burn.



Make sure students know what a firefighter looks like when they are wearing protective gear.

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"Firefighters witness tremendous tragedy as a result of fire. This realistic learning approach will revolutionize fire education for both children and adults, so that along with saving lives, we can also prevent fire tragedy."

William Lavin, President, NJ State Firefighter's Mutual Benevolent Association (NJ State FMBA)

## Fire Is...an Emergency (17.26 minutes)

#### **DISCUSSION POINTS**

Fire is black, super fast and hot.

Smoke detectors are early warnings to get out **now**.

You don't have time to think about a way out. Time works against you. You must have a fire escape plan in your home.

#### **CRITICAL CONCEPTS**

A fire is ALWAYS an emergency.

Leave as soon as you hear a smoke detector.

Meet outside at a designated area.

Get out as fast as you can, don't wait for anything.

Don't waste time looking for toys, pets or anything.

Look for your parents outside, not inside.

Tell firefighters that everyone is out so they won't have to go into a fire looking for missing family members.

#### SUGGESTED ACTIVITIES

Have students create posters or power point presentations to teach other students about fire.

Have students create their own "word find "with words from the "Fire Is..." presentations.

Have students write and present a speech about the major causes of home fires.

Have students draw a map of their house have them identify two ways out of each room in the house.

## **Pre-Test**

1. Firefighters crawl on the floor when they go into buildings to put out fires.

#### **TRUE**

2. Firefighters wear masks and special clothes so they are always protected and can't be injured by fire.

#### **FALSE**

3. Smoke in a fire is only a nuisance and makes you cough and your eyes tear.

#### **FALSE**

4. People who live in a high-rise building apartments must get out quickly if there is a fire in their building.

#### **FALSE**

If you are trapped in a room and cannot get out, go to the window and call for help. TRUE 6. If you forgot something valuable in your house try to get back in before the firefighters arrive.

#### **FALSE**

7. If you are trapped in a room full of smoke get into a closet and hide from the smoke.

#### **FALSE**

8. If it is a small fire in your house, try to put it out with buckets of water.

#### **FALSE**

9. Doors are valuable to stay safe from smoke and fire.

#### **TRUE**

10. Carbon Monoxide in a fire is invisible.

#### TRIIF

Printable Copies of the Pre and Post Tests are available on:
www.NJFireSafety.Com

## **Post-Test**

- 1. What is most often the first warning of a fire in your home?
- a. The smell of smoke which wakes you up.
- b. A grown –up
- c. A smoke detector
- d. A fire sprinkler
- 2. How many smoke detectors should you have in your home?
- a. They are not needed in a private residence
- b. One, near the kitchen
- c. At least one on every level of your home
- d. One in the basement near the furnace
- 3. What is the MOST IMPORTANT thing to remember if your home is on fire?
- a. Call the Fire Dept. on your phone.
- b. Find where the fire is in the house.
- c. Get out as fast as possible.
- d. Stop, Drop, and Roll!
- 4. What is the safest way to exit your home if there is a fire and your home is filled with smoke?
- a. Locate the source of the smoke so you can tell the Fire Dept.
- b. Open doors as you exit to allow the smoke to clear out.
- c. Turn off all major appliances
- d. Close doors as you exit.
- 5. What is the safest way to exit your home if there is a fire and your home is filled with smoke?
- a. Hold your breath and run for the door.
- b. Get low and go after you check the door to see if it is hot.
- c. Open windows and doors to allow the smoke to vent to aid in your escape.
- d. Stand tall above the smoke to allow better vision as you exit.
- 6. What is the most dangerous component of a fire?
- a. The flames
- b. The smoke
- c. The heat

The intense bright light of the flames blinds you.

- 7. If you are sleeping and your house is on fire, what will alert you to escape?
- a. The acrid smell of the smoke
- b. The loud crackling of the flames
- c. A smoke detector
- d. A neighbor who spots the flames and calls you.

- 8. What is the most dangerous gas produced by a fire, which you cannot smell and puts you into a deep sleep?
- a. Ethanol
- b. Carbon Monoxide
- c. Carbon Dioxide
- d. Oxygen
- 9. How often should you check and change the batteries in your smoke detectors?
- a. Once every 5 years.
- b. They never need servicing
- c. Twice a year
- d. Only after a fire do they need replacement
- 10. When the hot black smoke overhead bursts into flames, firefighters call this:
- a. Flashdance
- b. Heat fire
- c. Flashover
- d. Smoke fire
- 11. How many matches would it take to burn down a very large building?
- a. 1000
- b. 275
- c. 1
- d. 25
- 12. Which of these are true about the fire escape plan for your family:
- a. Not important since it is practiced in school
- b. Silly because everyone knows how to leave their home.
- c. Very important to plan and practice at least once a year.
- d. Not required in single family residences
- 13. Carbon Monoxide in excessive amounts will:
- a. Wake you up with the terrible odor
- b. Burn your nose when you breath it
- c. Make you cough
- d. Put you into a deep, deep sleep so you can't move.

#### **Post-Test Continued**

- 15. A meeting place should be:
- a. The local library
- b. Out front, next door to your home
- c. In the street in front of your home
- d. In the back yard so you are not in the fire department's way as they arrive
- 16. Candles, lighters, and matches are:
- a. Fun to play with
- b. Tools to be used by grown ups only.
- c. To be readily available
- 17. How fast can a fire totally consume a bedroom if it catches on fire?
- a. 1 hour
- b. 30 minutes
- c. 2 hours
- d. 1 minute
- 18. Which of these are the leading killers in a structure fire?
- a. Burn injuries caused by the flames
- b. Smoke inhalation
- c. Falling down stairs while trying to escape
- d. Non-working smoke detectors
- 19. How fast can a fire consume your home?
- a. 1 hour
- b. A few hours
- c. A few minutes
- d. 1 day
- 20. Fire as seen on TV shows and in the movies is:
- a. Informative and fun
- b. Not an accurate description of what fire is really like
- c. A good way to learn how to react in the event of a fire
- d. As real as it gets.

- 21. If you were to describe the color you saw if a fire occurred in your home it would be:
- a. Orange
- b. Yellow
- c. Black
- d. Blue
- 22. Fire is so hot, it can do all but the following:
- a. Melt glass like taffy
- b. Destroy everything in it's path
- c. Fool the smoke detectors into not working
- d. Turn a TV into a melted blob of plastic
- 23. Carbon Monoxide can actually:
- a. Improve your physical appearance
- b. Cause houseplants to grow faster
- c. Put you into a deep, deep sleep
- d. Stain your furniture
- 24. If there is a fire in your house, the smoke will only allow you to see
- a. Usually ten to fifteen feet
- b. Better near the ceiling
- c. Zero to a few inches
- d. Your windows where there is light
- 25. Of the following, which will not cause a fire?
- a. Faulty wiring
- b. Unattended cooking
- c. Smoke detector activation
- d. Playing with matches

### The Team Behind "Fire Is..."



Dr. Frank Field

The "Fire Is..." initiative was conceived by Dr. Frank Field, with more than 50 years' experience as science editor, meteorologist and reporter for the local NBC, CBS and Fox networks in New York City. He became passionate about fire prevention in 1987 when he read the alarming statistics regarding civilian fire death and injury rates in the United States.

The New Jersey State Firefighters' Mutual Benevolent Association, (NJSFMBA) is a labor union which has represented career firefighters in the State of New Jersey for more than 110 years and knows firsthand of the importance of fire safety among children.

Through a grant for the New Jersey Office of Homeland Security, the NJFMBA is now able to make this much needed realistic approach in children's fire safety education available throughout all New Jersey schools.



