Side by Side Sprinkler Demonstration Trailer Presentation

Personnel

- **Photographer and/or videographer**
- **Narrator – know when to signal to have the firefighters put out the non-sprinklered room**
- **Firefighters**
- **Someone running the timer/recorder**

Prepare the rooms

Set up the rooms with furniture. (The trailer may come with a few pieces, but you will need to complete the room with lamps, tables, magazines, or anything else that would fit in a room.)

Prepare the firefighters (prior to the demonstration take the time to review what the firefighters will be doing in this activity)

1. For the sprinklered room, you will only need a pressurized water extinguisher.
    - Just do a minimal overhaul – the idea is to show that there is very little damage with fire sprinkler operations.

2. Tell firefighters to watch for your signal to attack the un-sprinklered room fire.
    - Have someone take a picture of the flashover and then direct the crew to hit it.

3. Advise the crews to use a straight stream and hit it high. (If they use a fog, you will have everything coming back onto you and the crowd.

4. Advise the crew to use caution when overhauling the un-sprinklered side. Try not to get the melting plexiglass on their turnout gear.

Script

WHAT YOU WILL SEE TODAY

Describe what you will see – the effects of a fire sprinkler system and what many people will never see live – a flashover.

Temperatures in a flashover reach 1400 degrees Fahrenheit and we know that **No One Survives A Flashover**

In the 1970's, it was estimated that a person had 17 minutes to escape from a home fire. Through the years and because of the change of furnishings to plastics and foam rubber products, it is estimated that you have between 1 and 3 minutes to escape.

If you remember one thing today, it's that Fire Sprinklers Save Lives

In Massachusetts, in the past 10 years, 74% of total fire deaths occurred in residential dwellings. 2216 people died in one-and two-family home fires **without** sprinklers. 1,363 civilian injuries occurred in one-and two-family home fires without sprinklers.

There were no fire deaths in homes protected with sprinklers!

People make assumptions about sprinklers based on myths and Hollywood descriptions of what sprinklers do in and to a home. Here are two of the most common myths:

Myth #1

All sprinklers in the room activate at once. **False**, heat from a fire will only activate the sprinkler closest to the fire, spraying water directly on the fire. Typically, there is not enough heat to activate other sprinklers. Many people believe that smoke activates sprinklers, so they conclude that smoke will affect all the sprinklers. Only heat, not smoke can activate a sprinkler.

Myth #2

Water will create more damage than the fire. **False.** A home fire sprinkler sprays about 13-18 gallons of water per minute and is designed to operate early in a fire. The hoses used by firefighters use ten times that amount of water-about 250 gallons per minute. The combination of a sprinkler's quick response, lesser water flow and lower pressure significantly reduces property damage. When sprinkler protection is provided, the nearest sprinkler stops the fire before it can develop into a catastrophic incident.

Description of the room

Let me describe what is in this trailer. There are two rooms that are exactly the same, furnished like a sitting room. For demonstration purposes these could be furnished like a dorm, hotel, motel, office or any room in your home. There is a waste basket with paper in each room that will be ignited. No accelerants will be used. Both rooms have smoke alarms, and Styrofoam cups. These are our high tech temperature monitors. They melt at 464 degrees. So watch how quickly the cups melt, and you will know the temperature is above 464 degrees.

Begin the demonstration with the sprinklered side:

Ignite the paper. Using the clock, announce the time when things are occurring

- When smoke first shows
- When flame first shows
- When curtains ignite
- At what time is the smoke alarm activated

- Notice the color of the smoke
- Notice what is burning
- Is the Styrofoam cup burning?
- At what time does the sprinkler go off
- Review the damage done in the room. What was the extent of any damage noted?

Ignite the non-sprinklered side

Ignite the paper. Using the clock, announce the time when things are occurring:

- When flame first shows
- When curtains ignite
- At what time the smoke alarm is activated
- Notice the color of the smoke
- Notice what is burning.
- Announce what time the Styrofoam cup melts. Comment about super-heated air and survival rate.
- When the chair is on fire
- When the smoke alarm melts and falls from the ceiling
- Announce when flashover occurs – remember the time. **NO one could survive this fire.**
- **Firefighters begin extinguishing the fire**
- **They can pull the furniture out to make sure the fire is out.**
- Announce that a good response time for a fire department to arrive on scene is about 4-5 minutes. Having the firefighters present is accelerated for the demonstration.
- Make a connection at what time flashover occurred and response time of the fire department, reminding everyone that

the 4-5 minutes does not include getting set up to attack the fire.

- When the fire is out, have the audience compare the damage in each room.

Note: you may want to mention these two stories:

Ask if anyone remembers a fire in a nightclub 15 years ago where there was a rock band and pyrotechnics. Most will think of the Station night club fire. It's not! It's the Fine Line Café in Minneapolis MN where a fire occurred on Feb. 17th, 2003. There was a rock band and they used pyrotechnic and it set the ceiling on fire. No deaths, one injury. One Sprinkler head controlled the fire.

NOTE: If you want, you could tape off a 75' x 54 ft. area. You can explain that it is to keep everyone safe, but the area is a little over 4000 sq. feet. It is the same area that 100 people lost their lives in about three minutes in the Warwick Station night club fire on Feb. 20th, 2003. Computer models and an actual mockup of the exact area proved that 2 sprinkler heads would have controlled the fire even if it were designed as a light hazard.

Next room:

Closing:

- Remind people how important it to have working smoke and CO alarms in their home
- A practiced home escape plan – remind them you have 1-3 minutes to get out of your home so you need to know where your exits are.

- Remind people how dark smoke is. It is hard to see in smoke. That is why early detection from working smoke alarms is critical to survival.
- Sprinklers provide us with time in order to get out of our homes. Most fatal fires happen at night, and sprinklers buy us time to escape. Can you respond quickly immediately upon waking up out of a sound sleep?

Questions???