



## Shelter-In-Place:

# What you need to know

### **Everyone Needs to Know...**

- We live in an industrialized world
- We manufacture, transport and use products made from chemicals
- Accidental or intentional spills or releases of hazardous chemicals can occur
- During a release of hazardous materials, air quality may be threatened
- Sheltering in place is most often your safest option



### What could happen?

- Manufacturing Accident
- Train Derailment
- Interstate/Highway Accident
- Chemical leak from pool or wastewater treatment plant
- Terrorist Attack



### **Propane Storage Facility**



### HazMat Rail Car



### **HazMat Facility**



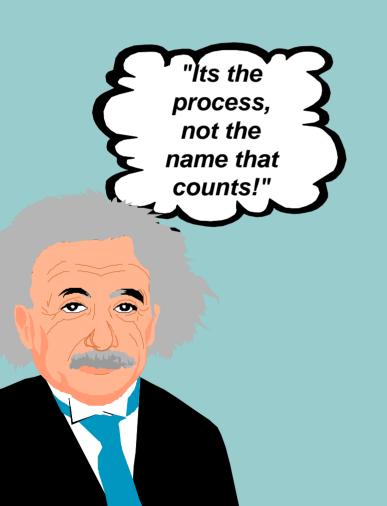
### **Major Accidents in Miami-Dade**

- November 1996: Tanker Ship ran aground off Key Biscayne carrying Butadiene
- March 2000: Freight train derails near Golden Glades Interchange, spills 1600 gallons of 70% Hydrogen Peroxide, 1100 persons evacuated
- January 2001: Wildfire burns into Propane tank farm in west Miami-Dade, several tanks explode, 70 businesses evacuated
- June 2001: Chlorine tank releases ½ ton of Chlorine Gas in Medley, 22 injured, 18 hospitalized

### **Protecting the Public**

- Decision to protect the public from a hazardous material incident is complex
- Options include evacuating the public or sheltering the public in place
- Measure is determined by Incident Commander based upon the nature of the threat to the public

### Sheltering-In-Place has many names...



"Protect-in-place"

"Cocooning"

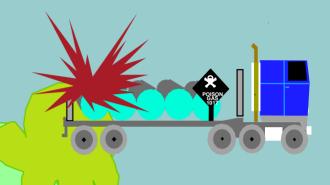
"Buttoning up"

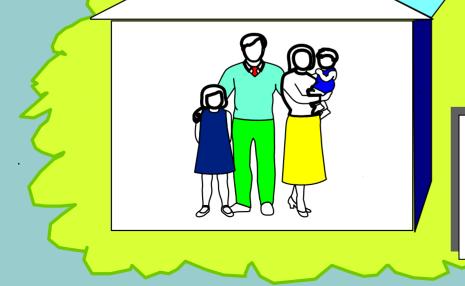
"Using safe havens"

"Sheltering"

## Sheltering-In-Place is a protective action

Sheltering-In-Place is the use of a structure and its indoor atmosphere to temporarily separate individuals from a hazardous outdoor atmosphere





The objective of sheltering-in-place is to <u>minimize</u> exposure of the public to the hazardous material released

#### SUMMARY OF THE GENERAL BENEFITS AND LIMITATIONS OF SHELTERING-IN-PLACE

Minimizes exposure of populations in the hazard zone

**Requires suitable structures** 

More quickly implemented than evacuation, but termination must be controlled

Requires fewer resources from emergency response organizations

Less familiar to the public

Can be more easily implemented in densely populated areas or with institutionalized individuals

#### DEFINITIONS OF BASIC OPTIONS FOR PROTECTIVE ACTION DURING HAZARDOUS MATERIALS EMERGENCIES

#### **EVACUATION**

The recommended or required relocation of the public from an area of unacceptably high risk to an area of acceptably low risk

#### **SHELTERING-IN-PLACE**

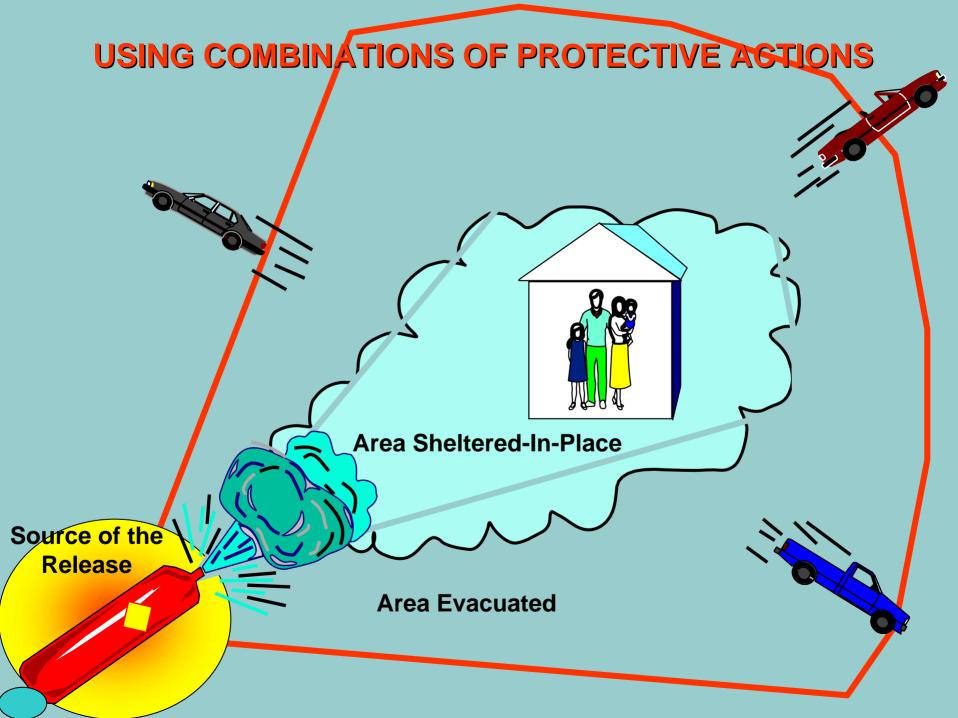
Sheltering-in-place is the use of a structure and its indoor air to temporarily isolate individuals from a hazardous outdoor atmosphere

#### **BREATHING AND SKIN PROTECTION**

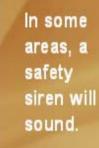
Breathing and skin protection are the use of readily available materials by an individual to minimize inhalation or skin contact with the hazardous material

#### **COMBINED PROTECTIVE ACTIONS**

The use of more than one protective action during an incident for different locations, at different times, or to enhance the use of a single protective action



### SHELTER-IN-PLACE How Will | Know?





Authorities will notify residents by radio or TV through the Public Emergency Notification System.







In Broward County some areas have emergency notification through the phone system.

## SHELTER-IN-PLACE Step 1 - Move Inside



All people and pets should move inside.

Pre-select a room with few windows. The room should be large enough for your whole family. If possible, select a room that has access to water and restroom facilities.

## SHELTER-IN-PLACE

### Step 2 - Close and Lock all Doors & Windows



# SHELTER-IN-PLACE

#### Step 3 - Turn Off Ventilation Systems



## SHELTER-IN-PLACE

#### Step 4 - Everyone Should Go Into One Room



Pre-select the room you will use for Shelter-In-Place.

It is recommended that you prepare a SIP kit and keep it stored in this room. Items should include:

Battery-operated radio w/fresh batteries
Bottled water
Masking tape & plastic
Towels

### SHELTER-IN-PLACE Step 5 - Turn On Radio or Television



Turn on your radio or television for information & instructions Local authorities will determine when the event is "all clear."

DO NOT call the 911 Dispatch Center. This will tie up needed telephone lines. Call 911 ONLY if you have a true emergency situation. **Special thanks to:** 

#### National Institute for Chemical Studies Charleston, WV

Harrisonburg/Rockingham County LEPC, VA



### Shelter-In-Place

South Florida LEPC District 11 George Danz, Chairman Manny Cela, Coordinator (celam@sfrpc.com) www.sfrpc.com/lepc/sip.htm

South Florida Regional Planning Council 3440 Hollywood Boulevard, Suite 140 Hollywood, Florida 33021 Phone: (954) 985-4416