

# ***Shelter-in-Place***



A Practical Guide

# Chemical Fire Aboard Train Prompts Evacuation in Kentucky City

- Danville, KY - Portions of Danville, Kentucky were evacuated today after sodium dithionite on a railroad car began burning here. Police evacuated residents within at least a quarter-mile of the fire at the Norfolk Southern rail yard on the city's west end. Rail authorities eventually moved the car, with the chemical still burning inside, to a more remote site south of the city. That allowed most people back into their homes and businesses. An explosion occurred inside the car after it was moved, said Rodney Raby of the state fire marshal's office.
- Earlier in the day, a one-mile-square section of the town of 16,000 was ordered evacuated. The affected areas included residences, businesses, several schools and Centre College, which is adjacent to the rail yard where the car was burning.
- The boxcar was carrying sodium dithionite, a flammable product that can produce irritating, corrosive or toxic gases, Conley said. Water cannot be used to fight such a chemical fire, he said. "So that's going to present some challenge," he said. The chemical, which is used in dyes and as a thinning agent, also is known as sodium hydrosulfite, local authorities said.

# The Problem

- Chemical spills can occur anytime, anywhere;
- Preparation is the key to protect the public;
- Quick action is crucial.

# Protection Options

- Evacuation
  - Preferable in situations in which the event is expected to be long-term in nature and enough time allows to safely evaluate residents.
- Shelter-in-place
  - Preferred in fast moving situations in which evacuation cannot be achieved.

# Shelter-in-Place

- Method used to protect the public during chemical spills
- "Seal" people indoors

# Notification

- You will be notified of an emergency by:
  - Port / Campus Sirens
  - Police or fire (using vehicle PA)
  - Reverse 911
  - Direct contact (door to door)
  - Radio or TV
    - Emergency Alert System

# Shelter-in-Place

## What to do?

- Stay calm;
- Turn on radio or TV;
- Try not to tie up the phones;
- Get everyone inside;
- Close all windows and doors;
- Follow your Shelter-in-Place Plan.

# Preparing Your Safe Room

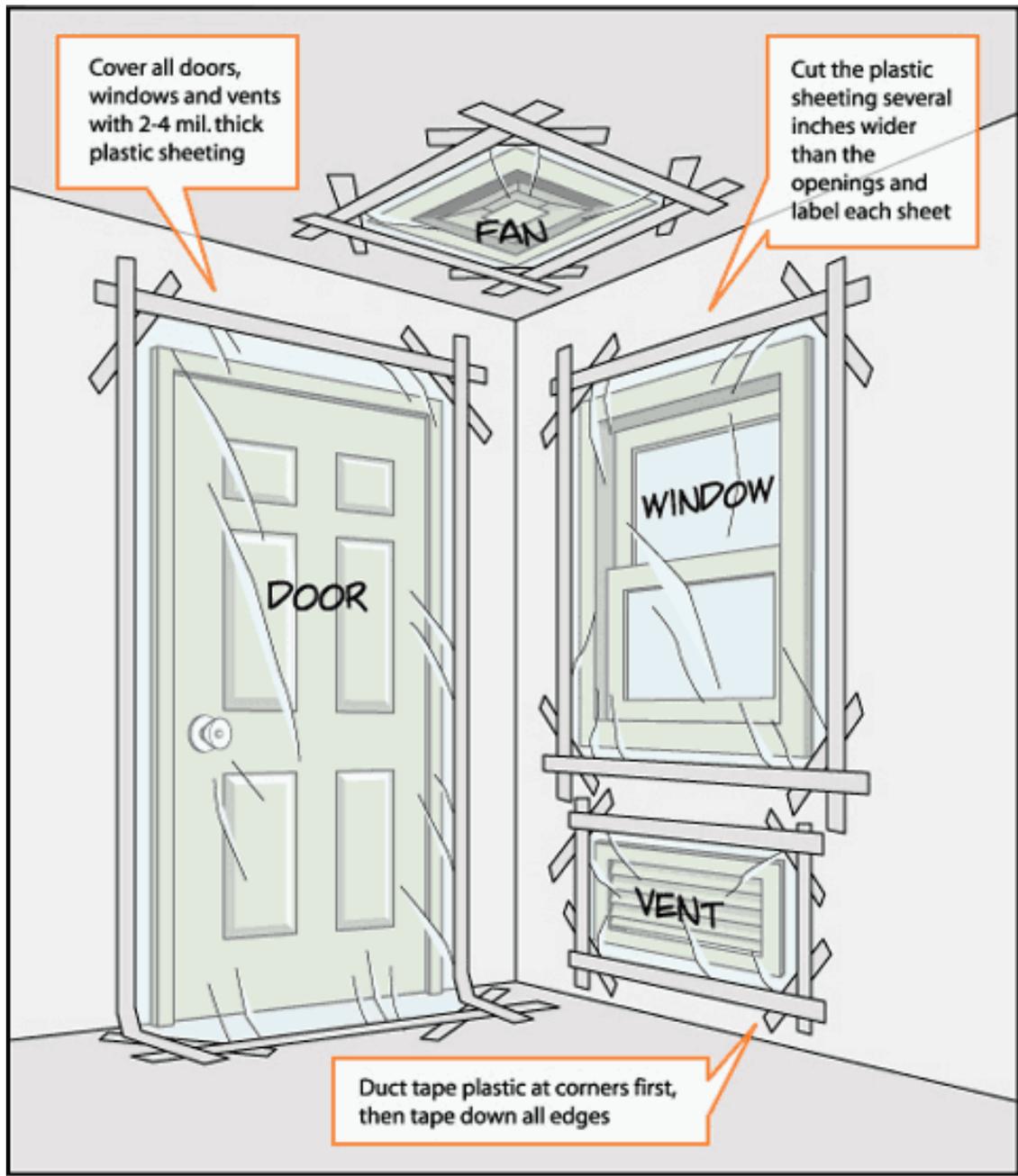
- Inside room preferred with few or no windows (such as bathroom);
- Close and lock windows
- Shut off heating or cooling systems (HVAC), fans, heat pumps, fireplace dampers, air conditioners;
- Turn off pilot lights
  - If you SAFELY know how to and....
  - Instructed by the Fire Department.

# Sealing Your Safe Room

- Seal windows with pre-cut plastic and Duct Tape (from inside)
- Seal door edges and bottoms with tape
  - Use wet towels to seal the bottoms of doors
- Close drapes
- Seal electrical & CATV outlets
  - With Duct Tape
- Seal HVAC ducts and outlets
  - With Duct Tape and Plastic Sheeting

Cover all doors, windows and vents with 2-4 mil. thick plastic sheeting

Cut the plastic sheeting several inches wider than the openings and label each sheet



Duct tape plastic at corners first, then tape down all edges

# Shelter-in-Place

- Stay inside
  - Monitor radio or TV for "all clear signal"
- Terminating shelter-in-place
  - Go outside
- Open all windows to ventilate the building

# Other Precautions

- Don't go outside;
- Listen to radio or TV;
- Don't open a window to get "some fresh air" during the emergency;
- Keep everyone calm.

# Shelter-in-Place Kit

- Duct Tape
- Heavy Plastic Sheeting (to cover windows/doors)
- Heavy Duty Scissors
- Battery Operated Radio
- Flashlight
- Extra Batteries
- Towels (to cover any opening at bottom of doors)
- Bottled Water (to use on towels, if needed)
- Non-perishable Food
- First-aid Kit
- Games & Book

# Shelter-in-Place Principles

- Make sure all windows and doors are closed in areas you are leaving
- Turn-off all air conditioners and ventilation systems immediately
- Once in sheltering site, accomplish any taping/sealing necessary as soon as all personnel are in the Safe Room.

# Questions



Call PEMA at 401-228-8000