

CBRNE Awareness Module 6

## Agent Dissemination Devices

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CBRNE Awareness Objectives

**Student will be able to**

- identify a potential CBRNE dissemination devices
- categorize a dissemination device as to type and potential impact.
- identify potential targets .

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CBRNE Awareness

## Dissemination Devices

Type Disseminator	Type Dissemination	Function Type
• Direct Deposit	Point	Mechanical
• Breaking Devices	Point	Mechanical
• Bursting/Exploding Devices	Point	Mechanical
• Spraying Devices	Point or Line	Mechanical
• Vector	Area (Biological Only)	Biological

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**CBRNE - Awareness**

### Direct Deposit Device

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**CBRNE - Awareness**

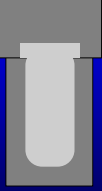
### Breaking Devices

Point Dispensers

- Common Items
- Mechanical
- Point source
- Moderate downwind hazard
- Fairly controllable



Light Bulb



Thermos Bottle

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**CBRNE - Awareness**

### Bursting/Exploding Devices

Point Dispenser

Timer

Agent Reservoir

Explosive with Igniter

- Mechanical
- Point Source
- Significant downwind hazard
- Fairly controllable

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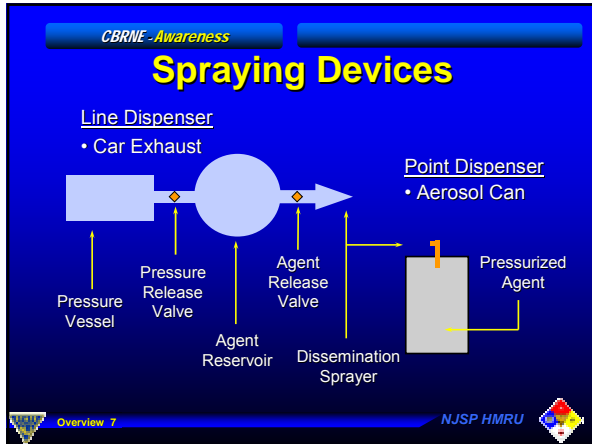
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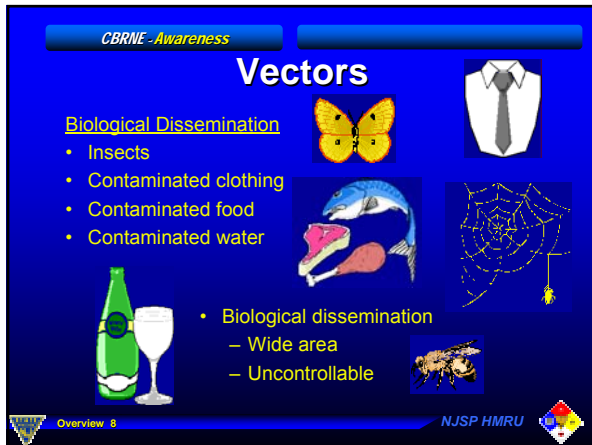
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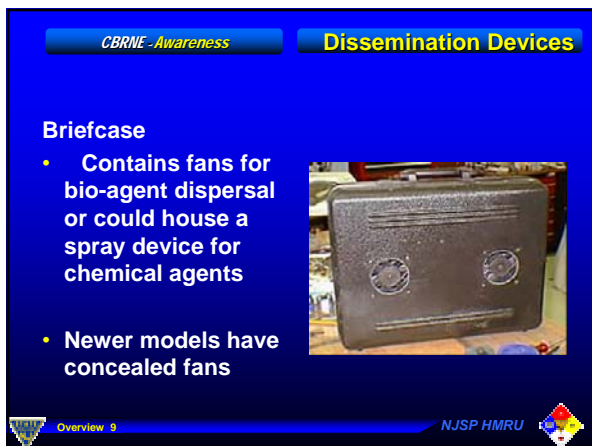
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**CBRNE Awareness**      **Dissemination Devices**

**Fire Extinguisher**

- Fire extinguisher with a solenoid
- and four spray nozzles using a timer mechanism



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**CBRNE Awareness**      **Dissemination Devices**

**Chemical Weapons**  
**Dissemination Methods**

- ◆ Aerosol--suspension or dispersion of small particles (solids or liquids) in a gas
  - ◆ Hand-held spray bottles
  - ◆ Backpack pesticide spray equipment

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**CBRNE Awareness**      **Dissemination Devices**

**Chemical Weapons**  
**Dissemination Methods (cont'd)**

- ◆ Dissemination is difficult
  - ◆ Most scenarios have limited effectiveness
  - ◆ Military dissemination uses explosive detonated in air.
  - ◆ Most serious injury to those in physical contact with product.
  - ◆ Persons in immediate area most affected.
  - ◆ Very difficult to produce building-wide or large-scale effects.

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**CBRNE Awareness**      **Dissemination Devices**

### Electrical Box



Can be mounted on a wall. Box has a hole in the side and spray device mounted inside. Can be placed on a timer or remotely activated.

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**CBRNE Awareness**      **Dissemination Devices**

### Electrical Box (cont'd)



- ◆ Inside the box:
- ◆ spray device
- ◆ container
- ◆ plunging mechanism
- ◆ battery
- ◆ remote activation system

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**CBRNE Awareness**      **Dissemination Devices**

### Compressed Gas Cylinder



Pressurized cylinder with a holding tank, which provides agent delivery through Venturi effect

Can be used with a timer or remote activator

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**CBRNE Awareness**      **Dissemination Devices**

**Spray Paint and Milk Carton**



Spray paint delivery bottle (left)

Delivery device hidden in milk carton activated by remote control (right)

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**CBRNE Awareness**      **Dissemination Devices**

**Leaf Blower**



Container added to bottom, provides mechanism for biological distribution

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**CBRNE Awareness**

**Render Safe Considerations**



Using a water cannon, explosive ordnance division (EOD) attempted to breach this device. It was not successful in opening the box, and broke the chemical container on the inside.

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CBRNE Awareness

### Key Points

- **Dissemination devices can take many forms**
  - Sometimes difficult to recognize
- **Potential targets**
  - Enclosed spaces
  - Critical facilities
  - Facilities of interest to terrorists
- **Responder actions**
  - Don't touch, cover or move device
  - Make proper notification

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CBRNE Awareness

### Summary

- Chemical agents are lethal and effective...
- and relatively easy to obtain
- Next to incendiaries and explosives, they are the easiest WMD agent to employ
- Of the two categories of chemical agents, industrial agents are more easily accessible
- Any chemical agent event will generate large numbers of psychological casualties
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