

Disaster Planning Emergency Response

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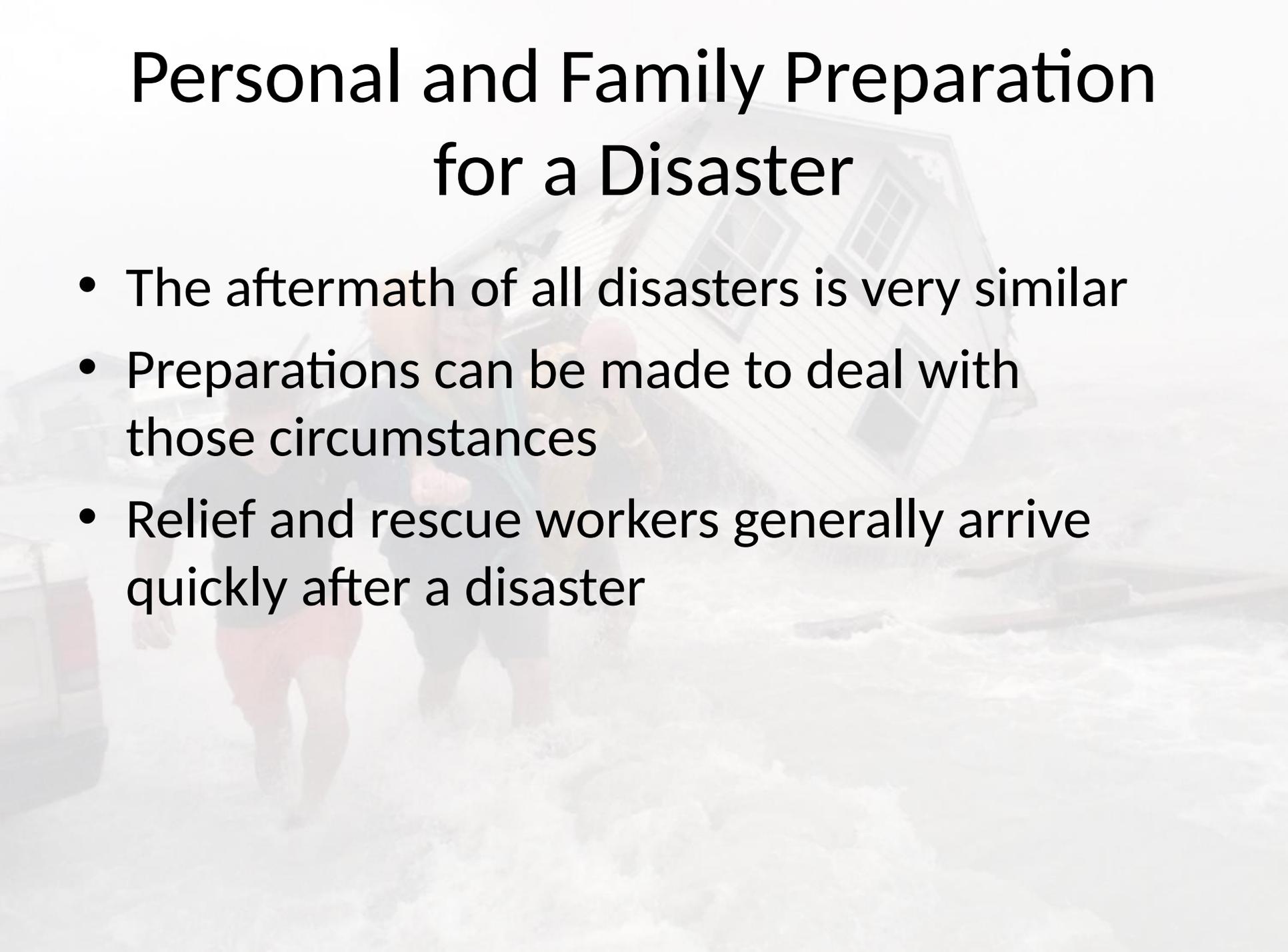
Disaster Defined

- A catastrophic event that leads to major property damage, a large number of injuries, displaced individuals, or major loss of life



Personal and Family Preparation for a Disaster

- The aftermath of all disasters is very similar
- Preparations can be made to deal with those circumstances
- Relief and rescue workers generally arrive quickly after a disaster



Make a plan

- Get informed
- Get an “out-of-town” contact person
- Establish a preselected meeting place
- Have a family communication plan
- Map out escape routes and safe places
- Make a plan for pets

Make a plan

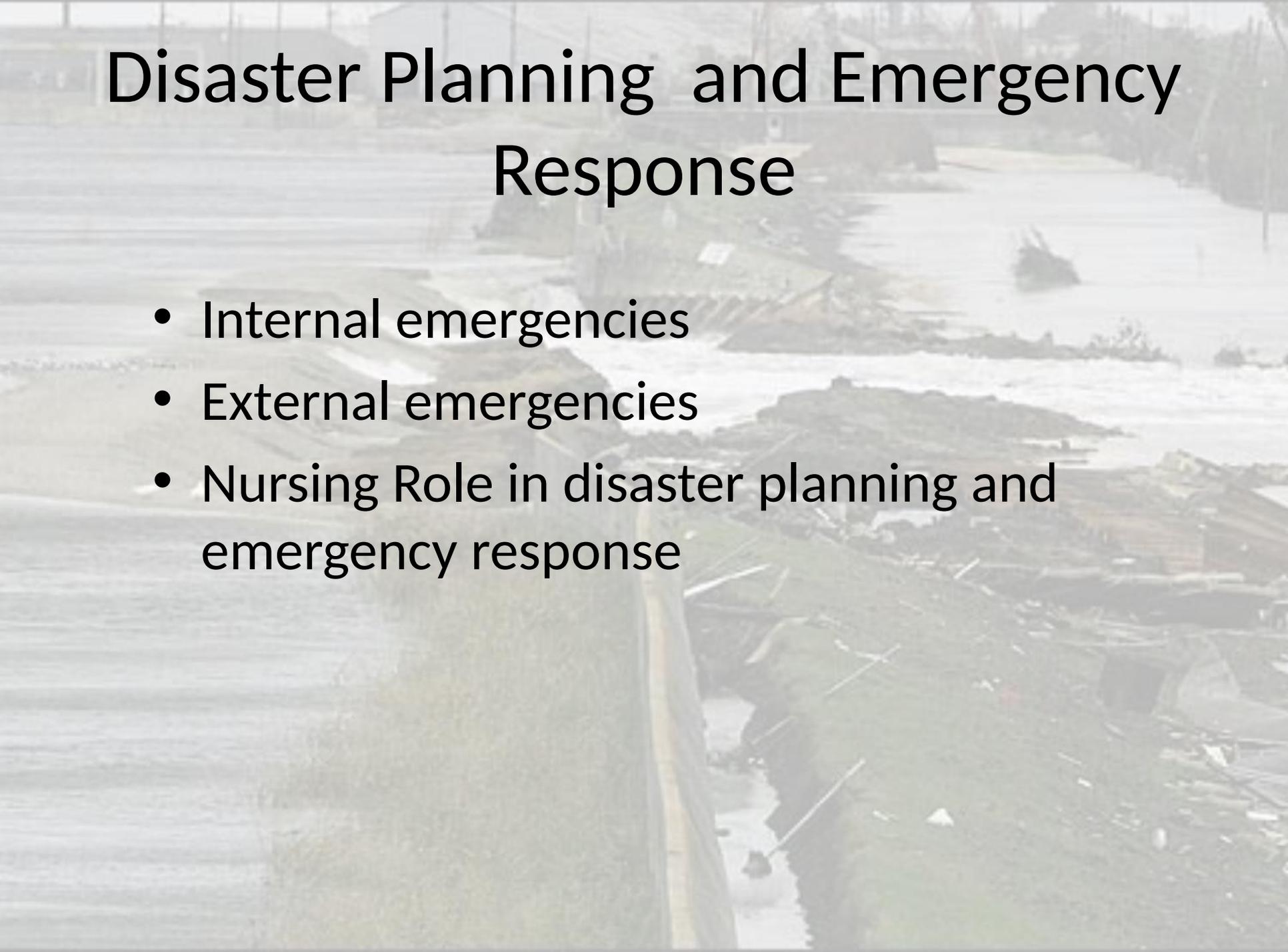
- Put together a disaster supplies kit
- Take an inventory of all home possessions
- Protect important records and documents
- Check your insurance coverage
- Learn how to turn off water, gas, and electricity

Disaster Phases

- Preimpact Phase
 - Communication is critical
- Impact Phase
 - Protection for First Responders
- Postimpact Phase
 - Evaluation



Disaster Planning and Emergency Response



- Internal emergencies
- External emergencies
- Nursing Role in disaster planning and emergency response

Disaster Planning and Emergency Response

- Nurses will function outside their usual practice setting
- They may assume a variety of roles in meeting needs of disaster victims
- Nurses must be able to perform under stressful and sometime physically dangerous conditions

Emergency and Mass Casualty Incident Preparedness

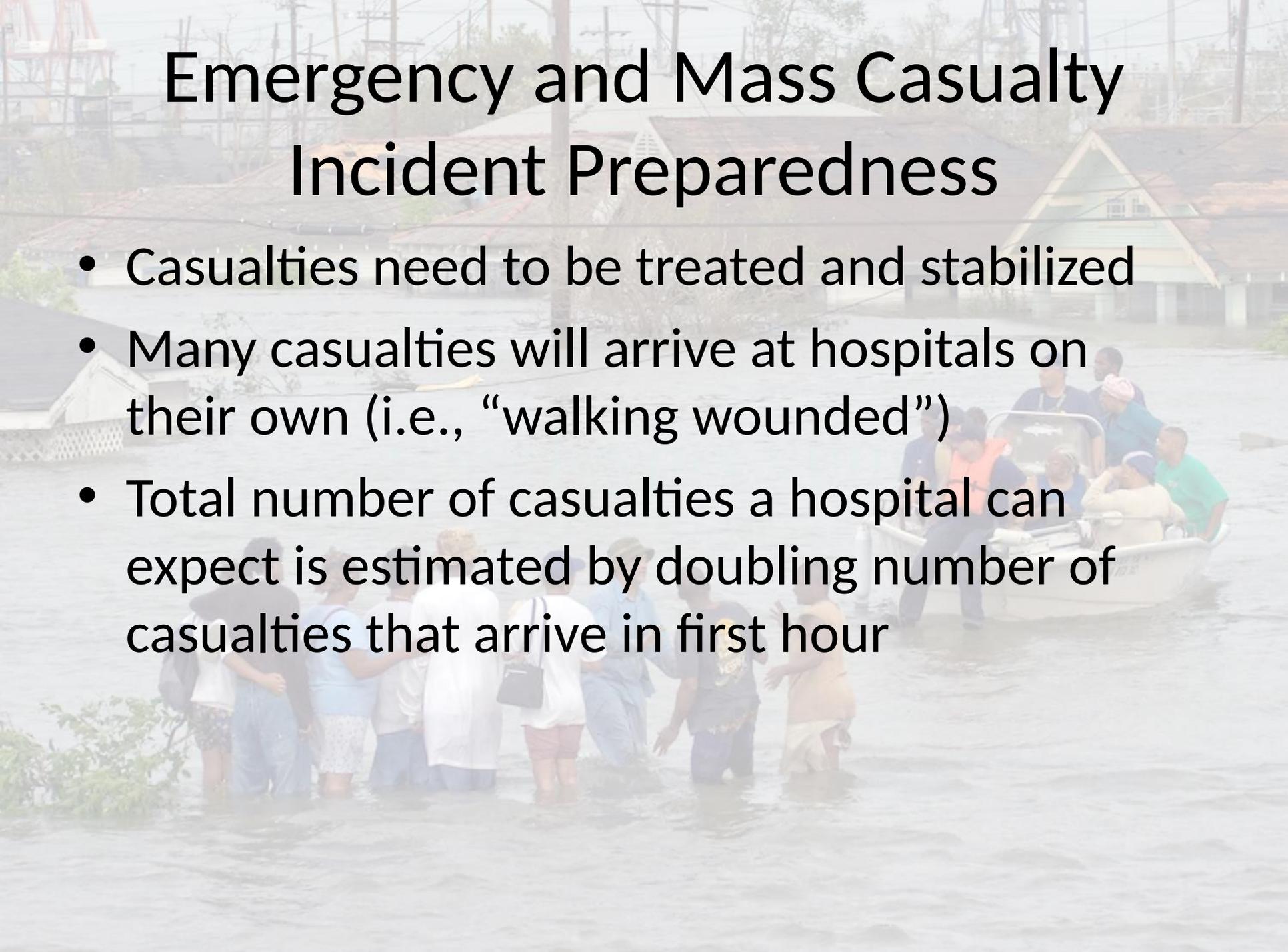
- Mass casualty incident (MCI)
- MCIs usually involve large numbers of injured (>1000)
- MCIs always require assistance from people/resources outside community

Emergency and Mass Casualty Incident Preparedness

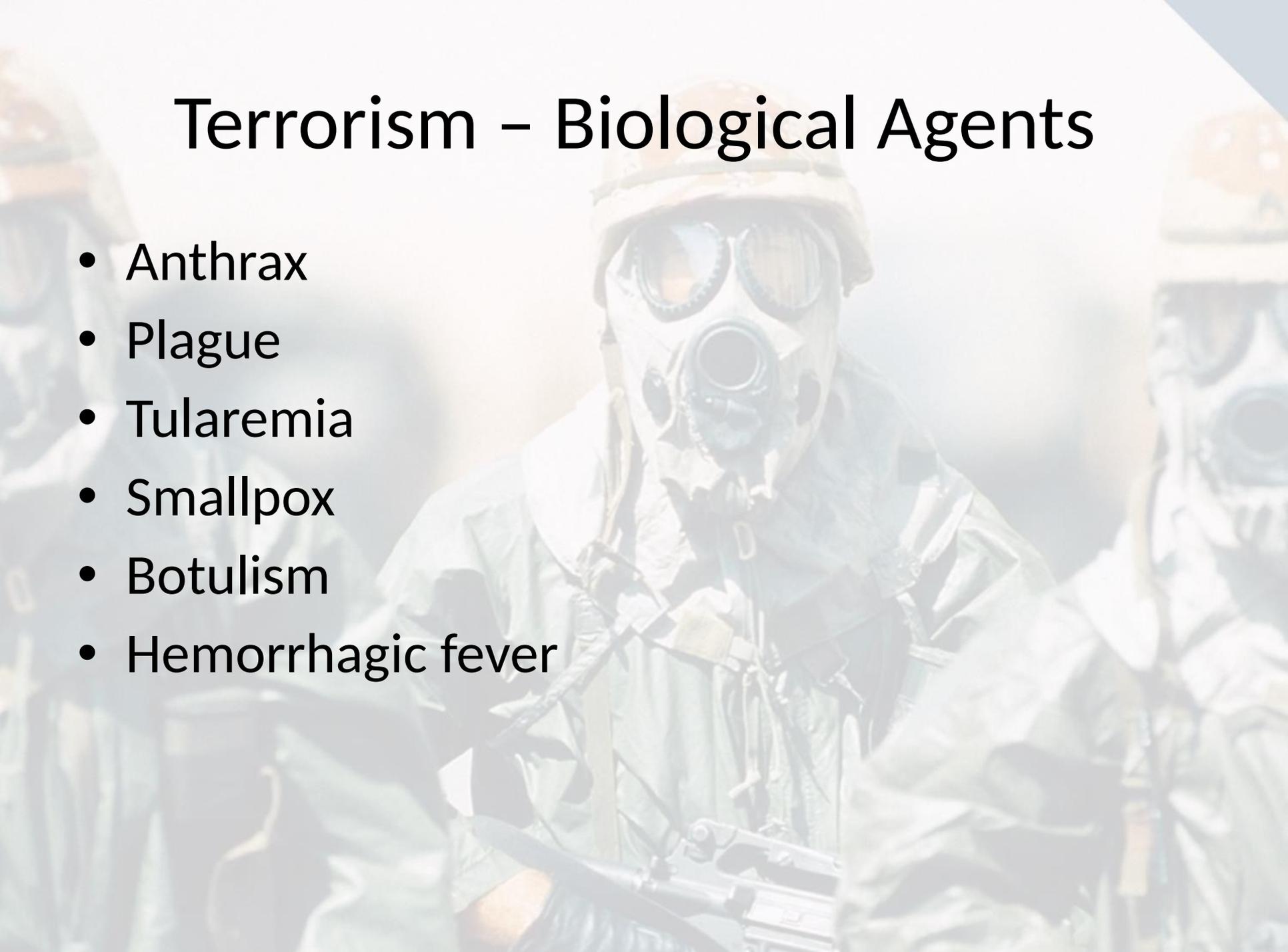
- Triage of casualties differs from usual ED triage and is conducted in <15 seconds
- System of colored tags designates both seriousness of injury and likelihood of survival
 - Green
 - Yellow
 - Red
 - Black

Emergency and Mass Casualty Incident Preparedness

- Casualties need to be treated and stabilized
- Many casualties will arrive at hospitals on their own (i.e., “walking wounded”)
- Total number of casualties a hospital can expect is estimated by doubling number of casualties that arrive in first hour

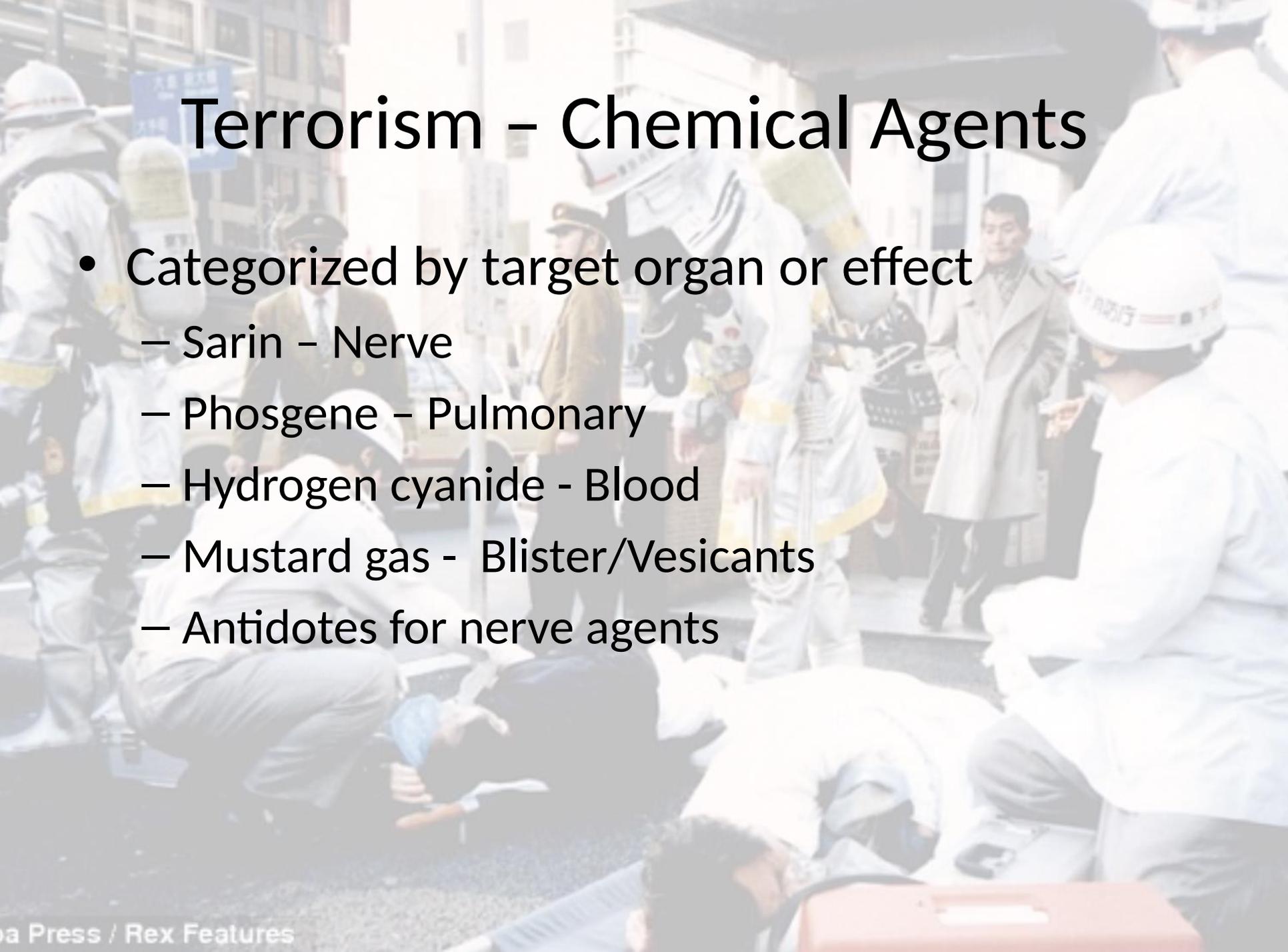


Terrorism – Biological Agents



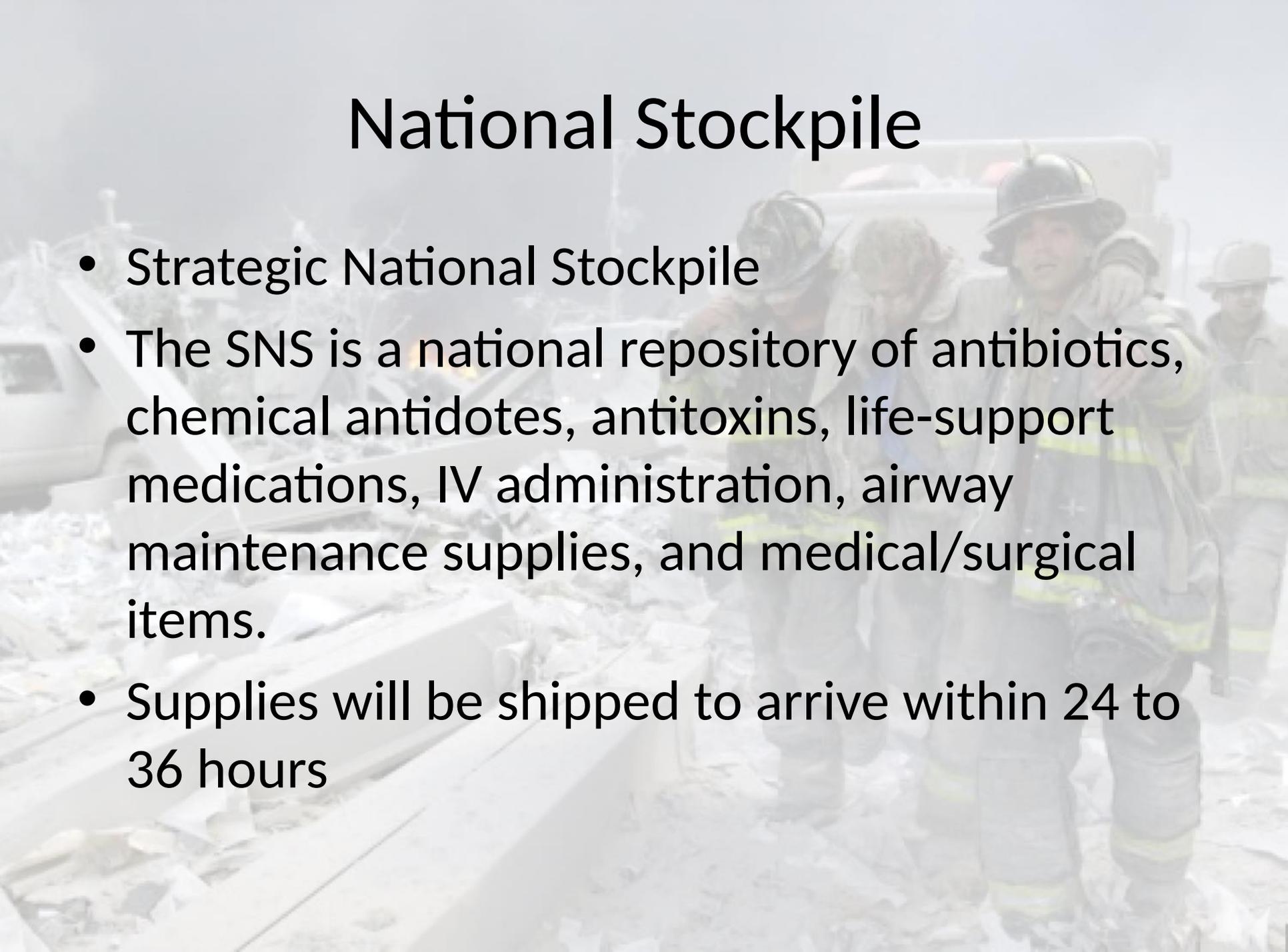
- Anthrax
- Plague
- Tularemia
- Smallpox
- Botulism
- Hemorrhagic fever

Terrorism – Chemical Agents

A photograph showing emergency responders in white hazmat suits and respirators attending to victims on a city street. The scene is chaotic, with several people lying on the ground and responders providing medical aid. The background shows a city street with buildings and other people.

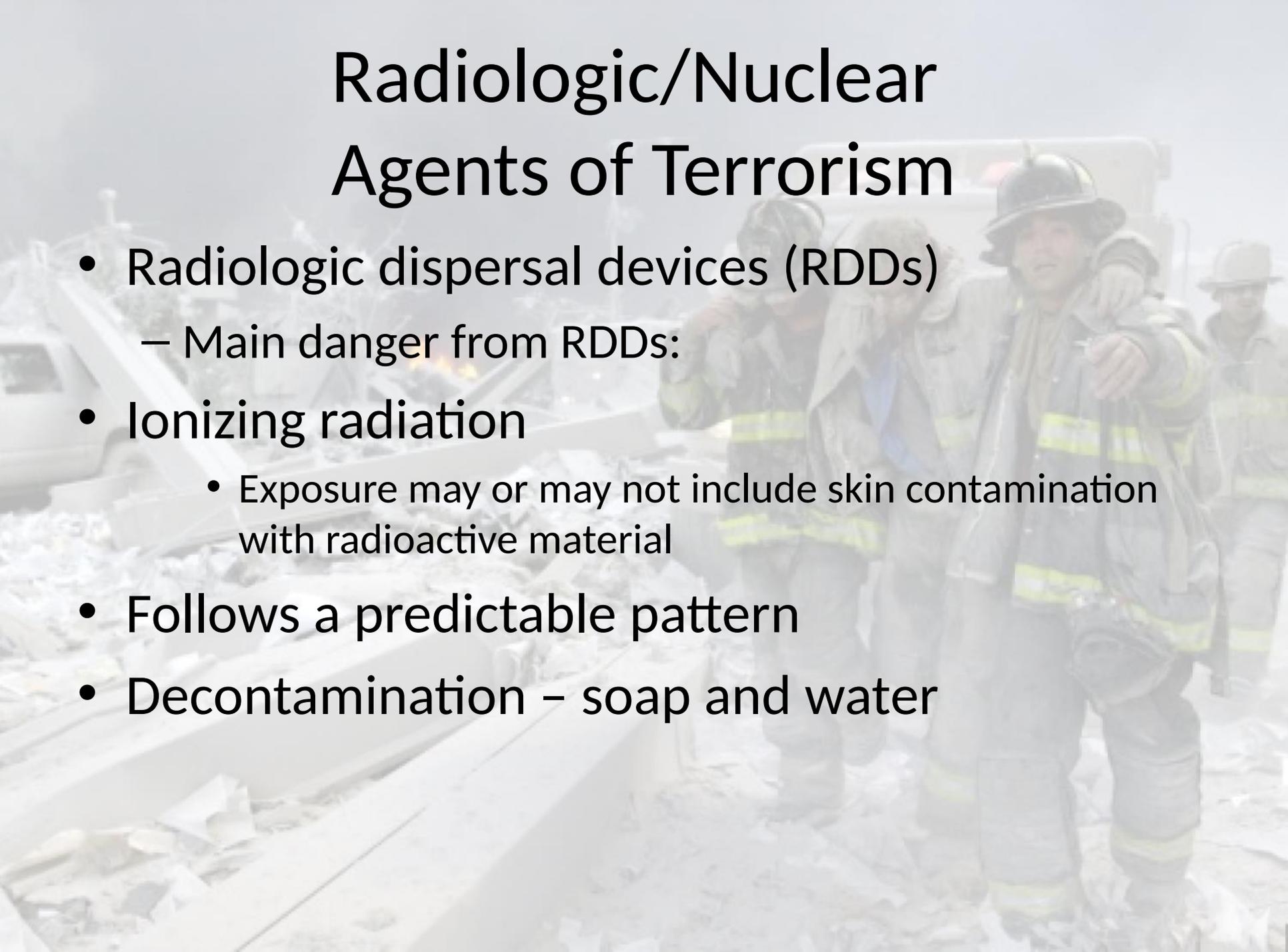
- Categorized by target organ or effect
 - Sarin – Nerve
 - Phosgene – Pulmonary
 - Hydrogen cyanide - Blood
 - Mustard gas - Blister/Vesicants
 - Antidotes for nerve agents

National Stockpile



- Strategic National Stockpile
- The SNS is a national repository of antibiotics, chemical antidotes, antitoxins, life-support medications, IV administration, airway maintenance supplies, and medical/surgical items.
- Supplies will be shipped to arrive within 24 to 36 hours

Radiologic/Nuclear Agents of Terrorism

- Radiologic dispersal devices (RDDs)
 - Main danger from RDDs:
 - Ionizing radiation
 - Exposure may or may not include skin contamination with radioactive material
 - Follows a predictable pattern
 - Decontamination – soap and water
- 
- A background image showing several firefighters in full protective gear, including helmets and jackets with reflective stripes, working in a debris-filled environment. They appear to be investigating or managing a hazardous situation, possibly related to a radiologic or nuclear incident.

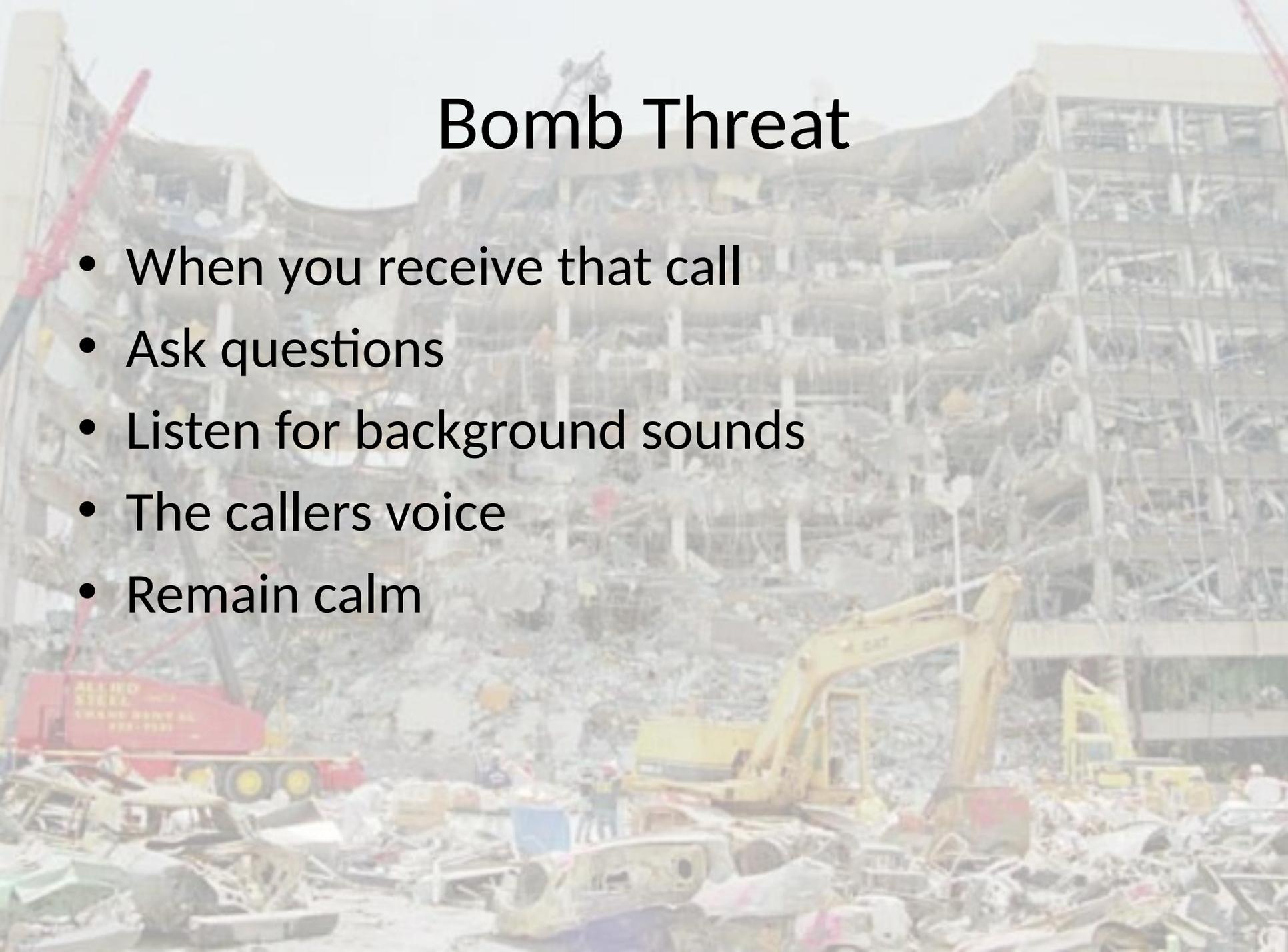
Decontamination

- The physical removal of toxic agents
- Prevent secondary exposure
- Increase chances for survival
- Soon as possible

Explosive Devices as Agents of Terrorism

- Result in one or more of following types of injuries: Blast, crush, or penetrating
- Damage to the
 - lungs, middle ear, gastrointestinal tract
 - Brain, Heart and Circulatory system,
 - Traumatic amputation, fractures, crush injuries

Bomb Threat



- When you receive that call
- Ask questions
- Listen for background sounds
- The callers voice
- Remain calm

Emergency and Mass Casualty Incident Preparedness

- Communities have initiated programs to develop community emergency response teams (CERTs)
 - Life-saving skills with emphasis on decision making and rescuer safety
- All health care providers have a role in emergency and MCI preparedness

Emergency and Mass Casualty Incident Preparedness

- Response to MCIs often requires the aid of a federal agency such as the National Disaster Medical System (NDMS)
- NDMS: Organizes and trains volunteer disaster medical assistance teams (DMATs)
 - DMATs: Categorized according to ability to respond to an MCI

Emergency and Mass Casualty Incident Preparedness

- Many hospitals and DMATs have a Critical Incident Stress Management unit
 - Arranges group discussions to allow participants to verbalize and validate their feelings and emotions about the experience

All Hazards Preparedness

- Disaster Task Force
- Emergency Management Team
 - Incident Command
 - Disaster Plans
 - Surge Capacity
 - Lockdown Plan
 - Staffing Plan

Hospital bed availability

- Reverse triage to increase surge capacity
- Who can be discharged
- How do we decide

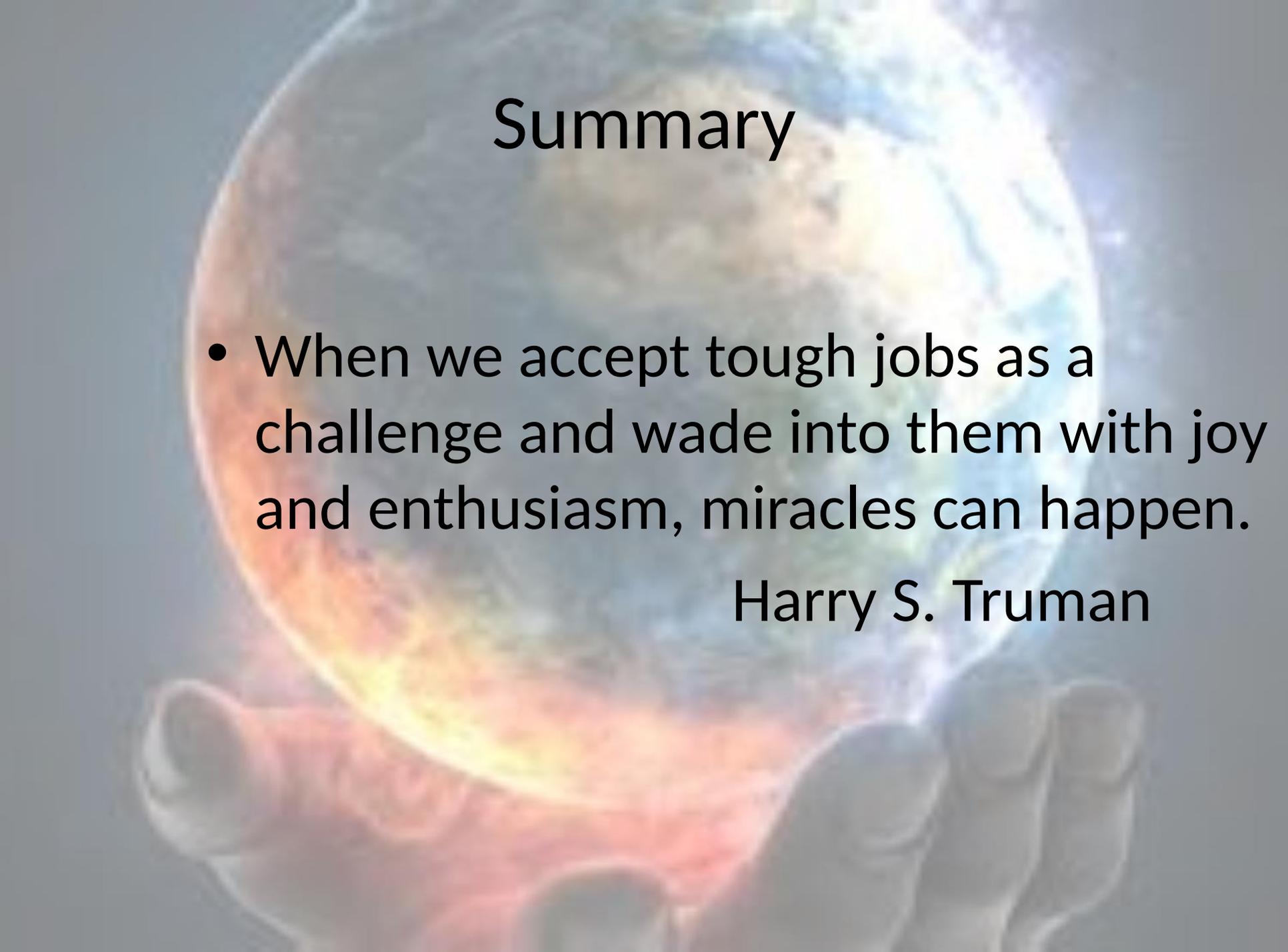
First Rule

- Keeping Staff Safe



Issues Now

- Intruder Safety
- Active Shooter
- Disaster scam artists

A hand is shown from the bottom, holding a glowing globe of the Earth. The globe is illuminated from the right, showing a bright horizon and a colorful gradient from yellow to red. The background is a dark, starry space. The text is overlaid on the globe.

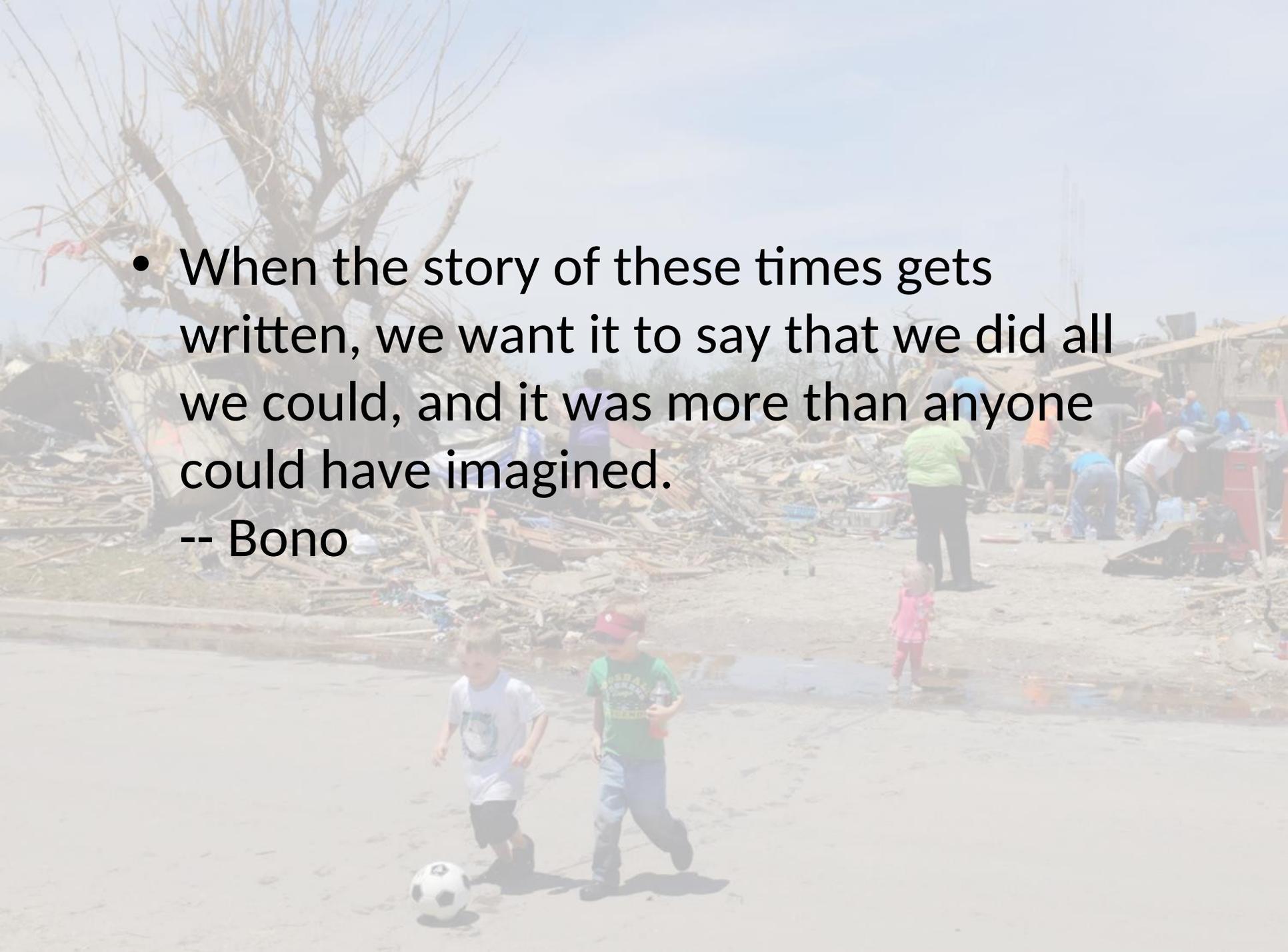
Summary

- When we accept tough jobs as a challenge and wade into them with joy and enthusiasm, miracles can happen.

Harry S. Truman

- When the story of these times gets written, we want it to say that we did all we could, and it was more than anyone could have imagined.

-- Bono



References

- Catalano, J.(2015). *Nursing Now Today's Issues, Tomorrow's Trends (8th ed.)*. Philadelphia: F.A. Davis
- Huber, D. (2010). *Leadership and Nursing Care Management (4th ed.)*. Maryland Heights: Saunders Elsevier.
- <http://www.cdc.gov/phpr/stockpile/stockpile.htm>