



CERT Training Manual

Summary

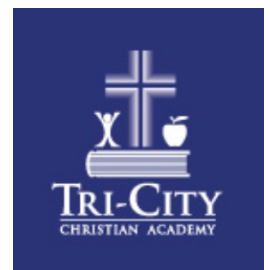


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Unit 1 – Disaster Preparedness

Citizen Corp

In his January 29, 2002 State of the Union Address, President George W Bush encouraged Americans to volunteer to improve and safeguard the nation.

Areas of emphasis for volunteer efforts:

- Crime
- Natural Disasters
- Terrorism

CERT Abilities

A well organized, well trained, and well managed CERT is able to:

- Prepare in advance of a disaster
- Respond in their community to address **immediate** needs.

Preparing for a Disaster

CERTs should prepare by:

- Identifying potential hazards in their homes and workplaces
- Reducing hazards where possible
- Developing a disaster supply kit

Responding to a Disaster

CERTs should respond by:

- Locating and turning off utilities, if safe
- Extinguishing small fires
- Treating injuries
- Conducting light search and rescue
- Helping to relieve survivor stress

Non-disaster CERT Roles

CERT members can:

- Distribute preparedness materials
- Staff first aid booths at special events
- Assist with installation of smoke alarms

Additional CERT Training Opportunities

1. Shelter management
2. Community relations
3. Donations management
4. Special needs concerns
5. Debris removal
6. Utilities control
7. Advanced first aid
8. Automated External Defibrillator use
9. CPR Skills

Types of Disasters

1. Natural
2. Technological
3. Man-made

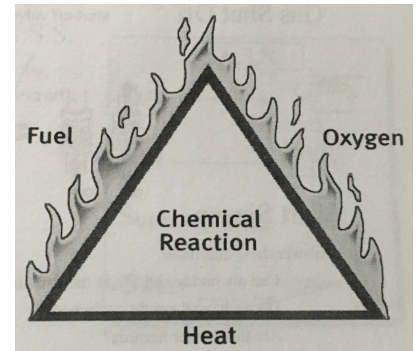
Unit 2 – Fire

The role of CERT in fire safety:

4. Put out **small** fires before they become big fires
5. Small fires fit a trash can and can be extinguished with one fire extinguisher
6. Prevent additional fires
7. Shut off utilities
8. Assist with evacuations where necessary
9. Hazardous material overview

The Fire Triangle

1. Heat – elevated temp of material to ignition point
2. Fuel – solid, liquid, or gas
3. Oxygen – without will just heat to vaporize



Note: Remove one of the three elements to extinguish the fire

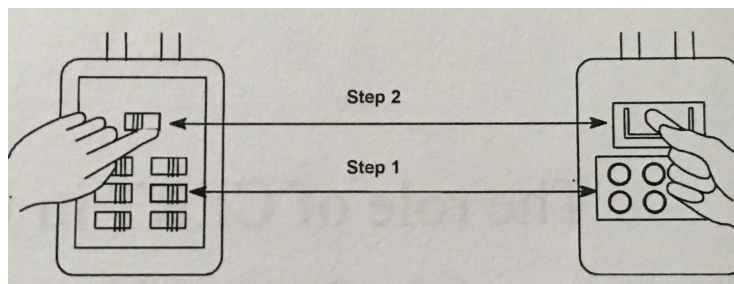
Fire Chemistry

1. Five Classes of fires
 - **Ordinary combustibles** - wood, paper, cloth, etc and leave ashes
 - **Flammable and combustible liquids** - burns on the surface where oxygen is
 - **Energized electrical equipment** - When power is disconnected it becomes a Class A fire
 - **Combustible metals** - Such as Magnesium (not normally found in residences)
 - **Cooking oils**

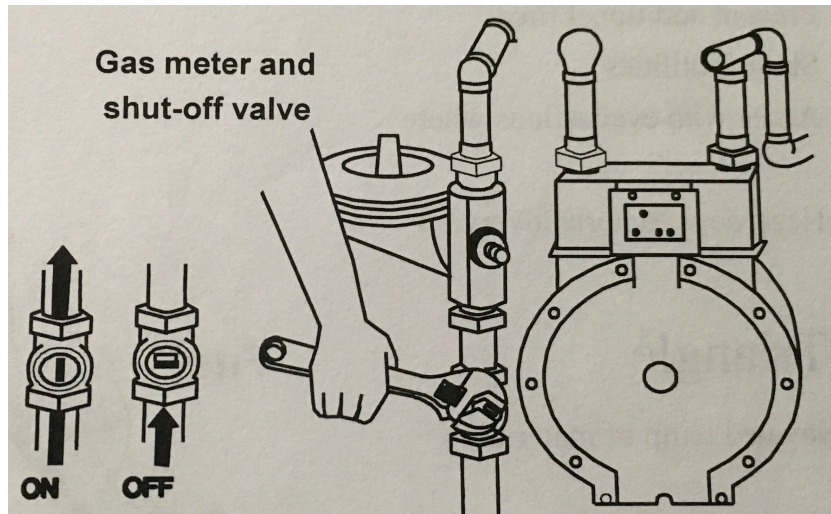
Note: It is important to match the extinguisher to the fire classification

Shutting Off Electricity

1. Shut off individual circuits, then the main (reverse this process to turn back on)
NOTE: DO NOT go into a flooded basement to shut off power



Gas Shut Off



When doing a CERT Size-Up

Answer these questions:

1. Can my buddy and I fight the fire safely?
2. Do we have the right equipment?
3. Are there other hazards?
4. Is the building structurally damaged?
5. Can we escape?

Firefighting Resources

Resources available:

1. When using **portable fire extinguishers** work in a team of two
2. When using **wet standpipes** work in a team of three
3. When working in a **confined space** use “creative” but **safe** resources

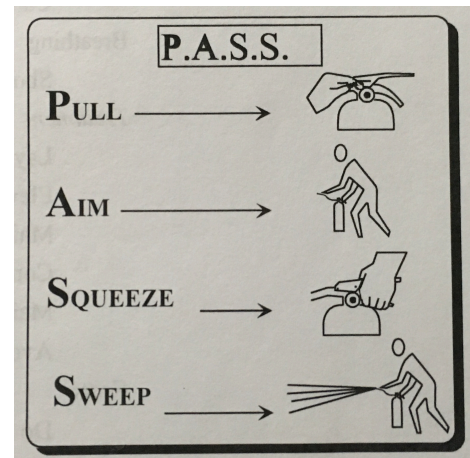
Types of Fire Extinguishers

Check label for type and that it is approved

1. Water - Removes heat and used for Class A fires. The extinguisher is usually silver and hold either 1 1/4, 2 1/2 or 3 1/4 gallons
2. Dry chemical - Breaks the chain of burning, used for Class A, B or C fires and the extinguisher is usually red
3. Carbon dioxide - Removes oxygen for Class B fires of about 2 square ft
4. Specialized fire extinguisher - Used for Class D fires
5. Wet Chemical - Removes air and used for Class D fires

Using a Fire Extinguisher – P.A.S.S.

1. Test the extinguisher before approaching any fire.
2. Use a sweeping motion to get the fire off the material, like brushing off a table



Fire Suppression Safety

Do:

- Use safety equipment
- Work in a buddy system
- Have a second extinguisher
- Feel closed doors for heat before opening
- Confine fires
- Stay low to the ground
- Have two ways to exit
- Maintain a safe distance
- Overhaul the fire

DON'T

- Try to suppress large fires
- Get too close.
- Fight it alone.
- Enter smoke-filled areas

Unit 3 – Disaster Medical Operations – Part 1

Treating Life-Threatening Conditions

Three Killers (SAB - Shock, Airway, Bleeding)

Shock

Identifiers

1. Blanch Test - 2 seconds
2. Following Simple Commands - Can you squeeze my hand?
3. Breathing - Short and shallow

Treatment

1. Lay victim on back
2. Elevate feet 6-10 inches above heart level
3. Maintain open airway
4. Control obvious breathing
5. Maintain body temp
6. Avoid rough handling
7. DO NOT allow them to eat or drink

Airway Obstruction (Number one concern is obstruction)

Identifiers

Unconscious/non-responsive

Treatment (Always be concerned with spinal and back injuries)

1. At arms length, gently shake by shoulders and say can you hear me?
2. If no response, lift the head by placing one hand on the forehead and tilting the chin with thumb on the chin and two fingers under the chin.
3. Put your ear over mouth with your head looking at their chest
 - *Look* for rising chest
 - *Listen* for air exchange.
 - *Feel* for abdominal movement and air exchange.
 - Repeat twice **(If no change, consider the victim dead)**

Excessive Bleeding

1. Arterial bleeding spurts
2. Venous bleeding flows
3. Capillary bleeding oozes

Treatment

1. Direct pressure - Tie in bow
2. Elevate above the heart - Easy to maintain
3. Use pressure points in the forearm and the inner upper thigh
4. **LAST RESORT** use a tourniquet preferably made of soft materials and place it **BETWEEN** the injury and the heart

Note:

- Use latex gloves and clean or change them between each person
- Show the proper way to remove gloves
- Solution for cleaning gloves is one part bleach to 10 parts water
- There are 8 pints of blood in the average person
- Loss of 2 pints of blood can result in death

Triage (Doing the greatest good for the greatest number of victims by conducting simple head to toe triage and rapid treatment)

Needs immediate attention

1. One of the 3 killers (shock, breathing, bleeding)
2. Injuries that demand immediate attention to save their life
3. Rapid, life-saving treatment is urgent

Delayed

1. Injuries that do not jeopardize the victim's life
2. May require professional care
3. But treatment may be delayed

Dead

1. No respiration after two (2) attempts to open the airway
2. CPR is not performed
3. Too labor intensive while you could be aiding many others who could be saved for sure.

NOTE: Key to triage - The greatest good for the greatest number of people

CERT Size-up

1. Gather facts
2. Assess damage
3. Consider probabilities
4. Assess your situation
5. Establish priorities
6. Make decisions

Unit 4 – Disaster Medical Operations – Part 2

The “Killers”

1. Airway obstruction
2. Excessive bleeding
3. Shock

Triage involves **rapid** assessment and **rapid** treatment

ALL “immediates” (**reds**) receive airway control, bleeding control, and treatment for shock.

Public Health Considerations

1. Maintain proper hygiene.
2. Maintain proper sanitation.
3. Purify water (if necessary).

Steps to Maintain Hygiene

1. Wash hands frequently using soap and water
2. Wear latex gloves; change or disinfect after each patient
3. Wear a mask and goggles
4. Keep dressings sterile
5. Avoid contact with body fluids

Maintaining Sanitation

1. Control disposal of bacterial sources
2. Put waste products in plastic bags, tie off, and mark as medical waste
3. Bury human waste

Functions of Emergency Medical Operations

1. Triage
2. Treatment
3. Transport
4. Morgue

Establish Treatment areas:

1. The site selected should be:
 - In a safe area
 - Close to (but upwind and uphill from) the hazard
 - Accessible by transportation vehicles
 - Expandable

Conducting Head-to-toe Victim Assessment

1. Determines the extent of injuries and treatment
2. Determines the type of treatment needed
3. Documents injuries
 - Head
 - Neck
 - Shoulders
 - Chest
 - Arms
 - Abdomen
 - Pelvis
 - Legs
 - Back

Treating Burns

1. Cool the burned area
2. Cover to reduce infection

Wound Care

1. Control bleeding
2. Prevent secondary infection
3. Clean wound—**don't** scrub
4. Apply dressing and bandage

Treating Amputations

1. Control bleeding
2. Treat for shock
3. Save tissue parts, wrapped in clean cloth
4. Keep tissue cool
5. Keep tissue with the victim

Treating Impaled Objects

1. Immobilize
2. Don't move or remove
3. Control bleeding
4. Clean and dress wound
5. Wrap

Treating Fractures, Dislocations, Sprains, and Strains

1. Immobilize the injury and joints about and below the injury.
2. If questionable, treat as a fracture.

Treating an Open Fracture

1. DO NOT:

- draw exposed bones back into tissue
- Do not irrigate wound

2. DO:

- Cover wound
- Splint fracture without disturbing wound
- Place a moist 4" x 4" dressing over bone end to prevent drying.

Guidelines for Splinting

1. Support the injured area
2. Splint injury in the position that you find it
3. **Don't try to realign bones**
4. Check for color, warmth, and sensation
5. Immobilize above and below the injury.

Nasal Bleeding

Causes:

- Blunt force
- Skull fracture
- Non trauma-related conditions
- Blood loss can lead to shock.

NOTE: Victims may become nauseated and vomit if they swallow blood.

Symptoms of Hypothermia

Late stages of hypothermia will be accompanied by:

- Slurred speech
- Unpredictable behavior
- Listlessness

Unit 5 - Search and Rescue

Search Procedures:

1. Document the date and time of the search
2. Search should move from left to right
3. Goal of light search and rescue operations is to rescue the greatest number of people in the shortest amount of time
4. The safety of the rescuer is most important.
5. **ALWAYS** search in pairs

Building search:

1. **YOUR SAFETY IS THE PRIMARY CONCERN!**
2. Check the perimeter of the building
3. Note any structural damage and if the building is ready to collapse...STAY OUT!
4. Secure the perimeter
5. Keep untrained volunteers clear of the area
6. Make sure you turn off gas and water lines
7. Note **ANYTHING** that can be abnormal to the building
8. **ALWAYS** stay with your partner
9. Size up:
 - What hazards are present?
 - What are the dangers to the team?
 - What can the team do based on their training?
 - Could the conditions worsen?

CERT Safety Protocols for Structures

1. **Superficial damage** (CERT may enter the building)
 - Broken windows
 - Minor interior damage
 - Loose bricks and sidings
2. **Moderate Damage** (CERT may enter the building but limit the number of people at one time)
 - Obvious damage
 - multiple fallen bricks or siding
 - major interior damage
3. **Heavy damage (CERT NEVER ENTERS)**
 - Partial or total collapse, hazardous, materials, rising or moving water, off the foundation
 - Secure and deny entry

Search techniques

1. Be systemic and thorough going left to right
2. Mark areas search
3. Document search result
4. CERT is to be concerned for their own safety and that of the victims

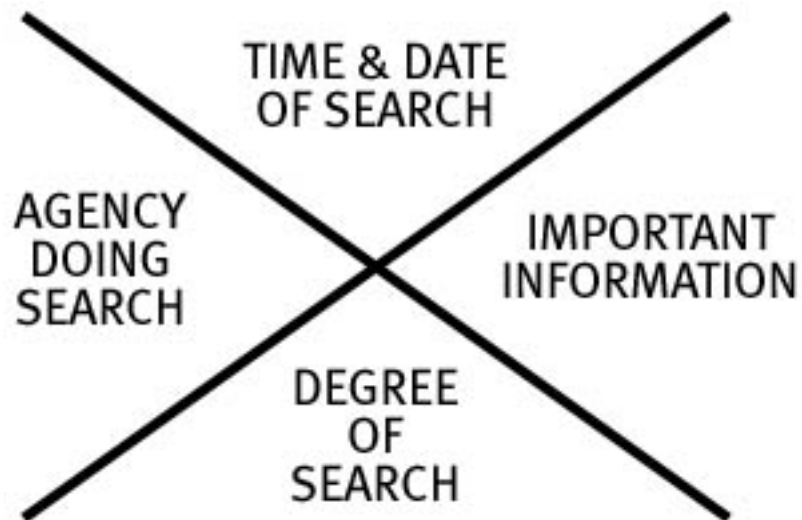
Rescue techniques

1. Leverage and cribbing
2. Lifts and drags

Essential CERT Protective Equipment for Search and Rescue

1. Helmet
2. Safety glasses
3. Gloves
4. Boots
5. Mask

Standard Search and Rescue Onsite Documentation on Outside Walls



Unit 6 – Cert Organization

CERT Organization:

1. Takes what you've learned in previous units and puts it into use in a team environment, and in using CERT Organization as a foundation, you'll learn the importance of emergency on-scene management in a disaster situation.
2. Maintains the safety of disaster workers
 - CERT Incident Commanders continually prioritize response activities based on:
 - The team's capability and training
 - The principle that **rescuer safety is the number one concern.**
 - CERT team members work in the buddy system
 - Responds based on their size-up of the situations that they encounter
3. Provides clear leadership and organizational structure by developing a chain of command and roles that are known by all team members.
 - Each CERT member has only one person that he or she takes direction from and responds to.
 - Improves effectiveness of rescue efforts.
 - Disaster information is collected and responses are prioritized based on:
 - rescuer safety and
 - doing the greatest good for the greatest number
 - according to the teams capabilities and training.

CERT Organization Structure provides:

1. Common terminology that contributes to effective communication and shared understanding
2. Effective communication among team members
3. A well-defined management structure (e.g., leadership, functional areas, reporting chain, working in teams)
4. Accountability
5. Common terminology that contributes to effective communication and shared understanding

Objectives of CERT Organization In a Disaster

1. Identifies the scope of the incident. (What is the problem?)
2. Determines the overall strategy. (What can we do, and how will we do it?)
3. Deploys teams and resources. (Who is going to do what?)
4. Documents actions and results

Incident Command System (ICS) and CERT

1. CERTs are part of ICS
2. All CERTs report to the first fire or law enforcement official at their location and take directions from that person until told that the command system has changed or until relieved.
3. The basic ICS structure is established by the person who arrives first to the scene who becomes the Incident Commander (IC).
4. The IC may handle all of the command positions until others arrive.
5. CERT personnel should always be assigned to teams consisting of at least three persons.
 - One person will serve as a runner and communicate with the Command Post and two people will "buddy up" to respond to the immediate needs.

CERT Mobilization after a disaster has taken place proceeds in the following manner:

1. CERT members care for themselves, their families, and their neighbors first
2. THEN, CERT members proceed to the staging area with their disaster supplies.
3. As they proceed to the staging area CERT members should make damage assessments and report them to the CERT Team Leader's for decision making.
4. The first CERT member at the staging area becomes the CERT Leader.
5. As other CERT members arrive the CERT Leader makes team assignments that includes the Logistics Team Leader.
6. The Logistics Team Leader is responsible for:
 - Maintaining the flow of CERT members into the staging area
 - Tracking personnel and supplies.
7. Other Team Leaders and team members are assigned based on their capabilities and the requirements of the incident.
8. As disaster intelligence becomes available through CERT members reporting to the staging area the CERT Leader must prioritize actions and work with the functional team leaders to accomplish the CERT mission.
9. **REMEMBER**, following an incident, information and therefore priorities, will be changing rapidly.
10. The CERT Leader must stay in close contact with the Logistics Team Leader and functional team leaders to ensure that CERTs do not overextend their resources or supplies.

Rescuer Safety

1. Effective scene management requires CERT members to ask the question:
Is it safe for the CERT members to attempt this rescue?

Post-Event Trauma

1. Following a disaster, children and adults may experience psychological and physiological symptoms related to the trauma. Symptoms ranging from depression to sleep disorders are common as survivors begin to rebuild their lives. The intensity and duration of the symptoms depend on the individuals' pre-event physical and mental state and the length of time they remain under stress.
2. CERT members, while assisting victims during this difficult period can try several approaches to lessen these psychological and physiological trauma symptoms by:
 - Establishing rapport with the victims
 - Listening carefully and empathizing with the victims' concerns
 - Keeping all conversations confidential.
3. Rescue workers should be alert to symptoms of disaster trauma in themselves while assisting victims during this difficult period.
4. CERT leaders must realize that team members are also undergoing emotional stress.
5. Leaders can help team members deal with their stressors by:
 - Briefing personnel
 - Emphasizing teamwork throughout rescue operations
 - Rotating personnel to the degree possible
 - Encouraging breaks
 - Providing for proper nutrition
 - Phasing out workers gradually.

CERT Decision Making

1. The key question that CERT leaders must always ask is: **Is it safe for the CERT members to attempt this rescue?** Whether or not to attempt a rescue depends on the degree of damage to the structure involved:
 - **When damage is light CERT members should:**
 - Search to locate victims
 - Complete triage, and
 - Prioritize removal of victims to the designated treatment area.
 - **When damage is moderate, CERT members should:**
 - Locate
 - Stabilize, and
 - Immediately evacuate victims to a safe area while minimizing the number of rescuers inside the building.
 - **If damage is heavy, CERT members SHOULD NOT attempt a rescue.**
 - Their primary mission in this case is to:
 - *Secure the building perimeter
 - *Control access into the structure, and
 - *Communicate the structure's location and extent of damage to emergency services personnel.

Unit 7 – Disaster Psychology

Team Well-Being:

1. **Vicarious Trauma** - The process of change in the rescuer resulting from empathic engagement with survivors.

- Ways to avoid it...
 - Don't over identify with the survivor.
 - Don't take the survivors' feelings as your own. (This can cause to your own stress level).
 - Be alert to signs of disaster trauma in yourself, as well as in disaster victims. This helps you to evaluate what steps to take to reduce stress.

2. Possible Psychological Symptoms

- Irritability, anger
- Self-blame, blaming others
- Isolation, withdrawal
- Fear of recurrence
- Feeling stunned, numb, or overwhelmed
- Feeling helpless
- Mood swings
- Sadness, depression, grief
- Denial
- Concentration and memory problems
- Relationship conflicts/marital discord

3. Possible Physiological Symptoms

- Loss of appetite
- Headaches or chest pain
- Diarrhea, stomach pain, or nausea
- Hyperactivity
- Increase in alcohol or drug consumption
- Nightmares
- The inability to sleep
- Fatigue or low energy

NOTE: Both the responders and victims can experience these symptoms.

4. CERT team leaders can help reduce stress by:

- Giving examples of what the volunteers might see or experience.
- Emphasizing that CERT is a team.
 - And a team is only as strong as its weakest member!**
 - Share the workload, don't try to do everything yourself.
 - Don't try to be a hero.
- Encourage rescuers to rest and re-group to avoid becoming over fatigued
- Direct rescuers to take breaks away from incident area
- Encourage rescuers to eat properly and maintain fluid intake.
 - Water or Gatorade
 - Avoid caffeinated or sugary drinks that enhance dehydration
- Rotate Teams
- Rotate duties
- Talk about your experience
- Phase our workers gradually from high to low-key stress areas of the incident.
- Conduct a brief discussion (Hot wash)
 - Talk about what went on and express your feelings

5. CERT Team members can reduce stress - (Only you know what makes you able to reduce stress within yourself. Your lifestyle reflects how your body reacts to a disaster.)

- Get enough sleep
- Exercise
- Eat a balanced diet
- Balance work, play, and rest
- Allow yourself to receive as well as give. You should remember that your identity is broader than that of a helper.
- Connect with others
- Use spiritual resources (Prayer)

NOTE - Most rescue workers find these steps helpful, but in some cases they may need to seek help from mental health professionals.

Phases of a Crisis

1. Impact Phase

- Survivors do not panic or show no emotion

2. Inventory Phase

- Routine social ties discarded, Instead more functional relationships

3. Rescue Phase

- Emergency personnel are responding and survivors are willing to take their directions making it essential for CERTs to wear their gear.

4. Recovery Phase

- Survivors pull together against rescuers

Survivors' Traumatic Stress Effects

1. Cognitive Functioning

- Act Irrationally
- Difficulty making decisions
- Out of character
- Difficulty sharing or retrieving memories

2. Physical Health

- Exhaustion
- Heat problems

3. Interpersonal Relationships

- Temporary or permanent changes that can make relationships difficult

Stabilizing Individuals

1. Assess the survivors for shock or injury
 - Check to see if they pose a danger to themselves or others
2. Get uninjured people involved in helping
 - Focused activity can help some to move beyond the shock
 - **NOTE:** This is why assessment is important, to see if they have the mental capabilities to handle it

Empathizing with Survivors

1. Empathizing

- People want to know that someone cares.
- Avoid Saying:
 - “I understand”
 - “Don't Feel Bad”
 - “You're strong/ You'll get through this”
 - “Don't cry”
 - “It's God's will”
 - “It could be worse”
 - “At least you still have....”

Managing the Death Scene

1. Treat it with respect
2. Cover the body
3. Allow one family member look at the body to see if the rest of the family should
4. Let the family grieve

Unit 8 – Terrorism

Question: What is terrorism?

Answer: According to the Department of Defense:

“The unlawful use of force or violence committed by a group or individual against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof in the furtherance of political or social objectives.”

Question: What are some examples of terrorist attacks?

Answer: The destruction of the World Trade Centers and Pentagon. Bombing of the Murrah Federal building in Oklahoma City.

Question: What are some goals of terrorism and places they would attack?

Answer:

- Mass casualties
- Loss of critical resources
- Disruption of vital services
- Disruption of the economy
- Individual and mass panic.
- Places likely to be attacked:
 - Seats of government
 - Key industries
 - Bridges
 - Subways
 - Tunnels
 - Water supplies
 - Utilities

Question: What are weapons terrorist use? (**B-NICE** - See bold letters below)

Answer:

- **B**iological Weapons
- **N**uclear Weapons
- **I**ncendiary devices
- **C**hemical Agents
- **E**xplosive devices

Biological Weapons

- Targets: People, animals, and crops.
- Routes of exposure: Inhalation, ingestion, and absorption.
- Agents: May take days or weeks to be confirmed.
- Agents: May spread for beyond initial contamination point.
- Considered high risk.

Nuclear Weapons

- Much different conventional weapons:
 - Many casualties
 - Very large area affected
 - Long-term health effects
- Considered relatively low risk of occurring

Incendiary Devices

- Used to initiate combustion.
- Easy to make
- Easy to use
- Considered high risk and low impact

Chemical Agent

- Five types (Blister agents, blood agents, choking agents, nerve agents, and riot-control agents.)
- Components readily available
- Onset of symptoms from immediate to 18 hours
- Considered moderate risk

Conventional Explosives

- Terrorist “weapon of choice”
- Can be: Military munitions or improvised explosive devices.
- Considered high risk

Question: What are some **B-NICE** indicators?

- **Environmental Indicators:**
 - Sick or dead animals, fish, or birds
 - Unscheduled spraying
 - Vapor clouds or mists
 - Absence of crops, wildlife, or insects
 - Out of place and unattended packages, boxes, or vehicles
 - Packages that are leaking
 - Unusual materials or equipment
 - Small explosions that disperse liquids, mists, or gases.
 - Unusual odors or tastes.
- **Human Indicators:**
 - Many casualties without signs of obvious trauma
 - Victims who are exhibiting similar symptoms
 - Large numbers seeking medical attention

Preparing for Terrorism

- Assembling a disaster supply kit.
- Identify a safe room and meeting place outside of the home or work place.
- Develop a family communication plan.
- Learn shelter-in-place procedures.

CERT Guiding Principles

- Team safety is the number one priority
- Always do a thorough size-up.
 - What are the dangers?
 - What are team capabilities?
 - What are team limitations?
 - Do not touch it!
 - Move away from the object or area.
 - Report it to authorities on a landline.

Spiritual and Emotional Care

ALWAYS Refer to a Mental Health Professional if Victims Have:

- Flat expressionless affect of face or voice
- Thinking or talking about hurting oneself or others
- Violent or self-destructive thoughts or imagery

Things To Keep In Mind When Talking to Victims

- **Reassure safety**
- **DO NO HARM**
- Be cautious about giving advice
- Provide presence and hospitality
- Use eye contact and open, attentive body language
- Watch the speaker's body language
- Encourage the speaker to continue
- Give feedback like "sounds like you are saying"
- Refrain from judgment - meet, accept and respect the person as they are
- Never preach - DO offer prayer if requested
- Permit people to share their memories and their stories
- Share you emotions sincerely
- Encourage people to be connected to loved ones
- Golden Rule (**Do to others like you would want them to do to you**)
- Ensure private time if needed

Disaster Spiritual Care Providers - quickly learn that a quiet presence in the midst of turmoil brings hope, comfort and the recognition that one is not alone. Below are some helpful things TO say when providing Spiritual Care in times of disaster.

- "I am so very sorry"
- "My heart is with you"
- "I am here to help you in any way I can"
- "You have my sincere sympathy"
- "My prayers are with you at this time"
- "What can I do to help you at this time?"

Excerpt from "A Guide for Spiritual Care in Times of Disaster" by the National Voluntary Organizations Active in Disasters and adapted for youth training by Sherry Campbell & David Houtchens - SAU MSW program January 2011

Course Overview

Home and workplace preparedness disaster supply kit:

1. Battery powered radio with weather channel
2. Water
 - Store in jugs/cycle out
 - 1 gal. per person, per day
 - store enough for 3 days
3. Food
 - 3 days supply/cycle out
 - canned, nonperishable
 - salt, pepper, sugar
 - high energy food
 - peanut butter, crackers, granola etc.
 - manual can opener
 - plates, cups, utensils, foil, bags...
4. Develop a disaster plan
 - Make a plan for home and work
 - Plan for every room/location (2 ways)
 - Consider the needs of others
 - Know where to meet
 - Know ways to take out of town
 - Have ways to take out of town
 - Be ready to shelter in place
 - Have important information and numbers written down and always available
5. Develop a safe room
 - Prepare for three days
6. Evacuation vs. sheltering in place
 - Evacuation
 - Listen for information, guidance, routes
 - Look for debris in outside air before leaving
 - *Maybe better to shelter in place
 - Leave quickly, if you have to
 - Let someone know where you are going
 - Wear protective clothing
 - Take a kit and special items
 - Lock you home

- Sheltering in place
 - Turn off air conditioners and ventilation systems
 - Get family and pets inside
 - Close and lock exterior doors and windows
 - Assemble supply and disaster kit
 - Cover outside openings
 - Listen to the radio
 - Remain inside
 - Once clear open windows and ventilation

Fire Safety

1. Hazardous Materials

- Corrode other materials
- Explode or are easily ignited
- React strongly with water
- Are unstable when exposed to heat or shock
- Are toxic to humans, animals, or the environment - Examples
 - Flammable gases and liquids
 - Poisons and poisonous gases
 - Corrosives
 - Nonflammable gases
 - Oxidizers
 - Radioactive materials

2. Utility control

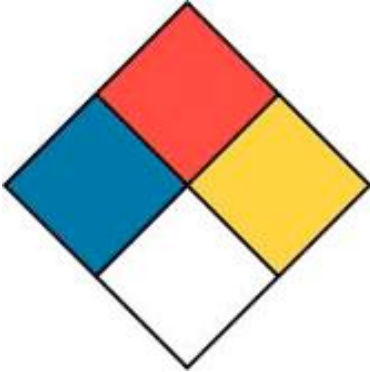
- Electric
 - Shut off individual circuits then the main
 - Turn on main, then individual circuits
 - DO NOT go into a flooded basement to shut off power
- Gas
 - Install a natural gas detector
 - *Prevent asphyxiation and explosions
 - Inspect appliances regularly
 - Locate and label gas shutoffs
 - Learn how to turn off gas at appliances and gas meters
 - *Do not turn back on without the utility company

3. Size-up:

- Answer these questions
 - Can my buddy and I fight the fire safely?
 - Do we have the right equipment?
 - Are there other hazards?
 - Is the building structurally damaged?
 - Can we escape?

4. Hazardous Materials

- Identification
 - NFPA 704 diamond
 - *0-4 severity number system
 - Red-flammability
 - Blue-Health Hazard
 - Yellow-Radiation
 - White quadrant-special information
 - When you see this diamond stop, this is a CERT's stop sign



5. Fire Resources

- Use the resources available
 - Portable fire extinguishers
 - *Extinguish fire in groups of two
 - Wet sand pipes
 - *Extinguish fire in groups of three
- Extinguishers
 - Check label for the type that is appropriate
 - *Water
 - *Dry chemical
 - *Carbon dioxide
 - *Specialized fire extinguisher
 - Water-removes heat
 - Dry chemicals and special agents-break the chain of burning
 - Carbon monoxide-remove oxygen
- Safety considerations
 - Safety equipment
 - Buddy system
 - Two exits
 - Stay low
 - Overhaul fire
 - Feel closed doors
 - Maintain a safe distance

- DO NOT:
 - Try to suppress large fires
 - Get too close
 - Fight it alone
 - Enter smoke filled areas

Medical Operations

1. The “Killers”

- Airway obstruction
- Excess bleeding
- Shock

2. Opening an airway

- Ask ‘can you hear me?’
- If there is no response: place your palm on their forehead
- Place two fingers under the chin, tilt the jaw upward, tilt head back
- Place your ear to the victims mouth and look to the feet place hand on their abdomen
 - LOOK: for chest rising
 - LISTEN: for air exchange
 - FEEL: for abdominal movement and air exchange

3. Control Bleeding

- Apply direct pressure
- Elevate
 - It should take 5-7 min. to fully stop bleeding
 - Maintain pressure while dressing
 - Tie the bandage in a bow
 - If blood soaks through bandage apply more bandages, do not remove the bandages already there
 - Monitor limb blow the bandage

4. Pressure points

- Direct pressure on wound with bandage
- Wrap with bandage elevate above the heart
- Put pressure on the nearest pressure point of necessary to slow the blood flow
 - Brachial point in the arm
 - Femoral point in the leg

5. Treatment for shock

- Symptoms
 - Rapid shallow breaths
 - Failure to follow simple commands
 - Pale, cool, clammy skin
 - Thirst

6. Treatment

- Keep the victim warm
- Elevate victims legs
 - Do not use a blanket for this
- Control bleeding (if any)
- Avoid rough or excessive handling
- No food or drink

7. Procedure

- Lay them on their back, elevate their feet 6-10 inches above their heart, monitor and maintain an open airway
- Control bleeding
- Maintain body temperature
 - Cover victim with a blanket
 - Place a blanket between the victim and the ground
- Avoid rough or excessive handling

8. Conducting Triage

- There are four groups to separate victims into
 - IMMEDIATE (red) "I"
 - *At risk for an early death
 - DELAYED (yellow) "D"
 - *Serious injury
 - MINOR (green) "M"
 - *Minor injuries
 - DECEASED (black) "DEAD"
 - *Not breathing
- STEPS:
 - Size-up the scene and consider it safe
 - Voice triage, call to patient and tell them to come out to you if they can walk
 - Start with the nearest victim and work outward in a systematic fashion
 - Assess each victim and tag them red, yellow, green or black
 - Treat red or "I" victims first
 - Document the results

9. REMEMBER:

Simple
Triage
And
Rapid
Treatment

Respiration
Perfusion
Mental status

10. Head-to-toe assessment

- Head
- Neck
- Shoulders
- Chest
- Arms
- Abdomen
- Pelvis
- Legs
- Back

11. Wound Care

- Control bleeding
- Prevent secondary infection
- Clean wound (don't scrub)
- Apply dressing and bandage

12. Head, neck, and spinal injuries

- Minimize movement of the head and spine while treating any other life-threatening conditions
- Keep the spine in a straight line when doing head-to-toe assessments
 - Look for materials that can be used as a backboard
 - *EX: door, desktop
 - Look for items that can be used to stabilize their head on the board
 - *EX: towels, draperies, sand bags
 - Tuck them snugly on either side of the head to immobilize it.

13. Treatment area consideration

- Should be:
 - In a safe area
 - Close to (but uphill and upwind) the hazard
 - Accessible by transportation vehicles
 - Expandable

14. Splinting and bandaging

- Splinting
 - Support the injured area
 - Splint injury in the position that you find it
 - DO NOT try to realign the bones
 - Check for color, warmth, and sensation
 - *Immobilize above and below the injury

Light search and rescue

1. Goals

- MOST IMPORTANT: your safety
- Rescue greatest number of people in the shortest time
- Rescue lightly trapped victims first

2. Size-up:

- What hazards are present?
- What is the level of damage?
- What are the dangers to the team?
- What can the team do based on their training?
- How could the conditions change?

3. Structural damage

- **Light damage**
 - Superficial damage
 - Broken windows
 - Minor interior damage
 - Loose bricks/siding
 - CERT may enter the building
- **Moderate Damage**
 - Obvious damage, multiple fallen bricks or siding, major interior damage
 - CERT may enter but limit the number of people at a time
- **Heavy damage**
 - Partial or total collapse, tilting, fire, hazardous materials, rising or moving water, off the foundation
 - NEVER ENTER, secure and deny entry

4. Be systematic and thorough

- Mark areas searched
- Document search results

5. Rescue techniques

- Leverage and cribbing
- Lifts and drags

Organization

6. Organizational structure

- Well-defined management structure
- Effective communications among agency personnel
- Accountability

7. Command objectives

- Identify the scope of the incident through damage assessment
- Determine overall strategy and logistical requirements
- Deploy resources efficiently but safely

Psychology

1. Reducing stress yourself as a team member

- Get enough sleep
- Exercise
- Eat a balanced diet
- Balance work, play, and rest
- Allow yourself to receive as well as give
- Connect with others
- Use spiritual resources

2. Reducing stress on team members

- Provide pre-disaster stress management training
- Brief personnel before response on what they might see
- Emphasize teamwork-share the work and emotional load
- Encourage breaks away from the incident area
- Provide for proper nutrition to include water
- Rotate teams out to rest and reassign to new duty
- Phase out workers gradually from high to low stress
- Conduct a brief discussion
- Arrange for a post-event debriefing 1-3 days later

3. Helping survivors overcome

- **DO NOT** take their emotions personally
 - Assess survivors for shock and injury
 - Get uninjured people involved with helping
- Provide support by:
 - Listening
 - Empathizing
- Help them connect with a support system
 - Family
 - Friends
 - Clergy
- Avoid saying
 - “I understand”
 - “don’t feel bad”
 - “you’re strong/you’ll get through this”
 - “don’t cry”
 - “it’s God’s will”
 - “it could have been worst...” “at least you still have...”
 - if you offend them apologize. It shows legitimate concern

Terrorism

1. B-NICE indicators (terrorist weapons)

- **B**iological
- **N**uclear
- **I**ncendiary
- **C**hemical
- **E**xplosive

2. CERT training **ONLY** prepares you to operate in a defensive posture

- Do not touch anything during a terrorist attack
- Move away (uphill, upwind)
- Report it with detail
- Cellular phone and radios can set off some bombs

To get more information about disaster preparedness go to [Ready.Gov](https://www.ready.gov)