

### **Acknowledgements**

MDCH-OPHP is grateful for the support of the Community Health Care Association of New York State for the use of their flipchart as an outline in developing this project.

This publication was supported by the Cooperative Agreement Number 1U90TP000528 – 01 from the Centers for Disease Control and Prevention and/or Assistant Secretary for Preparedness and Response. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention and/or Assistant Secretary for Preparedness and Response

Disclaimer: The information in the *Emergency Guide for Michigan Health Care Facilities* is not intended to be comprehensive. Exercise professional judgment in determining appropriate steps of action. Consult professional websites, medical references and regulatory guidelines. The authors and publishers do not bear liability for any uses to which it may be put.



## **Emergency Guide for Health Care Facilities**

**Michigan Department of Community Health**  
**Office of Public Health Preparedness**



The information in this flipchart is a quick reference guide for health care settings in their response to a variety of disasters and emergencies. This guide is not intended to serve as an exhaustive reference for all emergency situations, but rather as a starting point for emergency response. Actual responses to an emergency should be appropriate for the situation and based on the most current information available.

Remember that "preparedness" is a process, not a goal. Although your health care agency can never be completely prepared for every possible emergency, it can be more prepared tomorrow than it is today. Most of the steps necessary toward improving your readiness are unique to your agency. We encourage you to review this flipchart and customize it to your health care setting by "filling in the blanks" in as many places as possible.

Facility Review & Modification Date: \_\_\_\_\_

Anyone wishing more information about Emergency Preparedness or other programs available from the Office of Public Health Preparedness (OPHP) should contact:

**OPHP**  
**517-335-8150**

## #2 PKT (front)

### Criminal Activity

If you witness a criminal act or notice someone acting suspiciously and feel threatened, notify the facility manager, as soon as possible. Activate your facility plan for criminal activity which may include activating an alarm and calling 9-1-1 or local police.

Police: \_\_\_\_\_

In the event of a robbery, assault, overt sexual behavior or attempted crime:

1. Follow the instructions of the perpetrator.
2. Observe the person(s) carefully for:
  - physical description (height, weight, hair, and clothes)
  - type of weapon displayed, if any
  - number of perpetrators
  - behavior (nervous, calm, etc.)
3. Upon departure of the perpetrator(s):
  - Notify local law enforcement officials and your facility director.

- Announce the appropriate code for the situation.
  - Note the exact time of departure and the direction of travel, if possible.
  - Write a description of each person (referring to them as person #1, person #2, etc.).
  - Write the year, make, model, color, and license number of the vehicle, if applicable.
  - Write a description of the property involved.
  - Safeguard the scene for physical evidence by locking the door or preventing persons from entering the area.
4. Assist the police when they arrive by supplying them with any information they request; ask others to do the same.

**Facility Note:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Criminal Activity & Workplace Violence

2

## #2 PKT (back)

### Workplace Violence

Workplace violence has emerged as an important safety and health issue. Its most extreme form, homicide, is the third leading cause of fatal occupational injury in the United States.

#### Safety Tips

**Watch for signals that may be associated with impending violence:**

- Verbally expressed anger and frustration.
- Body language such as threatening gestures.
- Signs of drug or alcohol use.
- Presence of a weapon.

**Maintain behavior that helps diffuse anger:**

- Present a calm and caring attitude.
- Don't match the threats.
- Don't give orders.
- Acknowledge the person's feelings. For example, "I know you are frustrated."
- Avoid any behavior that may be interpreted as aggressive (for example: moving/getting to close, touching, or speaking loudly).

#### Be alert:

- Evaluate each situation for potential violence when you enter a room or begin to relate to a patient or visitor.
- Be vigilant throughout the encounter.
- Don't isolate yourself with a potentially violent person.
- Always keep an open path for exiting. Don't let the potentially violent person stand between you and the exit.
- Move all items that may be used as a weapon out of reach.

**Take these steps to diffuse the situation quickly:**

- Remove yourself from the situation.
- Call security; announce your facility code for combative person, dial 9-1-1 or appropriate number for help.
- Report any violent incidents to your management.

Encourage a workplace atmosphere of reporting violent language, actions or behaviors in person or anonymously.

**Bomb Threat Checklist**

The following is a checklist to be utilized by anyone receiving a call which threatens the safety or security of the facility.

**Document all possible items immediately following the call.**

1. Caller’s Name and Address (if known):  
\_\_\_\_\_
2. Number on Caller ID: \_\_\_\_\_
3. Time of call: \_\_\_\_\_
4. Sex:   ☐ Male   ☐ Female   ☐ Unknown
5. Age:   ☐ Adult   ☐ Child     ☐ Unknown
6. Bomb Facts:

a. When will it go off? \_\_\_\_\_

b. In what building is it placed? \_\_\_\_\_

c. Exact location \_\_\_\_\_
7. Call:

☐ Local

☐ Long-Distance

☐ Unknown

**8. Voice Characteristics**

- Tone

☐ Loud

☐ Soft

☐ High Pitch

☐ Low Pitch

☐ Stutter

☐ Raspy

☐ Nasal

Speech

☐ Fast

☐ Slow

☐ Distorted

☐ Cursing

☐ Slurred

☐ Lisp

☐ Disguised

☐ Poor

☐ Pleasant

Language

☐ Excellent

☐ Good

☐ Fair
- Accent

☐ Local

☐ Region

\_\_\_\_\_

☐ Ethnicity

\_\_\_\_\_

Manner

☐ Poor Grammar

☐ Well-Spoken

☐ Taped

☐ Message Read

☐ Emotional

☐ Irrational

☐ Deliberate

☐ Laughing

Background Noise

☐ Office Machines

☐ Factory Machines

☐ Bedlam

☐ Animals

☐ Quiet

☐ Other

☐ Street Traffic

☐ Airplanes

☐ Trains

☐ Voices

☐ Music

☐ PA System☐ Radios☐ Party☐ Static☐ Cell phone

**Bomb Threat**

**If you receive a telephone threat:**

1. While on the phone:
  - Do **NOT** hang up; **Note caller ID.**
  - Remain **calm.**
  - Try to prolong the conversation and get as much information as possible.
  - **Note what you hear:** are there background noises, such as music, voices, or cars? (see bomb threat checklist)
  - How does the **caller's voice** sound? Any accent? What gender? What age? Any unusual words or phrases?
  - Does the caller seem to **know the health agency**? How is the bomb location described? Does the caller use person's name? Does the caller give his/her name?
2. When the call is over, complete the bomb threat checklist immediately.
3. Consult with your facility manager and follow agency policies and procedures.
4. Announce **code yellow** or your facilities appropriate code for bomb threats.

5. Report the bomb threat. Dial 9-1-1 or appropriate number \_\_\_\_\_

Give the operator all the information you collected on the checklist (see reverse). Identify yourself - give your name, address, and phone number.




6. If it is deemed necessary to evacuate, you will be notified by your supervisor or the paging system. Evacuate via the primary route for your area, or by the alternate route if so directed (secondary devices are sometimes placed in parking areas).

**If you discover a bomb or a suspicious item:**

1. **Leave it untouched** and secure the area until police arrive.
2. Go to a telephone. **Dial 9-1-1 or appropriate number and report a suspicious item.** You may be asked to assist in a search because you are familiar with the area.
3. If so directed, evacuate your area. See your departmental evacuation plan.

**Facility Note\*** \_\_\_\_\_

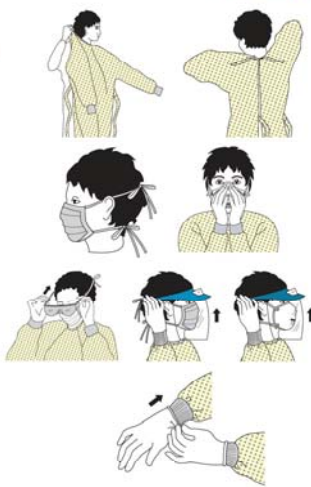

## Step 4 Back

SEQUENCE FOR REMOVING PERSONAL PROTECTIVE EQUIPMENT (PPE)	SECUENCIA PARA QUITARSE EL EQUIPO DE PROTECCIÓN PERSONAL (PPE)
<p>Except for respirator, remove PPE at doorway or in anteroom. Remove respirator after leaving patient room and closing door.</p> <ol style="list-style-type: none"> <li><b>GLOVES</b> <ul style="list-style-type: none"> <li>Outside of glove is contaminated!</li> <li>Grasp outside of glove with opposite gloved hand; peel off</li> <li>Hold removed glove in gloved hand</li> <li>Slide fingers of ungloved hand under remaining glove at wrist</li> <li>Peel glove off over first gloved</li> <li>Discard gloves in waste container</li> </ul> </li> <li><b>GOGGLES OR FACE SHIELD</b> <ul style="list-style-type: none"> <li>Outside of goggles or face shield is contaminated!</li> <li>To remove, handle by head band or ear pieces</li> <li>Place in designated receptacle for reprocessing or in waste container</li> </ul> </li> <li><b>GOWN</b> <ul style="list-style-type: none"> <li>Gown front and sleeves are contaminated!</li> <li>Unfasten ties</li> <li>Pull away from neck and shoulders, touching inside of gown only</li> <li>Turn gown inside out</li> <li>Fold or roll into a bundle and discard</li> </ul> </li> <li><b>MASK OR RESPIRATOR</b> <ul style="list-style-type: none"> <li>Front of mask/respirator is contaminated — <b>DO NOT TOUCH!</b></li> <li>Grasp bottom, then top ties or elastics and remove</li> <li>Discard in waste container</li> </ul> </li> </ol>  	<p>Con la excepción del respirador, quítese el PPE en la entrada de la puerta o en la antesala. Quítese el respirador después de salir de la habitación del paciente y de cerrar la puerta.</p> <ol style="list-style-type: none"> <li><b>GUANTES</b> <ul style="list-style-type: none"> <li>¡El exterior de los guantes está contaminado!</li> <li>Agarre la parte exterior del guante con la mano opuesta en la que todavía tiene puesto el guante y quíteselo</li> <li>Sostenga el guante que se quitó con la mano enguantada</li> <li>Deslice los dedos de la mano sin guante por debajo del otro guante que no se ha quitado todavía a la altura de la muñeca</li> <li>Quítese el guante de manera que acabe cubriendo el primer guante</li> <li>Arroje los guantes en el recipiente de desechos</li> </ul> </li> <li><b>GAFAS PROTECTORAS O CARETA</b> <ul style="list-style-type: none"> <li>¡El exterior de las gafas protectoras o de la careta está contaminado!</li> <li>Para quitárselas, tómelas por la parte de la banda de la cabeza o de las piezas de las orejas</li> <li>Colóquelas en el recipiente designado para reprocessar materiales o de materiales de deshecho</li> </ul> </li> <li><b>BATA</b> <ul style="list-style-type: none"> <li>¡La parte delantera de la bata y las mangas están contaminadas!</li> <li>Desate los cordones</li> <li>Tocando solamente el interior de la bata, pásela por encima del cuello y de los hombros</li> <li>Voltee la bata al revés</li> <li>Dóblela o enróllela y deséchela</li> </ul> </li> <li><b>MÁSCARA O RESPIRADOR</b> <ul style="list-style-type: none"> <li>La parte delantera de la máscara o respirador está contaminada — <b>¡NO LA TOQUE!</b></li> <li>Primero agarre la parte de abajo, luego los cordones o banda elástica de arriba y por último quítese la máscara o respirador</li> <li>Arrójela en el recipiente de desechos</li> </ul> </li> </ol> 
PERFORM HAND HYGIENE IMMEDIATELY AFTER REMOVING ALL PPE	EFECTÚE LA HIGIENE DE LAS MANOS INMEDIATAMENTE DESPUÉS DE QUITARSE CUALQUIER EQUIPO DE PROTECCIÓN PERSONAL

Graphics accessed from <http://www.cdc.gov/HAI/pdfs/ppe/ppeposter1322.pdf> 2014

**Step 4 front** (the sentence below needs to be on card 4 and the credit line on the back of card 4)

Employees who may be exposed to blood/body fluid or other potentially infectious material should understand where to find the PPE, understand what level of PPE to use, and how to apply and remove it in an area free of risks.

SEQUENCE FOR <b>DONNING</b> PERSONAL PROTECTIVE EQUIPMENT (PPE)	SECUENCIA PARA <b>PONERSE</b> EL EQUIPO DE PROTECCIÓN PERSONAL (PPE)
<p>The type of PPE used will vary based on the level of precautions required; e.g., Standard and Contact, Droplet or Airborne Infection Isolation.</p> <p><b>1. GOWN</b></p> <ul style="list-style-type: none"><li>Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back</li><li>Fasten in back of neck and waist</li></ul> <p><b>2. MASK OR RESPIRATOR</b></p> <ul style="list-style-type: none"><li>Secure ties or elastic bands at middle of head and neck</li><li>Fit flexible band to nose bridge</li><li>Fit snug to face and below chin</li><li>Fit-check respirator</li></ul> <p><b>3. GOGGLES OR FACE SHIELD</b></p> <ul style="list-style-type: none"><li>Place over face and eyes and adjust to fit</li></ul> <p><b>4. GLOVES</b></p> <ul style="list-style-type: none"><li>Extend to cover wrist of isolation gown</li></ul>  	<p>El tipo de PPE que se debe utilizar depende del nivel de precaución que sea necesario; por ejemplo, equipo Estándar y de Contacto o de Aislamiento de infecciones transportadas por gotas o por aire.</p> <p><b>1. BATA</b></p> <ul style="list-style-type: none"><li>Cubra con la bata todo el torso desde el cuello hasta las rodillas, los brazos hasta la muñeca y dóblela alrededor de la espalda</li><li>Átesela por detrás a la altura del cuello y la cintura</li></ul> <p><b>2. MÁSCARA O RESPIRADOR</b></p> <ul style="list-style-type: none"><li>Asegúrese los cordones o la banda elástica en la mitad de la cabeza y en el cuello</li><li>Ajústese la banda flexible en el puente de la nariz</li><li>Acomódesela en la cara y por debajo del mentón</li><li>Verifique el ajuste del respirador</li></ul> <p><b>3. GAFAS PROTECTORAS O CARETAS</b></p> <ul style="list-style-type: none"><li>Colóquesela sobre la cara y los ojos y ajústela</li></ul> <p><b>4. GUANTES</b></p> <ul style="list-style-type: none"><li>Extienda los guantes para que cubran la parte del puño en la bata de aislamiento</li></ul>
<p>USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION</p> <ul style="list-style-type: none"><li>Keep hands away from face</li><li>Limit surfaces touched</li><li>Change gloves when torn or heavily contaminated</li><li>Perform hand hygiene</li></ul>	<p>UTILICE PRÁCTICAS DE TRABAJO SEGURAS PARA PROTEGERSE USTED MISMO Y LIMITAR LA PROPAGACIÓN DE LA CONTAMINACIÓN</p> <ul style="list-style-type: none"><li>Mantenga las manos alejadas de la cara</li><li>Limite el contacto con superficies</li><li>Cambie los guantes si se rompen o están demasiado contaminados</li><li>Realice la higiene de las manos</li></ul>

## Step 5 back

### Medical Emergency

If you encounter someone who is injured, announce code blue (adult) or code white (pediatric) and apply the following actions:

#### CHECK - CALL – CARE

- **CHECK** the scene to make sure it is safe for you to approach. Then, check the victim for unconsciousness and life-threatening conditions, such as not breathing or severe bleeding. Life-threatening conditions require immediate care by trained responders and may require treatment by medical professionals.
- **CALL** out for help and call 9-1-1 immediately.
- **CARE** for the victim until professional help arrives. Follow standard precautions. The risk of getting a disease while giving first aid is extremely rare.

#### To reduce the risk even further:

- Avoid direct contact with blood and other potentially infectious material.
- Use protective equipment, such as disposable gloves and CPR breathing masks while administering first aid or CPR.
- Wash hand with soap and running water or alcohol-based hand sanitizer ( $\geq 60\%$  alcohol).



- **Check breathing:** If the victim is not breathing, call for help and have them dial 9-1-1. Begin CPR if trained and apply an automated external defibrillator (AED) if available and trained.
  - **Control bleeding:** Have the person lie down and elevate the injured area above the level of the heart. Apply direct pressure using a barrier, or a disposable glove if available.
  - **Care for shock:** Dial 9-1-1, have the person lie down, check for signs of circulation, loosen constricting clothing, and cover to keep warm. Do not give food or drink to the victim.
  - **Tend burns:** Stop the burning by cooling the burn with large amounts of tepid water. Cover the burn with dry, clean dressings or cloth.
- Care for injuries to muscles, bones and joints:** Rest the injured part. Apply ice or a cold pack to control swelling and reduce pain. Avoid any movement or activity that causes pain. If you must move the victim because the scene is becoming unsafe, try to immobilize the injured area before moving patient.

#### 24/7 Consultation Resource:

Post-Exposure Prophylaxis Hotline (PEPlne): 1-888-448-4911





## Body Fluid Exposure

In an event an employee is exposed to blood or other potentially infectious material (OPIM) (e.g. semen, vaginal secretions, amniotic and synovial fluid or saliva in dental procedures or other bodily fluids visibly contaminated with blood or OPIM), either through the skin (e.g. needlestick) or onto non-intact skin or a mucous membrane (eyes, nose, mouth):

1. Take the following actions:
  - a. For a **splash into the eyes**, flush eyes with copious amounts of clean water.
  - b. For a **needlestick, cut, wound or splash onto the body or mucous membrane other than the eyes**, thoroughly wash the exposed body part with soap and running water.
  - c. Remove soiled clothing, wash the affected areas skin and change into clean clothing.
2. **Immediately inform** appropriate manager and/or supervisor.
3. **Identify source patient** if known and available.
4. Complete appropriate **incident report form**.

5. **Report as soon as possible, within 1-2 hours** to a designated health care provider.
6. Follow-up with any recommended **treatment and/or evaluation** (at no cost to the employee).

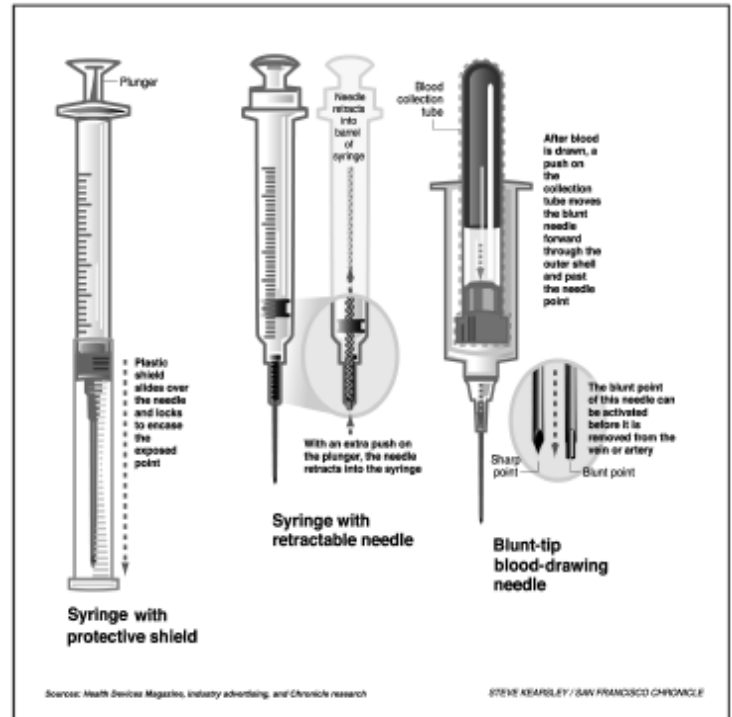


Figure 3. Three examples of syringes with safety features. (These drawings are presented for educational purposes and do not imply endorsement of a particular product by NIOSH.)

## Step 6 back

### Utility Shut Off

Know how to turn off utilities during an emergency should it be necessary. Post-disaster fires can be caused by damaged electrical and gas lines and appliances. To prepare for this type of event:

- Locate and mark the electric, gas and water shut-off valves.
- Keep necessary tools near gas and water shut-off valves.
- Teach multiple staff members how to turn off utilities.

Designated Staff: \_\_\_\_\_

**If you turn off the gas, a professional must turn it back on. Do not attempt to do this yourself.**

### How to Turn Off the Electricity:

- Know where your facility's main electric switch is located. It may be a pull handle or it may be very large circuit breakers inside the panel box.
- Know the correct sizes of any fuses needed in your facility and keep spares on hand.
- Blown fuses must be replaced, not repaired. Do not replace a fuse with one of higher amperage.
- If a fuse blows, disconnect or turn off the appliance(s) that may have caused the problem. Shut off the main electric switch before replacing a fuse.
- Know how to reset a circuit breaker. After turning off or unplugging appliances on the circuit, push the switch firmly to the off position, and then back on.

### How to Turn Off the Gas:

- Know where your main shut-off valve is located. Keep a wrench handy to turn off the gas. Normally you won't need to shut off a gas meter unless there is a strong odor or sound of escaping gas, or if there is major damage to the building. Leave it off until service can be re-established safely by a gas company service person or other qualified professional.
- Most gas appliances have a valve that lets you turn off the gas to that appliance only. Know which of your appliances run on natural gas, and where their shutoff valves are located. In most cases, turning off the gas at the appliance's shut-off valve will suffice.
- Many older gas appliances have a small, continuously burning gas flame - the pilot light - that ignites the main burner. Newer models have electric igniters. Know which of your appliances have a pilot light. Keep the manufacturer's relighting instructions within easy reach.
- Keep a flashlight handy to investigate minor gas odors. Check pilot lights to make sure they are lit. Never use matches or candles, and never turn any electric switches on or off if you smell gas. Always wait five minutes to let gas disperse before trying to relight your appliance. If the smell or sound of escaping gas continues or if you have any doubts, open windows and doors and get everyone out of the building. Call the gas company or 9-1-1 from the nearest phone away from the gas odor.

See inside panel of front cover for utility telephone numbers.

### Shut-off valve locations:

### Shut-off valve instructions:

**Water:** \_\_\_\_\_

**Gas:** \_\_\_\_\_

**Electric:** \_\_\_\_\_

## Step 6 front

### Fire preventive measures:

- Have an emergency plan addressing all procedures, evacuation routes and designated assembly area outside of building.
- Identify location of fire alarms: Manual fire alarm pull stations are located within 5 feet of an exit doorway opening. Be familiar with locations.
- Four basic evacuation options:
  - Horizontal: Using building exits to outside ground level, or going into unaffected wings of multi-building complexes.
  - Vertical (stairway): Using steps to reach ground level exits from the building.
  - Defend in Place: When confined by fire and unable to evacuate using other means; use telephone and window to advise emergency services of your location.
  - Area of Refuge: Persons unable to evacuate down a stairwell should remain in a designated area, while others will notify emergency personnel of such persons, upon their exit.

### Self-protective measures:

- If your clothes catch fire: Stop, Drop and Roll.
- If smoke is intense, drop to the floor, and crawl.
- If you are trapped in a room, place a wet towel or cloth under the door to prevent smoke from entering.
- Move to a safe location and close doors, after ensuring that rooms have been evacuated.

### If you discover a fire (see flames or smoke):

Announce **code red**.

### For a fire emergency response, use the RACE acronym:

- **R**escue: Remove anyone in immediate danger.
- **A**larm: Activate fire alarm pull station and dial 9-1-1, or follow your facility's policy.
- **C**ontain: Close doors to confine the fire.
- **E**xtinguish: Extinguish the fire, if safe to do so. Evacuate, if instructed to do so.

### If you hear a fire alarm:

- **NEVER** assume the alarm is “just a drill”. Use every opportunity to practice and improve!
- Activate your facility/department emergency plan.
- Be accountable for all patients and staff members.
- Assist patients to a safe location, either within the building or outside, as instructed.
- Again, account for all patients and staff members.
- Remain outside building until a “competent authority” states that it is safe to re-enter.

### Fight a fire ONLY:

- AFTER the fire department has been notified **and**
- IF you have a way out **and**
- You can fight the fire with your back to the exit **and**
- You have the proper extinguisher, in good working order **and**
- You know how to use it!

### To use a fire extinguisher, use the PASS acronym:

- **P**ull: Pull the safety pin.
- **A**im: Aim the stream at the base of the fire.
- **S**queeze: Squeeze the trigger handle together.
- **S**weep: Sweep the stream from side to side, at the base of the fire.
- If you are unsure of your ability to safely fight the fire **or** of the fire extinguisher's capacity to contain the fire, **then** confine the fire, **and** leave the area immediately.

### Utilities:

- Identify in your emergency plan who has the authority (by job title) to turn off any medical gases, or other utility services within the facility.

Note: As part of your emergency plan, you may wish to establish relationships outside your facility, to develop a contingency plan to continue operations, should your facility become incapacitated to resume operations.

## Step 7 back

### Evacuation Procedures:

- Follow instructions in your facility/department emergency plan. Your plan should include specific roles/responsibilities of staff members (by job title). All staff members should be well versed in the contents of the emergency plan, which should include shelter-in-place and evacuation protocols for each type of event. Not all emergency situations will require evacuation; however, should an evacuation order be given, staff members should follow the instructions given in their facility or department emergency plan. General steps follow:

**Evacuation Orders:** May be given under a variety of emergent situations, such as fire, flooding, or building damage due to severe weather occurrences. If an order for evacuation is given:

- Be accountable for all patients, visitors, and staff members. Maintain a listing of all persons.
- Remain calm, do not rush, and do not panic.
- Gather all personal belongings, secure important documents and medications.

### Assignment for Specific Staff:

- **Front Desk Staff:** Secure confidential records. Using the sign-in sheet as a census record, evacuate patients and visitors from the reception area. It is critical to be accountable for all patients and visitors at designated evacuation areas.
- **Clinical Staff:** Secure confidential records and medications. Evacuate patients and visitors from waiting rooms, exam rooms, clinical areas and restrooms. As rooms are evacuated, close the door.
- **Administrative Staff:** Evacuate offices and work areas. Close the door, as rooms are evacuated. Maintain a record of all working staff members for reconciliation at designated evacuation areas. It is critical to be accountable for all staff members.

### Emergency Procedures Quick Checklist (see Facility/Department Emergency Plan):

- Close all doors and windows, as rooms are cleared.
- Use the nearest stairwell (if safe), and proceed to nearest exit and out to the evacuation location.
- Account for all patients, visitors and staff.
- Provide census status (including patients, visitors, and staff) to the incident commander.
- Remain clear and at a safe distance from the building. Fires may produce toxic smoke or explosions.
- Do not re-enter the building until advised that the building is safe. Instruction should be provided by an emergency provider, such as the fire department.

### Long-term Preparation:

- Develop a detailed emergency plan for the facility and/or department, which addresses all high risk emergency events identified in the Hazard Vulnerability Analysis, including evacuation gathering area(s).
- Establish Memorandums of Understanding (MOUs) with vendors for supplies, long-term facilities for continuing care, transport of patients, food/water, fuel (for generators), etc. as part of the emergency preparedness planning.

Your plan should include alternative locations for business continuity should the facility be damaged, including telephone forwarding services.

Business continuity re-location site:

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

## Step 7 front

### Extreme Weather:

There are a variety of extreme weather conditions which may affect health facilities throughout Michigan. Monitor NOAA Weather Radio for reports and emergency information. Obtain a Hazard Vulnerability Analysis from your jurisdictional emergency manager and plan for those which are most likely to affect your region.

#### Severe Thunderstorm:

- **Warning:** Is issued when the National Weather Service (NWS) expects thunderstorms with large hail and/or damaging winds in excess of 57 mph. Frequent lightning is likely (and a tornado is possible).

#### Tornado:

- **Watch:** Is issued when the NWS determines that the atmospheric conditions are favorable for tornadoes to form, although none have yet been sighted. A “watch” is intended to provide enough lead time, so those who need to set their plans in motion can do so.
- **Warning:** Is issued when a tornado has been sighted, or is indicated by weather radar. Warnings advise of a threat to life or property. **IMMEDIATELY TAKE COVER IN A SAFE AREA, AWAY FROM OUTSIDE WINDOWS/DOORS, IN AN INTERIOR LOWEST LEVEL OF THE BUILDING.**

#### Snow:

- **Advisory:** Is issued when the NWS determines that snow may cause significant inconveniences but will not meet warning criteria, and if caution is not exercised could lead to life threatening situations.
- **Warning:** Is issued by the NWS when snowfall of 6 inches or more in 12 hours, or 8 inches or more in 24 hours is imminent or occurring.

#### Flash Flood:

- **Watch:** Is issued by the NWS to indicate current or developing conditions are favorable for flash flooding, but the occurrence is neither certain or imminent.
- **Warning:** Is issued by the NWS to inform the public, emergency management, and others that flash flooding is in progress, imminent, or highly likely.

### General Preparedness Guidelines:

- Have an emergency plan which addresses all procedures, evacuation routes, etc.
- Listen to your radio, television, or NOAA Weather Radio for weather reports and emergency information.
- Sign up for weather bulletins to be sent to your email from your local TV station.

#### High Winds:

- Keep trees or shrubs trimmed away from building.
- Advise patients of weather conditions.
- Be accountable for all patients and staff members.
- Pull curtains and move away from windows.
- Take shelter in basement or inner rooms/hallways.
- Assist patients in seeking shelter.
- Plan ahead for interrupted utility services (e.g. prolonged power outages, loss of telephone services).
- Be prepared to evacuate, if advised.

#### Snow:

- Limit exposure to the elements.
- Advise patients and staff to keep emergency kit in their car, including blankets, drinking water and food.
- Plan ahead for interrupted utility services (e.g. prolonged power outages, loss of telephone services).
- Prepare to evacuate.

#### Flooding:

- Store valuable possessions/documents in Ziploc<sup>®</sup> bags or sealable plastic tubs. Move possessions to upper floors.
- Prepare to evacuate. Maintain a full tank of gas, in the event of an evacuation order being issued.

## Step 8 back

### Shelter-in-Place Guidelines

#### What Shelter-in-Place means...and does *not* mean:

Not all emergencies require the evacuation of your building. During certain emergencies, authorities may recommend citizens to “shelter-in-place”. This is a precaution aimed to keep you safe while remaining indoors. Most likely you will only need to shelter-in-place for a few hours.

Shelter-in-place is *not* the same thing as going to a shelter in case of a storm.

Shelter-in-place does *not* mean sealing off your entire office building or health care facility.

Shelter-in-place means taking refuge in your agency or whatever other building you are in. It is preferable to take refuge in interior rooms, with a water supply, but with no or few windows. If you are told to shelter-in-place in your health facility, follow the guidelines provided below.

#### In the event shelter-in-place is indicated, you should: Prepare the Health Care Facility

- Close the agency for routine patient care purposes. Close and lock all windows, exterior doors, and any other openings to the outside.
- If you are told there is danger of explosion, close the window shades, blinds, or curtains.
- Have employees familiar with your building’s mechanical systems turn off all fans, heating and air conditioning systems. Some systems automatically provide for exchange of inside air with outside air – these systems, in particular, need to be turned off, sealed, or disabled.
- Select interior room(s) above the ground floor, with the fewest windows or vents. The room(s) should have adequate space for everyone to be able to sit in. Avoid overcrowding by selecting several rooms if necessary. Large storage closets, utility rooms, pantries, copy and conference rooms without exterior windows will work well.

Avoid rooms with mechanical equipment like ventilation blowers or pipes, because this equipment may not be able to be sealed from the outdoors.

### Keep People Safe

- If there are patients or visitors in the building, provide for their safety by asking them to stay, *not* leave.
- Gather essential disaster supplies. Examples include nonperishable food, bottled water, battery-powered radios, first aid supplies, flashlights, batteries, duct tape, plastic sheeting, and plastic garbage bags.
- Bring everyone into the room(s). Shut and lock the door(s).
- Write down the names of everyone in the room (e.g. employees, patients, visitors) and inform authorities.

### Facilitate Communications

- Unless there is an imminent threat, ask staff, patients, and visitors to call their emergency contact to let them know where they are and that they are safe.
- Turn on call-forwarding or alternative telephone answering systems or services. If your building has voice mail or an automated attendant, change the recording to indicate that the agency is closed, and that staff and visitors are remaining in the building until authorities advise it is safe to leave.
- It is ideal to have a hard-wired (rotary/analog) telephone in the room(s) you select. Call emergency contacts and have the phone available if you need to report a life-threatening condition. Cellular telephone equipment may be over-whelmed or damaged during an emergency.
- Continue listening to the radio or television until you are told all is safe or you are told to evaluate. Local officials may call for evacuation in specific areas at greatest risk in your community.

**Shelter-in-place location:** \_\_\_\_\_

**Shelter-in-place supply location:** \_\_\_\_\_



## Step 8 front

### Hazardous Material Emergencies

The Michigan Occupational Safety and Health Administration (MIOSHA) requires Right-to-Know training for all employees who may come in contact with hazardous materials in the workplace. This training should include what steps the employee needs to take if there is a spill (see your facility emergency plan).

#### Material Safety Data Sheets

Material Safety Data Sheets (MSDS) provide information on chemical hazards, health effects and spill response procedures. In our health facility MSDSs are located: \_\_\_\_\_

#### Signs of a hazardous material emergency:

- Liquid or solid spilled on the floor.
- Leaking containers.
- Haze or mist in a room.
- Many people suffering from watery eyes, twitching, choking, having trouble breathing or losing coordination.

#### In the event of a hazardous material emergency:

- Put safety first.
- Announce **code orange**.
- Evacuate the area and deny entry.
- Contact your supervisor or facility manager.  
Telephone: \_\_\_\_\_
- If appropriate call 9-1-1 or local police and follow their instructions. Telephone: \_\_\_\_\_

**Provide the emergency responders with the location of the spill, the chemical name if known, and if anyone was contaminated.**

Facility address: \_\_\_\_\_

Facility telephone: \_\_\_\_\_

- **Consult with Poison Control at 1-800-222-1222** for medical advice, as needed.
- If directed by Poison Control assist in first aid and personnel decontamination.
- Activate the facility emergency plan.

- If shoes are contaminated, remove them after leaving the contaminated area to avoid spreading the contamination.
- If an additional person is available, send them to direct the emergency responders to the hazardous location. If no one else is available, remain in a safe area where you will be able to direct the emergency responders to the hazardous location.
- Obtain the MSDS of the chemical.
- When required, notify the Pollution Emergency Alerting System (PEAS Hotline: 1-800-292-4706) and the National Response Center (1-800-424-8802).
- Follow health care agency procedures for completing an incident report.
- For more information see: ATSDR Managing Hazardous Materials Incidents, <http://www.atsdr.cdc.gov/MHMI/index.asp>

### Pesticides

When you suspect a patient has pesticide poisoning:

- Contact your supervisor or facility manager:  
Telephone: \_\_\_\_\_
- If possible get labeling information about the pesticide or toxin(s) the patient was exposed to.
- **Consult with Poison Control 1-800-222-1222.**
- If directed by Poison Control assist in first aid and personnel decontamination.

Resources:

- Workplace Environmental Exposure Interview, <http://www.epa.gov/oppfead1/safety/healthcare/handbook/Chap03.pdf> (Chapter 3)
- Michigan Department of Agriculture Spill Response, 1-800-405-0101 (fertilizer, pesticide and manure spill clean up information)
- National Pesticide Information Center, 1-800-858-7378, [www.npic.orst.edu](http://www.npic.orst.edu)
- Chemical Safety Information - Intergovernmental Organizations, [www.inchem.org/](http://www.inchem.org/)
- Integrated Risk Information System (IRIS), [www.epa.gov/iris](http://www.epa.gov/iris)

## Step 9 back

Resource	Website	Phone	Notes
<b>Departments of Health</b>			
Michigan Department of Community Health (MDCH)	<a href="http://www.michigan.gov/mdch">www.michigan.gov/mdch</a>	After hours: 517-335-9030	
Office of Public Health Preparedness (OPHP)	<a href="http://www.michigan.gov/prepare">www.michigan.gov/prepare</a>	Business hours: 517-335-8150	After hours: 517-335-9030
Division of Communicable Disease	<a href="http://www.michigan.gov/mdch">www.michigan.gov/mdch</a>	Business hours: 517-335-8165	Click on Providers, Communicable & Chronic Diseases
Division of Immunizations	<a href="http://www.michigan.gov/flu">www.michigan.gov/flu</a>	Business hours: 517-335-8159	
Division of Environmental Health	<a href="http://www.michigan.gov/mdch-toxics">www.michigan.gov/mdch-toxics</a>	Business hours: 800-648-6942	
Bureau of Laboratories	<a href="http://www.michigan.gov/mdchlab">www.michigan.gov/mdchlab</a>	Business hours: 517-335-8063	
Local Health Departments	<a href="http://www.michigan.gov/mdch/0,1607,7-132--96747--00.html">www.michigan.gov/mdch/0,1607,7-132--96747--00.html</a>		Click local health department map under quick links
<b>Emergency Management Offices</b>			
Michigan State Police – Emergency Management and Homeland Security Division	<a href="http://www.michigan.gov/emhsd">www.michigan.gov/emhsd</a>	Emergency Number (24/7): 1-800-241-8000	
Local Emergency Managers	<a href="http://www.michigan.gov/msp">www.michigan.gov/msp</a>		Click Specialized Divisions, Emergency Management & Homeland Security Div.
<b>Federal Agencies/Resources</b>			
Center for Disease Control and Prevention (CDC)	<a href="http://www.bt.cdc.gov">www.bt.cdc.gov</a>	Emergency Response Hotline: 1-800-232-4636	General Information 1-800-CDC-INFO
Federal Emergency Management Agency (FEMA)	<a href="http://www.fema.gov">www.fema.gov</a>	1-800-621-FEMA	General Contact Number
Environmental Protection Agency (EPA)	<a href="http://www.epa.gov">www.epa.gov</a>	1-800-424-8802	U.S. Coast Guard National Response Center
Federal Bureau of Investigation (FBI)	<a href="http://www.fbi.gov">www.fbi.gov</a> <a href="http://www.fbi.gov/detroit/">www.fbi.gov/detroit/</a>	1-202-324-3000 FBI Detroit: 1-313-965-2323	FBI Detroit 477 Michigan Ave., 26 <sup>th</sup> Floor Detroit, MI 48226
U.S. Department of Justice Alcohol, Tobacco, Firearms & Explosives (ATF)	<a href="http://www.atf.gov/content/contact-us/hotlines">www.atf.gov/content/contact-us/hotlines</a>	Bomb Hotline: 1-888-ATF-BOMB 1-888-283-2662	ATF Detroit Field Division 1-313-202-3400 <a href="http://www.atf.gov/content/Contact-Us/Local-ATF-Office/detroit-field-division">www.atf.gov/content/Contact-Us/Local-ATF-Office/detroit-field-division</a>
National Response Center	<a href="http://www.nrc.uscg.mil/index.html">www.nrc.uscg.mil/index.html</a>	1-800-424-8802	Federal point of contact for reporting oil & chemical spills
National Weather Service	<a href="http://www.nws.noaa.gov">www.nws.noaa.gov</a>		
American Red Cross	<a href="http://www.redcross.org">www.redcross.org</a>		Website links to Michigan Chapters
<b>Other Resources</b>			
Poison Control Centers		1-800-222-1222 (24/7)	
The National Pesticide Information Center (NPIC)	<a href="http://www.npic.orst.edu/">www.npic.orst.edu/</a>	1-800-858-7378	Answers questions about pesticides 11:30 am to 9:30 pm-EST Mon.-Fri.
Michigan Department of Agriculture (MDARD)	<a href="http://www.michigan.gov/mdard">www.michigan.gov/mdard</a>	Emergency (24/7): 1-800-405-0101	Pesticides and agricultural spill clean up instructions
Michigan Dept of Environmental Quality (DEQ)	<a href="http://www.michigan.gov/deq">www.michigan.gov/deq</a>	PEAS Emergency (24/7): 1-800-292-4706	State point of contact for reporting chemical releases and environmental emergencies
DEQ Environmental Assistance Center		Non-emergency (Bus. Hrs.): 1-800-662-9278	
Michigan Occupational Safety and Health Administration (MIOSHA)	<a href="http://www.michigan.gov/miosha">www.michigan.gov/miosha</a>	MIOSHA hotline: 1-800-TO-MIOSHA 1-800-866-4674	MIOSHA Consultation and Training Division: 517-322-1809
CHEMTREC	<a href="http://www.chemtrec.com">www.chemtrec.com</a>	1-800-262-8200	Private emergency call center with access to 5 million MSDSs



## Communicable Disease

### Screening Procedures to Identify Patient with Communicable Diseases:

All patients reporting for care should be screened for communicable diseases before being placed into a communal waiting area.

Methods include:

- Posting culturally appropriate signs in the waiting area regarding respiratory hygiene/cover your cough.  
Posters: [www.cdc.gov/flu/protect/covercough.htm](http://www.cdc.gov/flu/protect/covercough.htm)
- Asking patients with respiratory symptoms and a fever to self-identify to the receptionist.
- Placing mask on the patient, if needed.
- Removing the patient immediately to an exam room and close the door.
- Implementing Standard and Droplet (isolation) Precautions.
- Training the receptionist to ask patients with a fever and respiratory symptoms regarding travel history.
- Posting signs in the waiting area for patients to immediately report to the receptionist any rashes, wounds or eye drainage.
- If the patient is diagnosed with a communicable disease that is also reportable, notify your local health department communicable disease program.  
Telephone: \_\_\_\_\_

Text source:

[www.chcanys.org/clientuploads/downloads/ep\\_misc/CHCANYS\\_CommunicableDisease\\_Policies\\_Procedures.pdf](http://www.chcanys.org/clientuploads/downloads/ep_misc/CHCANYS_CommunicableDisease_Policies_Procedures.pdf)

### Infection Control Precautions for Health Care Settings:

#### Follow Standard (Universal) Precautions:

This applies to all patients, in all health care settings. Precautions are based on the principle that all mucous membrane, non-intact skin, blood and other potentially infectious material except sweat, may contain infectious organisms.

#### Standard (Universal) Precautions:

- Perform hand hygiene before and after all patient contact or contact with items potentially contaminated with blood or body fluids.
- Wear gloves, gowns, masks and eye and/or facial protection to prevent contact with mucous membranes, non-intact skin, blood and other moist body substances as determined by the nature and extent of the anticipated exposure.
- Remove all personal protective equipment and discard immediately after completing a task and between patients.
- Perform hand hygiene.

**Droplet Precautions:** (For infections spread by large droplets generated by coughs, sneezes, etc.)

- Place a surgical mask on symptomatic patients at the point of initial encounter, during transport, or whenever exposure to other people is anticipated. Monitor the patient to be sure they can tolerate mask wearing.
- Wear a surgical mask and goggles or a face shield when within 6 feet of potentially infectious (not masked) patients.
- Place the patient in an examination room or cubicle as soon as possible. Instruct the patient to follow recommendations for respiratory hygiene/cough etiquette.
- Separate possible infectious (masked) patients from others by at least 6 feet, or group with other patients with the same infectious strain.

Resources:

- CDC Guidelines for Isolation Precautions: [www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf](http://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf)
- Hand Hygiene: [www.cdc.gov/Handhygiene](http://www.cdc.gov/Handhygiene)
- Respiratory Hygiene: [www.cdc.gov/flu/professionals/infectionControl/resphygiene.htm](http://www.cdc.gov/flu/professionals/infectionControl/resphygiene.htm)

# FBI *Advisory*

**If you receive a suspicious letter or package**

**What should you do?**

- 1** Handle with care  
Don't shake or bump
- 2** Isolate and look for indicators
- 3** Don't Open, Smell or Taste
- 4** Treat it as Suspect!  
Call 911



**If parcel is open and/or a threat is identified...**

**For a Bomb**

Evacuate Immediately  
Call 911 (Police)  
Contact local FBI

**For Radiological**

Limit Exposure - Don't Handle  
Distance (Evacuate area)  
Shield yourself from object  
Call 911 (Police)  
Contact local FBI

**For Biological or Chemical**

Isolate - Don't Handle  
Call 911 (Police)  
Wash your hands with soap and warm water  
Contact local FBI



**Police Department** \_\_\_\_\_

**Fire Department** \_\_\_\_\_

**Local FBI Office** \_\_\_\_\_

(Ask for the Duty Agent, Special Agent Bomb Technician, or Weapons of Mass Destruction Coordinator)

GENERAL INFORMATION BULLETIN 2000-3  
Produced by: Bomb Data Center  
Weapons of Mass Destruction Operations Unit

U.S. Department of Justice, Alcohol, Tobacco, Firearms and Explosives Division  
Detroit Field Office: [www.atf.gov/content/Contact-Us/Local-ATF-Office/detroit-field-division](http://www.atf.gov/content/Contact-Us/Local-ATF-Office/detroit-field-division)

## Step 10 front

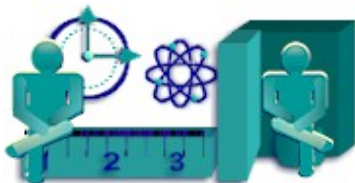
### General Information About Radiological Events and Terrorism

The first step in understanding radiation emergencies is to draw the distinction between a nuclear event (like the bomb dropped on Hiroshima) and a radiological event, such as a nuclear power plant incident or a radiological dispersal device (dirty bomb). A nuclear event involves nuclear fission (splitting of atoms) and a highly destructive explosion that leaves large amounts of radioactivity behind.

Radiological Dispersal Device (RDD) is the use of common explosives to spread radioactive materials over a targeted area. The primary danger may be from the blast itself. The presence of radiation will not be clearly defined until trained personnel with specialized equipment are on the scene.

**If there is a RDD (dirty bomb) explosion** or other radioactive material incident, limit your exposure and avoid breathing radiological dust that may be released in the air.

- If you are outside and there is an explosion, cover your nose and mouth and quickly go inside a building that has not been damaged. If you are already inside, check to see if your building has been damaged. If your building is stable, stay where you are. Close windows and doors; turn off air conditioners, heaters or other ventilation systems.
- Limit your exposure: Think about shielding, distance and time.



- **Shielding**: A barrier between yourself and radioactive materials will prevent some of the radiation from being absorbed, and you will be less exposed.
- **Distance**: The farther away you are from radioactive materials (including blast and fallout), the lower your exposure.
- **Time**: Minimizing time spent near radioactive materials will also reduce your exposure and your risk.
- **Stay tuned to the Emergency Alert System (EAS)**: Listen to the official directions and information, which will be repeated often.

Text obtained from EPA:

[www.epa.gov/rpdweb00/understand/protection\\_basics.html](http://www.epa.gov/rpdweb00/understand/protection_basics.html)

If a person enters your facility after being exposed to radiation from a RDD or other radioactive material incident:

- Notify supervisor immediately and activate your facility plan.
- **Call 9-1-1. Follow their instructions.**
- Isolate the patient.
- Consult with emergency services personnel. They will provide decontamination instructions. When appropriate emergency services personnel will instruct staff to use standard precautions and double glove.
- Emergency services personnel will coordinate transport of contaminated patients to area hospital ED. Let the hospital know the presense of radiation is a possibility.
- Consult professionals to remove waste from the triage area, decontaminate as necessary.

#### Medical Management Principles:

- Addressing contamination issues should not delay treatment of life-threatening injuries.
- It is highly unlikely that the levels of radioactivity associated with a contaminated patient would pose a significant health risk to care providers.
- Consult with emergency services personnel if you think someone has been exposed to radiation. They will provide decontamination instructions.

#### Use Standard (universal) Precautions to Protect Staff:

- Follow standard guidelines for protection from microbiological contamination.
- Surgical masks should be adequate. N95 masks are recommended, if available.
- Due to fetal sensitivity to radiation, assign pregnant staff to other duties.





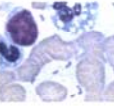

#### Radiation Resources:

- Michigan Department of Environmental Quality, Waste and Hazardous Materials Division: 1-517-335-2690
- After hours call: MDEQ Pollution Emergency Alerting System: 1-800-292-4706
- Michigan State Police Special Operations: 517-241-8000
- Radiation Emergency Assistance Center/Training Site (REAC/TS). Emergency number: 1-865-576-1005 <http://orise.orau.gov/reacts/default.aspx>
- Radiation Event Medical Management - Guidance for Healthcare Providers: [www.remm.nlm.gov](http://www.remm.nlm.gov)
- Centers for Disease Control and Prevention - Telephone: 1-800-CDC-INFO or 1-800-232-4636 [www.bt.cdc.gov/radiation](http://www.bt.cdc.gov/radiation)

Text obtained from Centers for Disease Control website:

[www.bt.cdc.gov/radiation/pocket.asp](http://www.bt.cdc.gov/radiation/pocket.asp)

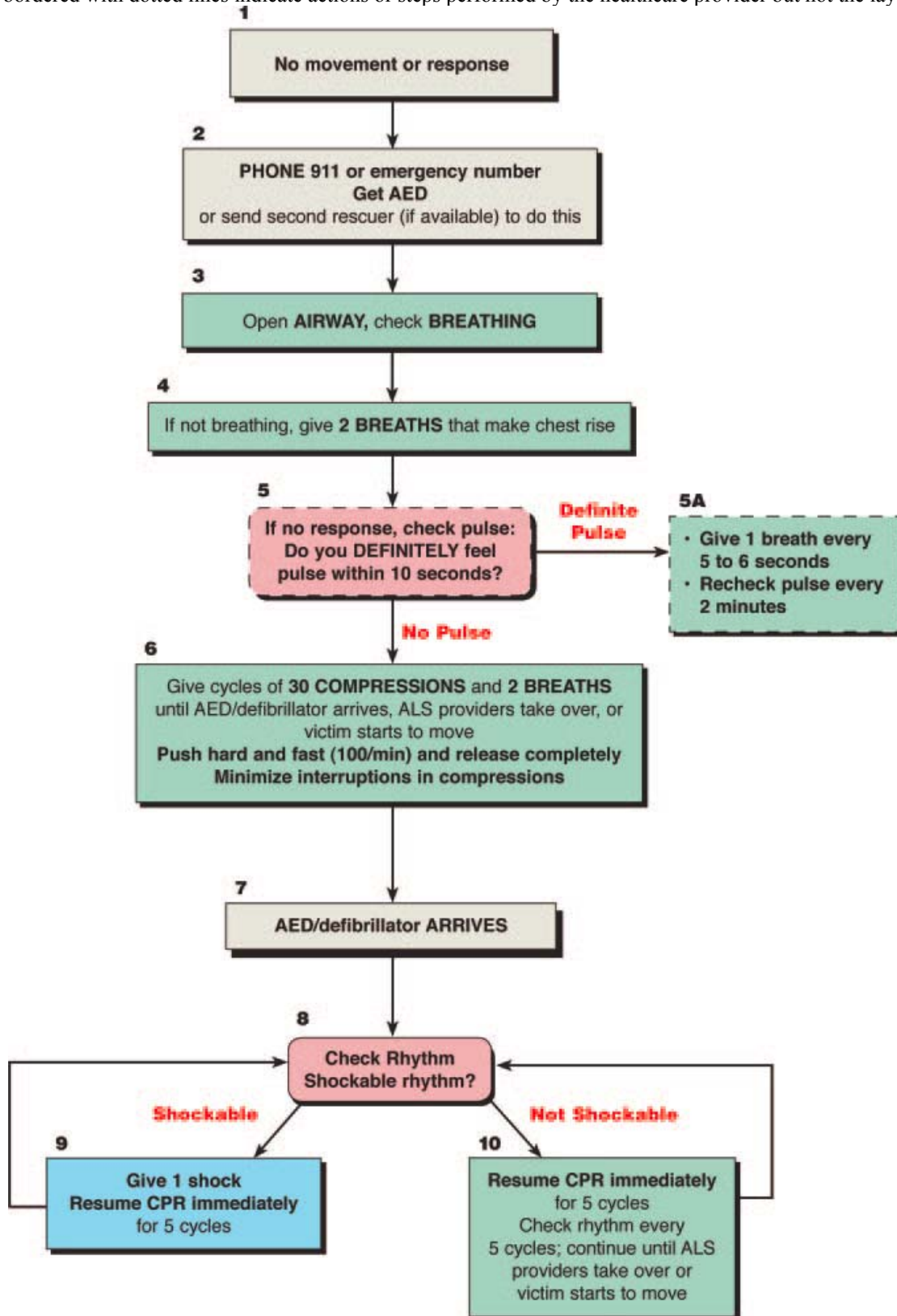


Recognizing, Diagnosing and Treating Health Effects of Biological Agents							
Disease	Signs & Symptoms	Incubation Time (Range)	Person-to-person Transmission	Isolation	Diagnosis	Postexposure Prophylaxis for Adults	Treatment for Adults
<b>Anthrax</b> <i>Bacillus anthracis</i>							
Inhalation 	Flu-like symptoms (fever, fatigue, muscle aches, dyspnea, non-productive cough, headache), chest pain; possible 1-2 improvement then rapid respiratory failure and shock. Meningitis may develop.	1-6 days (up to 6 weeks)	None	Standard precautions	Chest x-ray evidence of widening mediastinum; obtain sputum and blood culture. Sensitivity and specificity of nasal swabs unknown – do not rely on for diagnosis	Prophylaxis for 60 days: Ciprofloxacin 500mg PO q12h or Doxycycline 100mg PO q12h  Alternative (if strain susceptible and above contraindicated): Amoxicillin 500 mg PO q8h  <i>In vitro studies suggest that</i> Levofloxacin 500mg PO q24h or Gatifloxacin 400mg PO q24h or Moxifloxacin 400 mg PO q24h Could be substituted	Combined IV/PO therapy for 60 days  Ciprofloxacin 500mg q12h or Doxycycline 100mg q12h AND 1 or 2 additional drugs (vancomycin, rifampin, imipenem, clindamycin, chloramphenicol, clarithromycin, and if susceptible penicillin or ampicillin)
Cutaneous 	Intense itching followed by painless papular lesions, then vesicular lesions, developing into eschar surrounded by edema.	1-12 days	Direct contact with skin lesions may result in cutaneous infection	Contact precautions	Peripheral blood smear may demonstrate gram positive bacilli on unspun smear with sepsis.	Recommendations same for pregnant women and immunocompromised persons (for prophylaxis and therapy)	Ciprofloxacin 500mg PO q12h or Doxycycline 100mg PO q12h
Gastrointestinal 	Abdominal pain, nausea and vomiting, severe diarrhea, GI bleeding, and fever	1-7 days	None	Standard precautions	Cutaneous blood and stool		
<b>Botulism</b> <i>Botulinum toxin</i> 	Afebrile, excess mucus in throat, dysphagia, dry mouth and throat, dizziness, then difficulty moving eyes, mild papillary dilation and nystagmus, intermittent ptosis, indistinct speech, unsteady gait, extreme symmetric descending weakness, flaccid paralysis; generally normal mental status.	Inhalation: 12-80 hours Foodborne: 12-72 hours (2-8 days)	None	Standard precautions	Laboratory tests available from CDC or appropriate Public Health Department; obtain serum, stool, gastric aspirate and suspect foods prior to administering antitoxin. Differential diagnosis includes polio, Guillan Barre, myasthenia, tick paralysis, CVA, meningococcal meningitis	Pentavalent toxoid (types A, B, C, D, E) 0.5 ml SQ may be available as investigational product from USAMRIID	Botulism antitoxins from public health authorities. Supportive care and ventilatory support. Avoid clindamycin and aminoglycosides.
<b>Pneumonic plague</b> <i>Yersinia pestis</i> 	High fever, cough, hemoptysis, chest pain, nausea and vomiting, headache. Advanced disease: purpuric skin lesions, copious watery or purulent sputum production; respiratory failure in 1 to 6 days.	2-3 days 2-6 days	Yes, droplet aerosols	Droplet precautions until 48 hours of effective antibiotic therapy	A presumptive diagnosis may be made by Gram, Wayson or Wright stain of lymph node aspirates, sputum, or CSF with gram negative bacilli with bipolar (safety pin) staining.	Ciprofloxacin 500mg PO q12h or Doxycycline 100mg PO q12h	Streptomycin 1gm IM q12h or Gentamycin 2mg/kg, then 1.0 to 1.7 mg/kg IV q8h  Alternatives: Doxycycline 200mg PO load, then 100mg PO q12h or Ciprofloxacin 400mg IV q12h
<b>Smallpox</b> <i>Variola virus</i> 	Prodromal period: malaise, fever, rigors, vomiting, headache and backache. After 2-4 days, skin lesions appear and progress uniformly from amcules to papules to vesicles and pustules, mostly on face, neck, palms, soles and subsequently progress to trunk.	12-14 days (7-17 days)	Yes, airborne droplet nuclei or direct contact with skin lesions or secretions until all scabs separate and fall off (3 to 4 weeks)	Airborne (includes N95 mask) and Contact precautions	Swab culture of vesicular fluid or scab, send to BL-4 laboratory. All lesions similar in appearance and develop synchronously as opposed to chickenpox. Electron microscopy can differentiate variola virus from varicella.	Early vaccine critical (in less than 4 days). Call CDC for vaccinia. Vaccinia immune globulin in special cases – call USAMRIID at 301-619-2833.	Supportive care. Previous vaccination against smallpox does not confer lifelong immunity.  Potential role for Cidofovir.

## Step 11 Front

### Adult BLS Healthcare Provider Algorithm

Boxes bordered with dotted lines indicate actions or steps performed by the healthcare provider but not the lay rescuer.



## Step 12 back

Recognizing, Diagnosing and Treating Health Effects of Chemical Agents						
Agent Type	Agent Names	Mode of Action	Unique Characteristics	Signs and Symptoms	Treatment	Other Patient Considerations
Nerve	<ul style="list-style-type: none"> <li>Sarin</li> <li>Soman</li> <li>Tabun</li> <li>VX</li> <li>Some insecticides (cholinesterase inhibitors)</li> </ul>	Inactivates acetylcholine esterase enzyme, causing both muscarinic and nicotinic effects	<ul style="list-style-type: none"> <li>Miosis (pinpoint pupils)</li> <li>Copious secretions and sweating</li> <li>Muscle twitching, fasciculation's</li> </ul>	<ul style="list-style-type: none"> <li>Miosis</li> <li>Blurred/dim vision</li> <li>Headache</li> <li>Nausea, vomiting, diarrhea</li> <li>Copious secretions and sweating</li> <li>Muscle twitching, fasciculation's</li> <li>Dyspnea</li> <li>Seizures</li> <li>Loss of consciousness</li> </ul>	<ul style="list-style-type: none"> <li>Confirm patient decontamination</li> <li>Nerve agent antidote, if available</li> <li>Atropine, before other measures</li> <li>Pralidoxime (2-PAM) chloride</li> </ul>	<ul style="list-style-type: none"> <li>Onset of symptoms from dermal contact with liquid forms may be delayed</li> <li>Repeated antidote administration may be necessary</li> </ul>
Asphyxiant/ blood	<ul style="list-style-type: none"> <li>Arsine</li> <li>Cyanogen chloride</li> <li>Hydrogen cyanide</li> </ul>	<ul style="list-style-type: none"> <li>Arsine : Causes massive intravascular hemolysis which may lead to anemia, jaundice and renal failure</li> <li>Cyanogen chloride and Hydrogen cyanide: Cyanide binds with iron in cytochrome a3, preventing intracellular oxygen utilization. The cell then uses anaerobic metabolism, creating excess lactic acid and metabolic acidosis</li> </ul>	<ul style="list-style-type: none"> <li>Possible skin color changes: cherry-red (cyanosis or cyanogen chloride), yellow or bronze (arsine)</li> <li>Possible cyanosis</li> <li>Possible frostbite</li> </ul>	<ul style="list-style-type: none"> <li>Confusion</li> <li>Nausea</li> <li>Gasping for air, similar to asphyxiation but more abrupt onset</li> <li>Seizures</li> <li>Metabolic acidosis (Cyanogen chloride or Hydrogen cyanide)</li> </ul>	<ul style="list-style-type: none"> <li>Confirm patient decontamination</li> <li>Rapid treatment with oxygen</li> <li>For cyanide, use sodium nitrite, if available, and then sodium thiosulfate</li> <li>Vigorous supportive care may aid recovery of some patients even without specific antidote</li> <li>Arsine has no specific antidote</li> </ul>	<ul style="list-style-type: none"> <li>Arsine and cyanogen chloride may cause delayed pulmonary edema</li> </ul>
Choking/ pulmonary	<ul style="list-style-type: none"> <li>Chlorine</li> <li>Hydrogen chloride</li> <li>Nitrogen oxides</li> <li>Phosgene</li> </ul>	Acids or acid-forming agents which react with cytoplasmic proteins and destroy cell structure	<ul style="list-style-type: none"> <li>Chlorine is a greenish-yellow gas with pungent odor</li> <li>Phosgene gas may smell like newly mown hay or grass</li> <li>Possible frostbite</li> </ul>	<ul style="list-style-type: none"> <li>Eye and skin irritation</li> <li>Airway irritation</li> <li>Dyspnea, cough</li> <li>Sore throat</li> <li>Chest tightness</li> <li>Wheezing</li> <li>Bronchospasm</li> </ul>	<ul style="list-style-type: none"> <li>Confirm patient decontamination</li> <li>Fresh air, forced rest</li> <li>Semi-upright position</li> <li>If signs of respiratory distress are present, oxygen with or without positive airway pressure may be needed</li> <li>Maintain adequate oxygenation</li> <li>No specific antidote</li> </ul>	<ul style="list-style-type: none"> <li>May cause delayed pulmonary edema, even following a symptom-free period that varies in duration with the amount inhaled</li> <li>May lead to ARDS (Acute Respiratory Distress Syndrome)</li> </ul>
Blistering/ vesicant	<ul style="list-style-type: none"> <li>Mustard/ Sulfur mustard (HD, H)</li> <li>Nitrogen mustard</li> <li>Lewisite</li> <li>Phosgene oxime</li> </ul>	<ul style="list-style-type: none"> <li>Exact mechanisms of biologic activity are unknown</li> <li>Mustard: Forms metabolites that bind to enzymes, proteins and other cellular components</li> <li>Lewisite: Binds to thiol groups in many enzymes</li> <li>Phosgene oxime: Mechanism unknown, but corrosive like strong acids</li> </ul>	<ul style="list-style-type: none"> <li>Mustard (HD) may have an odor like horseradish, garlic or mustard</li> <li>Lewisite (L) may have an odor like geranium</li> <li>Phosgene oxime (CX) may have a pepper-like or pungent odor</li> </ul>	<ul style="list-style-type: none"> <li>Skin, eye and mucosal irritation</li> <li>Skin erythema and blistering</li> <li>Tearing, conjunctivitis, corneal damage</li> <li>Mild respiratory distress To marked airway damage</li> </ul>	<ul style="list-style-type: none"> <li>Confirm patient decontamination</li> <li>If dyspneic, give oxygen</li> <li>Specific antidote: British Anti-Lewisite (BAL) may decrease systemic effects of Lewisite, if available</li> <li>Mustard and phosgene oxime have no specific antidotes</li> </ul>	<ul style="list-style-type: none"> <li>Possible pulmonary edema</li> <li>Mustard has an asymptomatic latent period</li> <li>Lewisite has immediate burning pain, blisters later</li> <li>Phosgene oxime causes immediate pain</li> <li>Monitor electrolyte balance; fluid loss is likely to be less than in comparable thermal burns</li> <li>Neutropenia and sepsis</li> </ul>
Incapacitating/ Behavior altering	<ul style="list-style-type: none"> <li>Agent 15/ BZ</li> </ul>	Competitively inhibits acetylcholine which disrupts muscarinic transmission in central and peripheral nervous system (atropine-like action)	<ul style="list-style-type: none"> <li>May appear as mass drug intoxication with erratic behaviors, shared realistic and distinct hallucinations, disrobing and confusion</li> <li>Hyperthermia</li> <li>Mydriasis (dilated pupils)</li> </ul>	<ul style="list-style-type: none"> <li>Dry mouth and skin</li> <li>Initial tachycardia</li> <li>Altered consciousness, delusions, denial of illness and belligerence</li> <li>Hyperthermia</li> <li>Ataxia (lack of coordination)</li> <li>Hallucinations</li> <li>Mydriasis (dilated pupils)</li> </ul>	<ul style="list-style-type: none"> <li>Confirm patient decontamination</li> <li>Evaluate mental status</li> <li>Use restraints as needed</li> <li>Monitor core temperature carefully</li> <li>Specific antidote: physostigmine may be available</li> </ul>	<ul style="list-style-type: none"> <li>Hyperthermia and self-injury are greatest risks</li> <li>Hard to detect because it is an odorless and non-irritating substance</li> <li>Possible serious arrhythmias</li> </ul>
Cytotoxic protein	<ul style="list-style-type: none"> <li>Ricin</li> <li>Abrin</li> </ul>	Inhibit protein synthesis	Exposure by inhalation or injection causes more pronounced signs & symptoms than exposure by ingestion	<ul style="list-style-type: none"> <li>Latent period of 4-8 hours, followed by flu-like signs and symptoms</li> <li>Progress within 18-24 hours to nausea, cough, dyspnea, pulmonary edema (inhalation exposure); GI hemorrhage</li> </ul>	<ul style="list-style-type: none"> <li>Confirm patient decontamination</li> <li>Maintain fluid/electrolyte imbalance</li> <li>Maintain adequate oxygenation</li> <li>Provide pain</li> </ul>	<ul style="list-style-type: none"> <li>Rapid progression of signs and symptoms</li> <li>Death possible within 36 hours</li> <li>If patient survives beyond 5 days without complications, recovery is likely</li> </ul>



## Step 12 front

### Biological

How a biological attack would unfold is quite different for each agent (e.g. anthrax, smallpox, plague). It is likely that the initial recognition will be by routine monitoring at the local level. Once a potential attack is identified, the public health response will immediately begin.

- Samples will be properly collected and sent to special laboratories for confirmatory testing and diagnosis.
- Epidemiologists and health professionals will investigate cases and determine who may have been exposed and who will need treatment.

#### If there is a biological threat:

- **Watch TV, listen to the radio and check the internet for official news and health alerts.**
- Consider if you, your health facility or patients are in the group or area authorities believe to be in danger.
- Contact your supervisor or facility manager:  
Telephone: \_\_\_\_\_
- Contact authorities. Call 9-1-1 or local police:  
Telephone: \_\_\_\_\_
- Report characteristics of the outbreak to your local health department.  
Telephone: \_\_\_\_\_

#### Follow instructions from local and state health authorities.

It will be important for health care workers to work closely with local public health, and emergency response officials since obtaining, sharing and analyzing information is crucial in identifying a potential threat.

- If the disease is contagious, isolation, quarantine, social distancing and personal hygiene practices are likely to be implemented to slow transmission. Not all biological agents spread from person to person.
- There may be times when you will be instructed to wear a face mask to reduce spreading germs or to avoid coming in contact with others who are sick. Locate your health facilities supply of personal protective equipment (PPE) and be ready to use it if instructed to by public health officials.

#### Practice good hygiene and cleanliness to avoid spreading germs:

- Wash your hands with soap and water or alcohol-based gel frequently.
- Do not share food or utensils.
- Cover your mouth and nose when coughing or sneezing.
- Consider face masks to avoid spreading germs.
- Plan to share the health and safety information with patients and others in the community, especially those who may need help understanding the situation and what specific actions to take.

### Chemical

Special care must be taken when responding to intentional chemical threats. The chemicals used may be unknown and can be difficult to identify. Exposure to contaminated individuals may cause harm to other patients and health care personnel.

#### Signs of a chemical attack:

- Environmental clues: dead plants, animals, or insects, pungent odor, unusual clouds, vapors, or droplets, and discoloration of surfaces.
- Common physical symptoms from an immediate airborne attack: tightness in chest and difficulty breathing, nausea and vomiting, watery eyes and blurry vision.

#### To lessen the impact of exposure to a chemical threat:

- Put safety first. Move away from the site of release (if known).
- Consider using protective masks and clothing to minimize exposure (e.g. layers of cotton t-shirt, handkerchief or towel) may help.
- When the chemical release is indoors, evacuate the building and deny entry.
- Contact your supervisor or facility manager:  
Telephone: \_\_\_\_\_
- Call 9-1-1 or local police: \_\_\_\_\_  
Tell them the facility address & telephone.
- **Follow the instructions of emergency personnel (Hazmat/Police/Fire). Provide them with any facts or suspicious activities and whether anyone may have been contaminated.**
- When needed emergency personnel will wear protective gear and assist with proper removal and bagging of contaminated clothing. Follow their instructions.
- Consult with Poison Control Center at 1-800-222-1222 for medical advice, as needed.
- If directed by Poison Control assist in first aid and personnel decontamination.
- Seek emergency medical attention if you have breathed in chemical fumes or if chemicals have touched your skin. If medically indicated and available, get appropriate antidote(s).
- When required, notify the Pollution Emergency Alerting System, PEAS Hotline: 1-800-292-4706 and the National Response Center 1-800-424-8802.
- Consult ATSDR Managing Hazardous Materials Incidents, [www.atsdr.cdc.gov/MHMI/](http://www.atsdr.cdc.gov/MHMI/).

### Step 13 bottom 5.5 inches front only

Top 6.5 inches blank (There is a pocket here for the CD-ROM)

#### Infant/Child Abduction

Any staff person who has been made aware of a lost or missing child in the clinic should immediately notify their supervisor, facility director or safety officer.

Infant **code pink** and child code purple (or your facilities appropriate code) should be announced 3-5 times utilizing the facility paging system or communication equipment.

Upon hearing the **code pink** or code purple announcement, all staff should be placed at each entry/exit door to prevent anyone from leaving or entering the facility until the infant/child has been relocated or the authorities have been contacted.

- Monitor each entrance and stairway.
- Watch for unusual behavior by an individual.
- Stop all individuals carrying an infant or child.
- Stop all individuals carrying a large package e.g. gym bag, particularly if the person carrying the bag is 'cradling' or 'talking' to it.

If a suspicious person is identified, security staff should approach the person and say: *"We are in a security situation, please stay in this area until the event is over."*

- Do not attempt to physically restrain the individual.
- Note physical characteristics, vehicle description and license and exit route.
- A supervisor should escort the person who has reported the lost child throughout the facility to look for the child.
- The individual should be asked if a photo of the child is available so that other staff, patients, and visitors can assist with this process.
- The reporting person should be questioned about any recent custodial issues or any other unusual circumstances about the missing child.

If after a search and/or due to prevailing custodial issues it appears that the child cannot be found, call 9-1-1 (police).

Clinic staff will cooperate with authorities and provide the necessary documents (i.e. sign-in sheets) to assist the police in their search for the child. The police may ask that no one leave the facility, as they may want to interview persons in the facility.



Chart adapted from <a href="http://www.health.state.ny.us/nysdoh/bt/chemical_terrorism/docs/poster_multi.pdf">www.health.state.ny.us/nysdoh/bt/chemical_terrorism/docs/poster_multi.pdf</a> 2014		with emesis and diarrhea • Hypovolemic shock, hepatic, splenic & renal failure (ingestion exposure)	management • No specific antidote	
---	--	---	--------------------------------------	--