

EMERGENCY PUBLIC INFORMATION

I. PURPOSE

This annex provides for the coordinated Emergency Public Information (EPI) through official representatives in order to protect the citizens of Morgan County from hazards that may affect the community. It also relieves primary emergency responders from the obligation of dealing directly with media and thus facilitates a more effective response to all hazards.

II. SITUATION AND ASSUMPTIONS

A. Situation

1. Morgan County is vulnerable to the following hazards: Drought, Earthquake, Floods, Hazmat Incidents, Tornado/Severe Storm, Terrorism and Energy Emergencies.
2. Instructions detailing what citizens of this community should do in the event these hazards occur have been developed. (See appendices attached to this annex.)
3. Morgan County Emergency Management Agency and Office of Homeland Security provides instruction, speaker's bureau, and hazard-specific pamphlets in order to prepare citizens to protect themselves during emergencies. Public meetings will be conducted as necessary.
4. There are three daily and one weekly newspapers; six radio stations, and two television stations serving Morgan County that will provide public instruction during emergencies. The Emergency Broadcast System is WCOL AM/FM, Columbus. (See Tab 1 to this Annex.)
5. Agreements have been developed with local print and broadcast media for the dissemination of emergency public information.
6. A Joint Public Information Center (JPIC) has been established at the Morgan County Courthouse. This will be the central location used to provide briefings to all media representatives and develop coordinated releases of public information. The Opera House will serve as an alternative site for the JPIC.

B. Assumptions

1. News media resources serving Morgan County will provide emergency instructions to residents.
2. News releases in the county will initiate from one source: if the EOC is activated or from the officially designated county Public Information Officer (PIO) if the EOC is not activated.

3. State-level news releases will be coordinated with the Morgan County PIO and will not conflict with county-level releases.
4. Rumor control procedures directed by the Morgan County PIO will prevent incorrect information from affecting emergency response activities.
5. If electrical systems fail during the emergency, protective action information will be announced door-to-door and/or by the bullhorns or public address systems, by law enforcement officers and fire responders.

III. CONCEPT OF OPERATIONS

A. Phases of Emergency Management

1. Mitigation

- a. Develop/update agreements with local media for the dissemination of emergency public information.
- b. Coordinate with and develop agreements with media and emergency management directors in adjacent counties in preparation for multi-county emergencies.
- c. Develop agreement with the Ohio Emergency Management Agency (Ohio EMA) PIO for coordination of news releases during emergencies.
- d. Develop agreements with local emergency response organizations for the coordinated release of public information through the county PIO.
- e. Develop JPIC site and alternate site plan and procedures, i.e., rules for media, local, state, and national PIOs, etc.

2. Preparedness

- a. Maintain/update listings of news media contacts and capabilities.
- b. Provide media contacts with up-to-date hazard specific emergency public information that is ready for immediate release in event of an emergency.
- c. Maintain an adequate supply of pamphlets and brochures containing hazard specific guidance that can be distributed to the public.
- d. Train support staff and emergency responders in the dissemination of EPI in the event of power failures.
- e. Ensure that the County JPIC has the necessary equipment for briefings and that media representatives know the location of the JPIC.
- f. Provide regular presentations to county residents on protective actions to take during emergencies.

3. Response

- a. Release EPI through the designated media contacts in the county as soon as the threat has been determined and evaluated by emergency responders.
 - b. EPI may be released through newspapers reports, radio and television broadcasts and door-to-door contact.
 - c. Refer inquiries about missing or injured persons to the Muskingum Valley American Red Cross representative.
 - d. Coordinate with officials at affected sites and with Emergency Operations Center (EOC) representatives for press releases describing the emergency services being rendered and the damaged areas with restricted access.
 - e. Direct, coordinate and supervise the release of all EPI through the JPIC.
 - f. PIO will provide regular briefings to the EOC representatives.
 - g. Relay instructions on protective measures, which will save lives and limit property damage.
 - h. Maintain a constant flow of official news through media resources in order to inhibit the development of rumors and panic.
 - i. Coordinate briefings with Ohio EMA PIO on county-level activities.
4. Recovery
- a. Inform citizens of availability of disaster assistance.

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. Organization

- 1. The Morgan County Emergency Management Director appoints the COUNTY PIO. Appointment papers on file at EMA office.
- 2. Dissemination of public information will be made from the JPIC via news conferences, interviews, and issuing of news releases. This will serve as the single official point of contact and release of information during emergency situations.
- 3. An agreement with the Emergency Alert System (EAS) does exist. Morgan County is in the Central EAS Operational Planning Area. See Annex C to the Notification & Warning Annex.

B. Specific responsibilities of the PIO and their staff are as follows:

- 1. Coordinate with appropriate officials and EOC representatives for the release.
- 2. Develop and maintain a public information and education program that includes EPI packets prepared in advance and an operational EAS.

3. Provide announcements urging residents to share their homes with evacuees in a disaster.
4. Maintain working relationships with the local media and develop agreements for EPI support.
5. Prepare disseminate materials that describe the health risks associated with each hazard, the appropriate self-help first-aid actions, and other appropriate survival measures.
6. Prepare materials for the visually impaired and non-English speaking groups, if appropriate.
7. Prepare instructions for people who must evacuate from high-risk areas. These materials include the following for each threat definition for the population at risk, evacuation routes, suggestions on the types and quantities of clothing, food, medical items, etc. evacuees should take with them, locations of reception/shelters, and safe travel routes for return to residence.
8. Prepare instruction that identifies centrally located staging areas and pick-up points for evacuees without private automobiles or other means of transportation.
9. Prepare instruction for evacuee's use upon arrival in a hosting area, which shows the location of reception centers, shelters, lodging, feeding facilities and medical clinics.
10. Provide for rumor control. Designate personnel and dedicate phone lines to handle inquiries from the public. Make arrangements to keep these personnel up-to-date on the disaster situation through briefings, fact sheets and news releases.
11. Refer inquiries about injured or missing relatives to the Red Cross representative in the EOC.
12. Make arrangements for County Commissioners, Mayor, or Township Trustee and response personnel to speak on television and radio. The PIO will provide news releases to newspapers during all phases of emergency management.

C. Responsibilities of EOC members to PIO:

1. All designated EOC representatives will provide/cooperate in public education with the PIO.
2. All representatives in the activated EOC will verify reports received from the field.

3. The Communications Officer will assist the County PIO with timely information concerning casualties, numbers and types of injuries. This information will be given to the Red Cross for next-of-kin notifications before it is released to the public.

V. DIRECTON AND CONTROL

- A. The JPIC provides for an organized arrangement of public information encompassing emergency personnel, facilities, equipment and procedures involved in providing accurate, coordinated and timely instructions and information to the public during an emergency/disaster.
- B. All organizations involved in emergency response and recovery and having requirements to release information to the media will cooperate with JPIC procedures set up by the Morgan County PIO.
- C. The Morgan County PIO manages the activities at the JPIC in coordination with the Emergency Management Director in the EOC. At the emergency, the PIO will coordinate with the Incident Commander.

VI. CONTINUITY OF GOVERNMENT

- A. The line of succession for the County PIO is as follows:
 1. Morgan County Commissioner
- B. Refer to Tab 2, Continuity of Government (COG) Public Awareness Program to this annex. Also, refer to Tab 11, Procedures for the Relocation & Safeguarding of Vital Records in the Basic Plan and Tab 3, Procedures for the Protection of Government Resources, Facilities, and Personnel in Annex N, Resource Management.

VII. ADMINISTRATION AND LOGISTICS

- A. All press releases will be reviewed by the County Commissioner, Mayors, Township Trustees, EMA Director and Prosecutor before they are released. Timely dissemination is essential.
- B. Copies of all press releases will be maintained on file at Morgan County EMA.
- C. When the EOC is activated, the County PIO on duty will keep a log listing all media contacts made, press releases issued and any other major PIO functions accomplished during their 12-hour shift. This report will be given to the Morgan County EMA and a copy to the new County PIO coming on-duty at the end of the shift. The new County PIO should be briefed on activities and needs for the next 12-hour shift.
- D. The County PIO will log all incoming and outgoing messages and provide the information to the activated EOC.

- E. PIOs from State, Federal and private sector organizations will coordinate information for release to the public. Such information includes but is not limited to health risks related to the hazard, type and availability of assistance, geographic, geological, meteorological and demographic information related to population protection.

VIII. PLAN DEVELOPMENT AND MAINTENANCE

- A. The Morgan County PIO in cooperation with the Morgan County Emergency Management Director is responsible for updating this annex based on deficiencies identified through exercises and changes in government structure and emergency organizations.
- B. The Morgan County PIO in cooperation with the Morgan County Emergency Management Director will prepare, coordinate, publish and distribute necessary changes and revisions to this annex.
- C. The Morgan County Emergency Management Director will forward all changes to the appropriate organizations.
- D. The Morgan County PIO will coordinate with JPIC representatives (industry representatives, media representatives, response organizations, appropriate state and federal organizations and private organizations) for the development of Standard Operating Procedures (SOP) that detail assigned responsibilities.

IX. AUTHORITIES AND REFERENCES

- A. Authorities
See Section IX.A. of the Basic Plan.
- B. References
See Section IX.B. of the Basic Plan.

X. ADDENDUMS

Tab 1 – Media Resources

Tab 2 – Continuity of Government – Public Awareness Program

Tab 3 – PIO Organizational Chart

Tab 4 – Media Access Standard Operating Procedures

Appendix 1 – Suggested Citizen Instructions – Chemical Accidents

Appendix 2 – Floods

Appendix 3 – Tornados

- Appendix 4 – Winter Storms
- Appendix 5 – Nuclear Attack
- Appendix 6 – Riots/Civil Disturbances
- Appendix 7 – Energy Shortages
- Appendix 8 – Structure Fire and Explosions
- Appendix 9 – Drought/Extreme Heat
- Appendix 10 – Severe Thunderstorms/Lightening
- Appendix 11 – Earthquakes

XI. AUTHENTICATION

04/02/04

Keith Spare

Date

Morgan County Public Information Officer

MEDIA RESOURCES IN MORGAN COUNTY AND SURROUNDING JURISDICTIONS

NEWSPAPERS

Marietta Times (Daily), 700 Channel Lane, Marietta, OH 45750
Zanesville Times Recorder (Daily), 34 S. 4th Street, Zanesville, OH 43701
Athens Messenger (Daily), St. Rt. 33 & Johnson Road, Athens, OH 45701
Morgan County Herald (Weekly), 89 West Main Street, McConnelsville, OH 43756

***RADIO STATIONS**

WJAW-FM (100.9), 925 Lancaster Street, Marietta, OH 45750
WWJM-FM (106.3), 210 South Jackson Street, New Lexington, OH 43764
WHIZ-AM/FM (102.1), 629 Downard Road, Zanesville, OH 43701

TELEVISION FACILITIES

Adelphia Cable (Serving Malta, McConnelsville, Stockport, Rokeby Lock, Eagleport, and Neelyville)
WHIZ-TV, Channel 18, 629 Downard Road, Zanesville, OH 43701
WTAP-TV, Channel 15, 1 Television Plaza, Parkersburg, WV 26101
WOUB TV, Channel 20, 9 South College Street, Athens, OH 45701

EMERGENCY BROADCAST STATIONS

WJAW-FM (100.9), 925 Lancaster Street, Marietta, OH 45750
WCOL-AM/FM (1230/92.3), 195 East Broad Street, Columbus, OH 43215
WTVN-AM (610) WLVQ-FM (96.3), 1301 Dublin Road, Columbus, OH 43215
WHIZ-AM/FM (1240/102.5), 629 Downard Road, Zanesville, OH 43701
WATH-AM (970) WXTQ-FM (105.5), 300 North Columbus Road, Athens, OH 45701
WOUB-AM/FM (1340/91.2), 9 South College, Ohio University, Athens, OH 45701
WBRJ-AM (910) WEYQ-FM (94.3), 1 PA Avenue, Marietta, OH 45750
WCLT-AM/FM (1430/100.3), 674 Jackson Road, Newark, OH 43055

NOTE: * Supplementary stations, when instructed by FCC Emergency Action Notification, will suspend normal operation after notifying the public to tune to the EAS station serving designated areas.

SPECIAL INSTRUCTIONS FOR TAB 2 AND APPENDICES 1-11 TO ANNEX B

The following Tab & Appendices should be distributed prior to an emergency, i.e., Public Awareness Program, Suggested Citizen Instructions, etc.

CONTINUITY OF GOVERNMENT (COG) FOR PUBLIC AWARENESS PROGRAMS

A. General Information

Catastrophic disaster events can interrupt, paralyze, and destroy the ability of the federal, state, or local governments to carry out their executive, legislative, and judicial functions. Therefore, it is imperative that each level of government build a Continuity of Government capability to preserve, maintain, and/or reconstitute its ability to function under the threat or occurrence of any emergency that could disrupt government operations and services.

The overall purpose of the COG is to preserve lawful leadership and authority; prevent unlawful assumption of authority; preserve vital government documents; assure that systems that are necessary are in place prior to the crisis; and assure that government services that are essential to the continued welfare of the public can be delivered during an emergency.

B. What does the COG Program mean to you as a citizen?

1. It means security for you and your family because lawful government, with the protection of democratic rights, will be assured under emergency situations.
2. It means that every effort during an emergency you shall continue to be provided with the information, direction, and services such as emergency police and fire protection, emergency public information, water, power, shelter, etc. that are normally provided by government.

C. What are the elements of the COG Program?

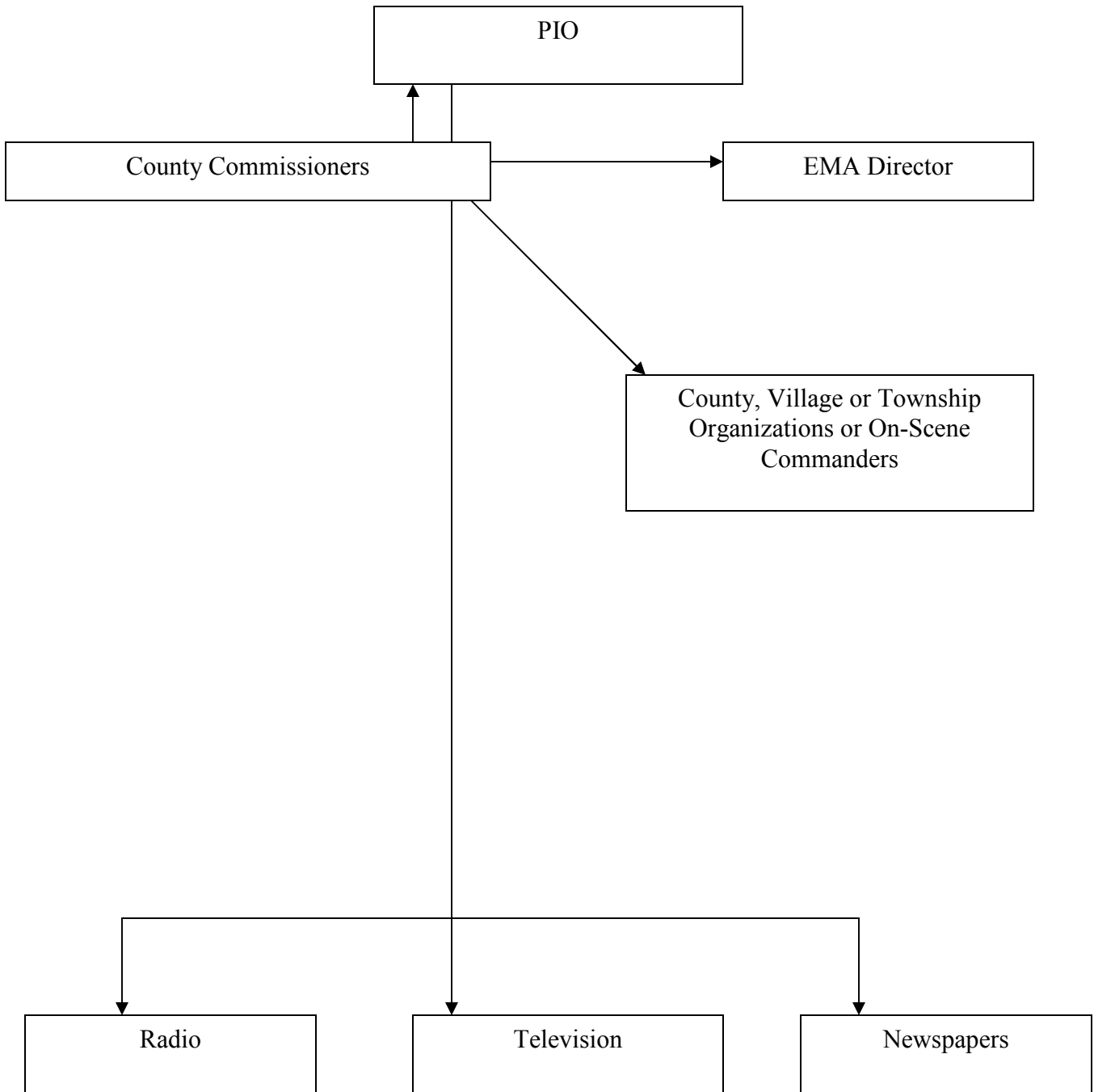
The foundation for the COG program rests on the achievement of a seven-point course of preparedness and planning actions that were outlined in 1969 in Executive Order 11490 as actions for the Federal government. There were reaffirmed under Section 202, Continuity of Essential Functions, in the May 1988 proposed replacement for E.O. 11490. These seven actions which have been adapted for programs of State and local COG include the following:

1. Succession – the process that is established to list the order or line of those entitled to succeed one another under emergency conditions.
2. Predelegation of Emergency Authorities – the process that is established to allow specific emergency-related legal authorities to be exercised by the elected or appointed leadership or their designated successors.
3. Emergency Action Steps – those actions that facilitate the ability of government personnel to respond quickly and efficiently to emergencies.
4. Emergency Operating Centers (EOCs) – a government owned facility from which all emergency efforts can be coordinated and directed.

5. Alternate Emergency Operating Centers (AEOC) – a government owned facility that can be used to coordinate and direct all government emergency response efforts if the primary EOC facility is not available during emergencies. The facility also houses key government officials that are forced to evacuate from the primary EOC or the primary EOC is not centrally located.
6. Safeguarding Essential Records – the measures that are taken by government to protect those documents that the government must have to continue functioning during emergency conditions and to protect the rights and interest of citizens after the emergency is over.
7. Protection of Government Resources Facilities and Personnel – the measures that are taken to disperse resources, facilities, and personnel in a manner that will facilitate sufficient redundancy to ensure government can continue to function during emergency conditions.

The COG program is of critical importance to all three levels at government: Local, State and Federal. All three levels of Government share the Constitutional responsibility for the preservation of the life and property of the citizenry.

PIO ORGANIZATIONAL CHART



MEDIA ACCESS STANDARD OPERATING PROCEDURES (SOP)

I. INTRODUCTION

This SOP recognizes that during a disaster it is important to provide people with prompt and accurate information to lessen their anxiety about the involvement of friends and family. The news media is instrumental in reducing inquiries to disaster response agencies. Efforts should be made to cooperate with the media in providing information and access to the response scene, when feasible. The right of the news media to inform the public must be recognized.

II. PURPOSE

This purpose of this SOP is to set policy for providing information to the public and equal access to certified representatives of legitimate news media during emergencies.

III. CONCEPT OF OPERATIONS

A. The following types of information will be provided to the public promptly, in as much detail as possible:

1. Nature of disaster
2. Location of disaster
3. Time of disaster
4. Number of casualties (if applicable)
5. Identification, age, sex, address of casualties. (*Only After Notification of Next of Kin.*)
6. Nature and severity of injuries.
7. Condition of casualties.
8. Agencies involved in response.
9. Scope of agency involvement.
10. All Government agencies and private organizations involved.

B. While it is recognized that response personnel are responsible for protecting life and property and will be under physical and mental stress, it is also recognized that certified representatives of the news media should have every opportunity for equal access to the disaster response scene and to interview personnel when feasible.

IV. COLLECTION AND DISSEMINATION OF INFORMATION

The types of information outlined above will be collected and disseminated promptly by the appropriate personnel as follows:

- A. Incident commander or officer-in-charge, or a representative, will forward the Public Information Officer with a timely evaluation of the disaster, to be followed by additional details as they become available.
- B. Sheriff and/or Coroner personnel will be responsible for rapidly collecting information concerning casualties, notifying next of kin and disseminating this information to the EOC.

- C. Public Information Officer will be responsible for collecting information from the forward command post, hospitals, and other sources and agencies, for disseminating this to the news media, preparing news releases, and, where appropriate, making announcements to the public by radio and/or television hookups.

V. ACCESS FOR NEWS MEDIA REPRESENTATIVES

In recognizing the public's right to know as much information about a disaster as possible, the response agencies will try to cooperate by allowing representatives of legitimate news media equal access to information and response activity scenes, as appropriate. Conversely, media representatives should cooperate with agency personnel as directed for safety and efficiency. Questionable press activities will be referred to the PIO for disposition.

- A. Incident Commander (IC) or officer-in-charge, or a representative, will allow access when consistent with safety and efficiency. Although on-scene access will be limited depending on conditions, the IC or officer-in-charge should use discretion in cooperating with media representatives.
- B. Hospital/clinic information officer at each hospital/clinic will establish access rules for news media representatives. These may vary with individual circumstances. As a minimum during an emergency medical disaster, each hospital/clinic should recognize certified press identification cards, designate an entrance for news media representatives and provide media representatives with a pressroom or other area with access to telephones consistent with operations.
- C. Public Information Officer will establish rules for media access at the EOC/Scene/JPIC as appropriate to conditions. Unless otherwise specified, media representatives will be governed by the following rules:
 - 1. All news media personnel shall go to the Morgan County Courthouse to a room designated as the Pressroom. They will sign in and be issued press passes/press identification badges. No news media personnel will be allowed near the disaster area without official passes.
 - 2. News media representatives will be considered certified by all agencies involved in disaster response activities if provided with an official emergency management press identification card as issued by the Morgan County Emergency Management Agency and Office of Homeland Security.
 - 3. When the EOC is activated following a declaration of a disaster, media representatives go to an assigned room at the Courthouse.
 - 4. Access to the following restricted areas of the EOC will be allowed only with the permission of the Morgan County EMA and the Public Information Officer.

Media representatives at the disaster scene will promptly follow all requests made by the incident commander.

SUGGESTED CITIZEN INSTRUCTIONS

CHEMICAL ACCIDENTS

A. General Information

The likelihood of a county suffering a major disaster caused by a chemical accident has escalated because of the increase in everyday use of chemicals by all segments of our population as well as the movement of chemicals by all types of transportation.

B. Citizen Cooperation with Authorities

Prompt reporting of a chemical accident is every citizen's responsibility. Local authorities and particularly the emergency services (police, fire, etc.) need factual information upon which to base decisions on how to respond to the accident. For example, they must be able to execute their plan of action for handling the emergency. Authorities must also be able to correctly answer questions from the news media so that erroneous reports are prevented.

A citizen should not spread rumors. If he or she is a witness but not a casualty, he or she should tell the authorities exactly what he or she saw. If not a witness, the citizen should keep posted via radio or TV but not rush to the scene since this causes serious obstructions to the emergency services who are attempting to save lives and property. A citizen at the scene is needlessly exposing his or her self to injury, particularly if chemical reactions take place.

C. Emergency Treatment of Casualties

A citizen may find him or her self administering emergency first aid to a victim of a chemical accident or to him or her self. The treatment described in this section is limited to emergency procedures that anyone can administer. The first-aid measures suggested lean heavily on the use of running water because it is available most anywhere and will remove chemical by solution, dilution, and mechanical action. These measures cover four of the principle types of chemical threats to people; (1) Inhalation; (2) Skin Exposure; (3) Swallowing; and (4) Eye Exposure.

1. Inhalation

- a. Remove person(s) to an uncontaminated atmosphere. If the person(s) has been overcome, do not attempt a rescue without the protection of proper respiratory equipment, preferably some form of self-contained breathing apparatus. Remember, a gas mask does not protect against atmospheric oxygen deficiency, nor is it effective in high concentrations (2 percent volume is the usual limit) of chemical vapors. Remember also that even though a self-contained air supply mask is worn, injury can occur through exposed skin surfaces if the air contaminant is an irritant or can be absorbed through the skin.
- b. Have the person(s) lie down and keep him warm. If breathing is difficult, a sitting position may be more comfortable. If unconscious, see that their tongue does not fall back and obstruct their breathing. If vomiting starts, turn on side or face downward to prevent inhaling vomited material.
- c. If breathing has stopped, shout for help and start any effective means of artificial respiration. Continue until breathing is restored or medical personnel arrives to take charge. An effective means of artificial respiration is one which the rescuer knows best how to perform. Mouth-to-mouth breathing is the most effective method now

known. The back pressure-arm lift method is next most efficient. The Schafer prone-pressure method may also be used.

- d. If breathing becomes difficult or color of the patient becomes blue-gray, check for an obstructed airway. If the airway is clear, oxygen may be given by facemask, but only by someone familiar with the use of the equipment and authorized to do so.
- e. Call a physician as soon as possible or send someone to do this. Make sure the physician knows where he is needed and why he is needed.
- f. Never leave an unconscious person attended.
- g. Never attempt to give an unconscious person anything by mouth.

2. Skin Exposure

- a. Small exposures of the skin should be promptly flooded with water and followed by thorough, gentle scrubbing with soap and water.
- b. Contaminated clothing should be removed and the underlying skin washed with running water followed by soap and water.
- c. If large skin or clothing contact occurs, the person(s) should be hurried to the nearest shower and clothing removed while standing in the shower. The skin should be thoroughly washed with water in the shower followed by gentle scrubbing with soap and water.
- d. Contaminated clothing should not be worn again until laundered.
- e. A physician should see those cases which show skin effects from the exposure or in whom symptoms of systemic illness appear.

3. Swallowing

- a. Cause the victim to vomit as quickly as possible. Having him or her drink a lot of water, then sticking a finger down his or her throat may do this. Another effective means of causing vomiting is to drink a glass of warm water in which a tablespoon of salt has been dissolved. CAUTION: If strong caustic chemicals have been swallowed, vomiting may rupture damaged tissue. Never give an unconscious person anything by mouth.
- b. Call a physician at once.
- c. Keep the victim lying down and keep him or her warm and comfortable.

4. Eye Exposure

- a. Take the victim immediately to the nearest water fountain or other source of clean running water.
- b. Spread the lids with the fingers and allow the water to flood the eye.
- c. Roll the eye about so that the water may contact all eye surfaces.
- d. Continue such emergency washing for 15 minutes.

- e. Take the victims to a first-aid station or to a physician as soon as possible after the emergency washing period is completed.

SUGGESTED CITIZEN INSTRUCTIONS

FLOODS

A. General Information and Definitions

The National Oceanic and Atmospheric Administration, NOAA, through its Weather Service's River Forecast Centers and River District Offices, issues flood forecasts and warnings when rainfall is enough to cause rivers to overflow their banks and when melting snow may combine with rainfall to produce similar effects.

Flood warnings are forecasts of impending floods, and are distributed to the public by radio and television and through local government emergency forces. The warning message tells the expected severity of flooding (minor, moderate, or major), the affected river, and when and where flooding will begin. Careful preparations and prompt response will reduce property loss and ensure personal safety.

Flash flood warnings are the most urgent type of flood warning issued, and are also transmitted to the public over radio, television and by other signals (e.g., sirens) established by local government to meet local needs.

Flood Watch-conditions are favorable for a flood.

Flood Warning-take action to protect life and property.

Flash Flood Watch-conditions are favorable for a flash flood.

Flash Flood Warning-take action to protect life and property from flash flooding.

B. Local Government Instruction

Area radio and television stations usually broadcast the latest flood information and warnings. However, local government will give more specific advice and instructions over local stations, preferably by the County Commissioners, Mayors, Township Trustees, EMA Director or the PIO or his public information representative. Turn to local radio stations for up-to-date information.

C. Suggested Flood Safety Instructions for Citizens

1. Before the flood:

- a. Find out how many feet your property is above or below possible flood levels so when predicted flood levels are broadcast, you can determine if you may be flooded. This information may be obtained from your Flood Plain Manager. Also ask for the location of the nearest safe area.
- b. Keep a stock of food, which requires little cooking and no refrigeration; electric power may be interrupted.
- c. Keep a portable radio with batteries, emergency cooking equipment, lights, and flashlights in working order.
- d. Keep first aid and critical medical supplies (prescriptions, insulin, etc.) on hand.
- e. Keep your automobile fueled; if electric power is cut off, filling stations may not be able to operate pumps for several days.
- f. Keep materials like sandbags, plywood, plastic sheeting, and lumber handy for emergency waterproofing.

2. When you receive a flood warning:

- a. Store drinking water in closed, clean containers. Water service may be interrupted.

- b. If flooding is likely, and time permits, move essential items and furniture to upper floors of your house.
- c. If forced or advised to leave your home, move to a safe area before access is cut off by floodwater.
- d. Cut off all electrical circuits at the fuse panel or disconnect switch. If this is not possible, turn off or disconnect all electrical appliances. Shut off the water service and gas valves in your home.

3. During the flood:

- a. Avoid areas subject to sudden flooding.
- b. Do not attempt to cross a flowing stream where water is above your knees.
- c. Do not attempt to drive over a flooded road. You can be stranded and trapped.
- d. If your vehicle stalls, abandon it immediately and seek higher ground. Many people drown while trying to rescue their car.

4. After the flood:

- a. Do not use fresh food that has come in contact with floodwaters.
- b. Test drinking water for portability; wells should be pumped out and water tested before drinking.
- c. Do not visit disaster area; your presence will probably hamper rescue and other emergency operations.
- d. Do not handle live electrical equipment in wet areas; electrical equipment should be checked and dried before returning to service.
- e. Use flashlights, not lanterns or torches, to examine buildings; flammables may be inside.
- f. Report broken utility lines to police, fire or other appropriate authorities.
- g. Keep tuned to your radio or TV stations for advice and instructions of your local government on:
 - (1) Where to go to obtain necessary medical care in your area.
 - (2) Where to go for emergency assistance such as housing, clothing, food, financial assistance, etc.
 - (3) Ways to help yourself and your community recover from the emergency.

SUGGESTED CITIZENS INSTRUCTIONS

TORNADOS/SEVERE THUNDERSTORMS

A. General Information

The tornado is a violent local storm with whirling winds of tremendous speed. It appears as a revolving, funnel-shaped cloud, which extends downward the ground from the base of the thundercloud. It varies from gray to black in color. The tornado spins like a top and may sound like the roaring of an airplane or locomotive. These small short-lived storms are the most violent of all atmospheric phenomena and over a small area, the most destructive.

TORNADO WATCH – means tornadoes are expected to develop.

TORNADO WARNING – means a tornado has actually been sighted or indicated on radar.

SEVERE THUNDERSTORM WATCH – means severe thunderstorms are expected to develop.

SEVERE THUNDERSTORM WARNING – means a severe thunderstorm has actually been sighted or spotted on radar.

B. Warnings

The National Weather Service issues severe weather warnings to the public over radio and TV stations. Sirens will also be used to notify county residents of a tornado warning.

C. Actions

Knowing what to do when a tornado is approaching may mean the difference between life and death. If you see any revolving, funnel-shaped clouds on a cloudy day report them by telephone immediately to the local police department, sheriff's office, or National Weather Service Office. But do not use the phone to get information and advice. Depend on radio or TV as indicated above.

D. Tornado Safety Rules

1. When a TORNADO WATCH is announced:

- a. Keep your radio or television on and listen for the latest Weather Service warnings and advisories. If power fails, use a portable battery radio or your car radio.
- b. Keep watching the sky, especially to the south and southwest.

2. When a TORNADO WARNING is announced:

- a. Your best protection is an underground area/shelter or cave, or a substantial steel-framed or reinforced concrete building. (If none is available, take refuge in other places as indicated below.)
- b. If your home has no basement, take cover under heavy furniture on the ground floor in the central part of the house, or in a small room *on* the ground floor that is away from outside walls and windows. The bathroom may also be a safe location since the fixtures are firmly connected and can protect you from flying debris. (As a last resort, go outside to a nearby ditch, excavation, culvert or ravine.)
- c. Door and windows on the sides of your house away from the tornado may be left open to help reduce damage to the building, but stay away from them to avoid

- flying debris.
- d. Do not remain in a trailer, recreational vehicle or mobile home if a tornado is approaching. Take cover elsewhere immediately.
- e. If advised that you are likely to be in the path of a tornado, and if time permits, electricity and fuel lines should be cut off.
- f. If you are outside in open country, drive away from the tornado's path, at a right angle to it. If there isn't time to do this-or if you are walking-take cover and lie flat in the nearest depression, such as a ditch, culvert, excavation, or ravine.
- g. SCHOOLS – If the school building is of good steel reinforced construction, stay inside away from the windows and remain near an inside wall on the lower floor if possible.
- h. AVOID AUDITORIUMS AND GYMNASIUMS with large, unsupported roof spans.
- i. In rural schools that do not have reinforced construction, move school children and teachers to areas providing best available protection within the building, if storm shelters are not available.
- j. FACTORIES AND INDUSTRIAL PLANTS – When possible shut off electrical circuits and fuel lines if tornadoes approach plant. Workers should be moved to sections offering the best possible protection, in accordance with advance plans.
- k. SHOPPING CENTERS – Go to a designed shelter area (NOT to your parked car.)
- l. OFFICE BUILDINGS – Go to an interior hallway on the lowest floor, or to a designated shelter area. Stay away from windows.

E. The following are examples of Announcements Concerning Safety Measures After the Passage of the Tornado.

1. Use extreme caution in entering or working in buildings that may have been damaged or weakened by the disaster, as they may collapse without warning. Also, there may be gas leaks or electrical short circuits.
2. Don't take lanterns, torches or lighted cigarettes into buildings that have been damaged by a natural disaster, since there may be leaking gas lines or flammable material present.
3. Stay away from fallen or damaged electric wires – they may still be dangerous.
4. Check for leaking gas pipes in your home. Do this by smell – don't use matches or candles. If you smell gas, do this: (1) Open all windows and doors; (2) Turn off the main gas valve at the meter; (3) Leave the home immediately; (4) Notify the gas company or the police or fire department; (5) Don't re-enter the house until you are told it is safe to do so.
5. If any of your electrical appliances are wet, first turn off the main power switch in your house, then unplug the wet appliance, dry it out, reconnect it, and finally, turn on the main power switch. (Caution: Don't do any of these things while you are wet or standing in water.) If fuses blow when the electric power is restored, turn off the main power switch immediately and inspect for short circuits in your home wiring, appliances and equipment.
6. Check your food and water supplies before using them. Foods that require refrigeration may be spoiled if electric power has been off for some time. (additional information will be provided during the emergency.)

7. Stay away from disaster areas. Sightseeing could interfere with first aid or rescue work and may be dangerous as well.
8. Don't drive unless necessary, and if you must, drive with caution. Watch for hazards to yourself and others, and report them to local police or fire departments.
9. Report broken sewer or water mains to the Water Department.
10. Keep tuned to your radio or TV stations for advice and instructions of your local government on:
 - a. Where to go to obtain necessary medical care in your area.
 - b. Where to go for necessary emergency assistance for housing, clothing, food, financial assistance, etc.
 - c. Ways to help yourself and your community recover from the emergency.

SUGGESTED CITIZEN INSTRUCTIONS

WINTER STORMS

A. **Warning Responsibility**

The National Weather Service is responsible for the timely issuance of weather warnings to the public, including the approach of winter storms.

B. **Definitions**

Ice Storm – Freezing rain or drizzle is called an ice storm. Moisture falls in liquid form but freezes upon impact. The term “heavy” is used to indicate an ice coating sufficiently heavy to cause significant damage to trees, overhead wires, and similar objects.

Snow – “Snow” is a forecast, without a qualifying word such as “occasional” or “intermittent,” means that the fall of snow is of a steady nature and will probably continue for several hours without letup.

“Heavy snow warnings” – are issued to the public when a fall of four inches or more is expected in a 12-hour period, or a fall of six inches or more is expected in a 24-hour period. Some variations on these rules may be used in different parts of the country. Where four-inch snowfalls are common, the emphasis on heavy snow is generally associated with six or more inches of snow. In other parts of the county where heavy snow is infrequent, or in metropolitan areas with heavy traffic, a snowfall of two or three inches will justify a heavy snow warning.

“Snow Flurries” – are defined as snow falling for short durations at intermittent periods; however, a snowfall during the flurries may reduce visibility to an eighth of a mile or less. Accumulations from snow flurries are generally small.

“Snow squalls” – are brief, intense falls of snow and are comparable to summer rain showers. They are accompanied by gusty surface winds.

“Blowing and drifting snows” – generally occur together and result from strong winds and falling snow or loose snow on the ground. “Blowing snow” is defined as snow lifted from the surface by the wind and blown about to a degree that horizontal visibility is greatly restricted.

LEVEL 1 – Roads are hazardous with blowing and drifting snow. Icy roads. Drive cautiously.

LEVEL 2 – Roads are hazardous with blowing and drifting snow. Those who feel it is necessary to drive should be on roads. Contact employer to see if you are needed.

LEVEL 3 – All roads are closed to non-emergency personnel. No one on roads unless it is absolutely necessary to travel. Contact your employer to see if you are needed. Those traveling on roads are subject to prosecution.

“Drifting snow” – is used in forecasts to indicate that strong winds will blow falling snow or loose snow on the ground into significant drifts. In the northern plains, the combination of blowing and drifting snow, after a substantial snowfall has ended, is often referred to as “ground blizzard.”

“Blizzards” - are the most dramatic and perilous of all winter storms, characterized by low temperatures and by strong winds bearing large amounts of snow. Most of the snow accompanying a blizzard is in the form of fine, powdery particles of snow, which are whipped in

such great quantities that at time, visibility is only a few yards.

“Blizzard warnings” – are issued when winds with speeds of at least 35 mph are accompanied by considerable falling or blowing snow and temperatures of 20 degrees F or lower are expected to prevail for an extended period of time.

“Severe blizzard warnings” – are issued when blizzards of extreme proportions are expected and indicate wind with speeds of at least 45 mph plus a great density of falling or blowing snow and a temperature of 10 degrees F or lower.

A “cold wave warning” – indicates an expected rapid fall in temperature within a 24-hour period, which will require substantially increased protection to agricultural, industrial, commercial, and social activities. The temperature falls and minimum temperatures required to justify cold wave warnings vary with the changing of the season and with geographic location. Regardless of the month or the section of the country, a cold wave warning is a red flag alert to the public that during a forthcoming forecast period a change to very cold weather will require greater than normal protective measures.

“Hazardous Driving (Traveler’s) Warnings” – are issued to indicate that falling, blowing or drifting snow, freezing rain or drizzle, sleet or strong winds will make driving difficult.

“Stockmen’s Warnings” – alert ranchers and farmers that livestock will require protection from a large accumulation of snow or ice, a rapid drop in temperature or strong winds.

Wind Chill Factor – Strong winds combined with low temperatures cause a very rapid cooling of exposed surfaces. Unprotected portions of the body, such as the face or hands, can chill rapidly and should be protected as much as possible from the cold wind. A very strong wind combined with a temperature slightly below freezing can have the same chilling effect as temperature nearly 50 degrees F lower in a calm atmosphere. Arctic explorers and military experts have developed a term called the “wind chill factor,” which states the cooling effect of various wind and temperature combinations. In certain areas, the Weather Service issues this information as the “wind chill index.” The following descriptive scale compares a 20-degree F temperature with different wind speeds.

Wind with Temperatures 20 Degree F	Wind-Chill Index (Equivalent Temperatures)	Forecast Descriptive Terms
10 mph	2 Degrees F	Very Cold
20 mph	-9 Degrees F	Bitter Cold
35 mph	-20 Degrees F	Extreme Cold

Winter Storm Safety Rules – Keep ahead of a winter storm by listening to the latest National Weather Service warning and bulletins on radio and television.

Check battery powered equipment before the storm arrives. A portable radio or television set may be your only contact with the world outside the winter storm. Also check emergency cooking facilities and flashlights.

Check your supply of heating fuel. Fuel carriers may not be able to move if a winter storm buries your area in snow.

Check your food and stock an extra supply. Your supplies should include food that requires no cooking or refrigeration in case of power failure.

Prevent fire hazard due to overheated coal or oil-burning stoves, fireplaces, heaters or furnaces.

Stay indoors during storms and cold snaps unless in peak physical condition. If you must go out, avoid over-exertion.

Don't kill yourself shoveling snow. It is extremely hard work for anyone in less than prime physical condition, and can bring on a heart attack, a major cause of death during and after winter storms.

Rural residents: Make necessary trips for supplies before the storm develops or not at all. Arrange for emergency heat supply in case of power failures. Be sure camp stoves and lanterns are filled.

Dress to fit the season – If you spend much time outdoors, wear loose-fitting, lightweight, warm clothing in several layers; layers can be removed to prevent perspiring and subsequent chill. Outer garments should be tightly woven, water repellent and hooded. The hood should protect much of your face and cover your mouth to ensure warm breathing and protect your lungs from the extremely cold air. Remember that entrapped, insulating air, warmed by body heat, is the best protection against cold. Layers of protective clothing are more effective and efficient than single layers of thick clothing, and mittens, snug at the wrists, are better protection than fingered gloves.

Your automobile can be your best friend-or worst enemy-during winter storms, depending on your preparations. Get your car “winterized” before the storm season begins. Everything on the checklist shown below should be taken care of before winter storms strike your areas.

ignition system	lubrication	defroster
battery	tight exhaust system	snow tires installed
lights	heater	chains
cooling system	brakes	antifreeze
fuel system	wiper blades	winter-grade oil

Winter Storm Car Kit – Be equipped for the worst. Carry a winter storm care kit, especially if cross-country travel is anticipated or if you live in the northern states.

The kit should contain blankets or sleeping bags, matches and candles, empty 3-pound coffee can with plastic cover, extra clothing, high-calorie, non-perishable food, compass and road maps, knife, first aid kit, shovel, sack of sand, flashlight or signal light, windshield scraper, booster cables, two tow chains, fire extinguisher, axe, etc.

Winter travel by automobile is serious business. Keep these points in mind, especially for severe storms:

1. If the storm exceeds or even tests your limitations, seek available refuge immediately.
2. Plan your travel and select primary and alternate routes.
3. Check latest weather information on your radio.
4. Try not to travel alone; two or three persons are preferable.
5. Travel in convoy with other vehicles, if possible.
6. Always fill gasoline tank before entering open country, even for a short distance.
7. Drive carefully, defensively.

Trapped by a Blizzard in a vehicle.

Avoid overexertion and exposure. Exertion from attempting to push your car, shoveling heavy drifts, and performing other difficult chores during the strong winds, blinding snow, and bitter cold of a blizzard may cause a heart attack-even for persons in apparently good physical

condition.

Stay in your vehicle. Do not attempt to walk out of a blizzard. Disorientation comes quickly in blowing and drifting snow. Being lost in open country during a blizzard is almost certain death.

Don't panic.

Keep fresh air in your car. Freezing wet snow and wind-driven snow can completely seal the passenger compartment.

Beware the gentle killers: Carbon monoxide and oxygen starvation. Run the motor and heater sparingly, and only with the downwind window open for ventilation.

Exercise by clapping hands and moving arms and legs vigorously from time to time, and do not stay in one position for long.

Turn on dome light at night, to make the vehicle visible to work crews.

Keep watch. Do not permit all occupants of car to sleep at once.

Livestock-Blizzards take a terrible toll in livestock. For both humane and economic reasons, stockmen should take necessary precautions in advance of severe winter storms.

Move livestock, especially young livestock, into sheltered areas (frequently called "shelter belts") properly oriented and laid out. These provide better protection to range cattle than shed-type shelters, which may cause cattle to overcrowd, with consequent overheating and respiratory disorders.

Haul extra feed to feeding areas before the storm arrives. Storm duration is the largest determinant of livestock losses; if the storm lasts more than 48 hours, emergency feed methods are required. Range cattle are hardy and can survive extreme winter weather providing they have some non-confining type of shelter from the wind and are able to feed at frequent intervals.

Autopsies of cattle killed by winter storms have shown the cause of death to be dehydration, not cold or suffocation. Because cattle cannot lick enough snow to satisfy their thirst, stockmen are advised to use heaters in water tanks to provide livestock with water and feed after prolonged exposure to winter storm conditions.

SUGGESTED CITIZENS INSTRUCTIONS

NUCLEAR ATTACK

A. General Information

The first step in preparing for a possible nuclear attack is to understand the hazards you would face if attack should come.

When a nuclear bomb or missile explodes, the main effects produced are intense light (flash), heat, blast, and radiation. The strength of these effects depends on the size and type of the weapon; how far away the explosion is; the weather conditions (sunny or rainy, windy or still); the terrain (whether the ground is flat or hilly); and the height of the explosion (high in the air or near the ground)

In a nuclear attack, people near a nuclear explosion would be killed or seriously injured by the blast, heat, or initial nuclear radiation. People a few miles away would be endangered by the blast, heat, and fires. A high percentage of people in the lighter damage areas would probably survive those hazards, but they could be further endangered by radioactive fallout -

B. Fallout

When a nuclear weapon explodes near the ground, great quantities of pulverized earth and other debris are sucked up into the nuclear cloud. There the radioactive gases produced by the explosion condense on and into this debris, producing radioactive fallout particles, which give off invisible gamma rays similar to x-rays.

Generally, the first 24 hours after fallout begins to settle would be the most dangerous period to a community's residents. The heavier particles falling during that time would still be highly radioactive and give off strong rays. The lighter particles falling later would have lost much of their radiation high in the atmosphere.

It is important to understand that fallout is not a mysterious, invisible or unrecognizable substance that strikes without warning. Fallout particles range in size from those like grains of sand, which can be seen easily, to very small particles that appear as fine dust.

The distribution of fallout particles after a nuclear attack would depend on wind currents, weather conditions, and other factors. No area in the United States could be sure of NOT getting fallout, and it is probable that some fallout particles would be deposited on most of the country.

Areas close to a nuclear explosion might receive fallout within 15-20 minutes, but it might take 5-10 hours or more for the particles to drift down on a community 100 or 200 miles away.

C. Radiation Sickness Caused By Fallout

Fallout arriving within a few hours after a nuclear explosion is highly radioactive. If it collects on the skin in large enough quantities, it can cause burns.

Gamma radiation is the most dangerous kind of fallout radiation because it can penetrate the entire body and cause cell damage to the organs, blood and bones. Enough gamma radiation damage to your body can cause illness or death.

People exposed to fallout radiation do NOT become radioactive and thereby dangerous to other people. Radiation sickness is not contagious or infectious, and one person cannot "catch it" from

another person.

D. Protection from Fallout

There are three major factors involved in protecting yourself from fallout: distance, mass and time.

1. The more distance between you and the fallout particles, the less radiation you will receive.
2. The more heavy, dense materials between you and the fallout particles, the better. Materials such as concrete, bricks, and earth will absorb many of the gamma rays and keep them from reaching you.
3. Fallout radiation decays fairly rapidly. As time passes, the radioactivity in fallout loses its strength. In most cases, the radiation level *would decrease* enough to permit people to leave the shelter within a few days for short periods of time. Even in communities that receive heavy accumulations of fallout particles, people soon might be able to leave shelter for minutes or a few hours at a time in order to perform emergency tasks. In most places, it is unlikely that full time shelter occupancy would be required for more than a week or two. However, unusual weather conditions or an extended period of attack *could* require a longer shelter stay.

E. The Standard Warning Signals

The two “standard” signals that have been adopted in most communities are these:

THE ATTENTION OR ALERT SIGNAL - This is used by some local governments to get the attention of citizens in a time of threatened or impending natural disaster, or some other peacetime emergency. The signal itself is a 3 to 5 minute steady blast on sirens, whistles, horns, or other devices. In most places, the Attention or Alert Signal means that the local government wants to broadcast important information on radio or television concerning a peacetime disaster.

THE ATTACK WARNING SIGNAL - This will be sounded only in case of enemy attack. The signal itself is a 3 to 5 minute wavering sound on the sirens, or a series of short blasts on whistles, horns or other devices, repeated as deemed necessary. The Attack Warning Signal means that an actual enemy attack against the United States has been detected, and that protective action should be taken immediately. This signal has no other meaning, and will be used for no other purpose.

1. If you should hear the Attention or Alert Signal, turn on a radio or TV set, tune it to any local station, and follow the official instructions being broadcast.
2. If you should hear the Attack Warning Signal unless your local government has instructed you otherwise, go immediately to the public fallout shelter or to your home fallout shelter. Turn on a radio; tune it to any local station that is broadcasting, and listen for official information. Follow whatever instructions are given.

F. Evacuation

If an international crisis should threaten to result in a nuclear attack, people living in areas more likely to be nuclear targets may be advised to move temporarily.

These areas are generally considered to be areas with significant military, industrial or economic importance. The designation of such an area does not constitute a prediction that the area will be attacked, but only indicates the potential for attack. The safer areas are outlying small towns and

rural areas.

Many communities now have evacuation plans, which could be used in any type of emergency—from nuclear attack, accident, tornadoes, hazardous materials incidents and terrorism incidents. You should check with your EMA Office for information on plans in your community.

G. Shelters

To-protect themselves from the radiation given off by fallout particles, people in affected areas would have to stay in fallout shelters from two or three days to as long as two weeks. Many people would go to public fallout shelters, while others—through choice or necessity—would take refuge in private or home fallout shelters.

A fallout shelter does not need to be a special type of building or underground bunker. It can be any space, provided the walls and roof are thick and dense enough to absorb the rays given off by the fallout particles outside. (A fallout shelter should not be confused with a blast shelter. Blast protection requires a shelter strong enough to resist blast pressure, initial radiation, heat, and fire as well as radioactive fallout.)

Most of the existing public shelters are located in larger buildings and are marked with the standard yellow and black fallout shelter signs. Other public shelters are in smaller buildings, subways, tunnels, mines and other facilities. These also are marked with shelter signs or would be marked in a time of emergency.

In many places—especially suburban and rural areas—there are few public shelters. If there are none near you, a fallout shelter may save your life.

If your home basement—or one corner of it—is below ground level, your best and easiest action would be to prepare a permanent type family shelter there. If you have basic carpentry or masonry skills, you probably could buy the necessary shielding material and do the work yourself in a short time.

Many materials are suitable for fallout shelter construction, some offering more shielding protection than others. Varying thickness of bagged sand, gravel or earth; bricks; concrete blocks, and wood are all acceptable materials, which are easily accessible to most people.

If you have no basement or would prefer a shelter separate from the house, an outside fallout shelter can be built either above or below ground. Construction plans for Permanent Shelters (H—12 Series) can be obtained by writing FEMA, P O Box 8181, Washington, D.C. 20024 or at <http://www.fema.gov>.

H. Improving Fallout Shelter

If an enemy attack should occur and you have made no advance shelter preparations, you still might be able to improvise a shelter either inside or near your home or in the open. In an emergency, radio broadcasts will tell you whether you have time to improvise a shelter or should take cover immediately.

An improvised shelter probably would not give you as much protection as a permanent or a pre-planned family shelter, but any protection is better than none and might save your life. The best place to improvise a shelter would be in a basement or other underground area.

I. Shielding Material Needed

To improvise a shelter you would need shielding materials such as concrete blocks, bricks, sand or earth. Other things could also be used as shielding material or to support shielding material, such as:

- House doors that have been taken off their hinges (especially heavy outside doors)
- Dressers and chests (fill the drawers with sand or earth after they are placed in position, so they won't be too heavy to carry and won't collapse while being carried)
- Trunks, boxes and cartons (fill them with sand or earth after they are placed in position)
- Books, magazines and stacks of firewood or lumber
- Flagstones from outside walks or patios

J. Improvising a Basement Shelter

Set up a large, sturdy table or workbench in the corner of your basement that is most below ground level.

On the table, pile as much shielding material as it will hold without collapsing. Then put as much shielding material around the table as possible.

When family members are "inside the shelter" - that is, under the table-block the opening with other shielding material.

If a large table or workbench is not available, or if more shelter space is needed, place furniture or large appliances in a corner of the basement to serve as the "walls" of the shelter. As a "ceiling," use doors from the house that have been taken off hinges. Pile as much shielding material on top of the doors as they will support. Stack other shielding material around the "walls" of the shelter.

When all persons are inside the shelter, block the opening with shielding material.

K. Using a Storm Cellar for Fallout Protection

A below ground storm cellar can be used as an improvised fallout shelter, but additional shielding material may be needed to provide adequate protection from fallout radiation.

If the existing roof of the storm cellar is made of wood or other light material, it should be covered with one foot or more of earth or an equivalent thickness of other shielding material for overhead shielding from fallout. The greater the thickness of shielding materials, the lower the danger to radiation exposure in the shelter. More posts or braces may be needed to support the extra weight.

After the roof has been shielded, better protection can be provided by blocking the entrance way with 8-inch concrete blocks or an equivalent thickness of sandbags, bricks, earth or other shielding material after all occupants are inside the shelter.

L. Using Crawl Space

Some homes without a basement have a "crawl space" between the first floor and the ground underneath the house. If you have this space under your house-and if the house is set on foundation walls, rather than on pillars-you can improvise fallout protection for your family there.

First, gain access to the crawl space through the floor or through the outside foundation wall. (A trap door or other entry could be made now, before an emergency occurs.)

As the location for your shelter, select a crawl space area that is under the center of the house, as far away from the outside foundation walls as possible.

Around the selected shelter area, place shielding material-preferably bricks or blocks, or containers filled with sand or earth-from the ground level up to the first floor of the house, so that the shielding material forms the “walls” of your shelter area. On the floor above, place other shielding material to form a “roof” for the shelter area.

If time permits, dig out more earth and make the shelter area deeper, so you can stand erect or at least sit up in it.

M. Living in a Shelter

People gathered in public and private shelters to escape fallout radiation after a nuclear attack might have to stay there-at least part of the time-for up to two weeks.

During this time they would need certain supplies and equipment in order to stay alive and well and to cope with emergency situations that might occur in their shelters.

To augment the supplies of water and food that may be found in or near large structures where public fallout shelter is usually located, you should plan to take the following with you:

- As much drinkable liquids (water, fruit and vegetable juices, etc.) and ready-to-eat food as you can carry to the shelter
- Special medicines or foods required by members of your family, such as insulin, heart tablets, dietetic foods or baby food
- A blanket for each family member
- A battery-powered radio, flashlight, extra batteries for each, and writing materials for taking notes or information given over the radio
- Non-prescription medications, basic first aid items such as bandages, antiseptics, thermometer, baking soda, petroleum jelly, and medications for headaches, waste elimination problems, and respiratory symptoms.
- Ready-to-eat food from home to supplement any supplies stocked in the shelter
- Drinking cups and plastic jugs of water

If you intend to use a home fallout shelter, you should gather together now all the things you and your family would need for two weeks, even though you probably wouldn't have to remain inside the shelter for the entire period.

The absolute necessities you would need in a home shelter include water, food, sanitation supplies, and any special medicines or foods needed by family members such as insulin, heart tablets, dietetic food and baby food.

Other items you may wish to stock are:

Cooking and eating utensils

Clothing

Bedding

Fire Fighting Equipment

General Equipment and Tools

Miscellaneous Items such as matches, candles and personal convenience items

SUGGESTED CITIZEN INSTRUCTIONS

ENERGY SHORTAGES

A. General Information

Energy shortages occur when there is not enough of a vital resource to meet the demand. The shortages that affect most people directly are those of food, water, petroleum products, or electricity.

B. Local Government Instruction

Area radio, TV, and newspapers will broadcast information about energy shortages when they occur. They will recommend conservation practices and sources available for special assistance.

C. Suggestions

1. Before Shortage

- a. Personal conservation measures are the surest method of avoiding shortages. Conservation measures are listed by power companies and government.
- b. Reduce your dependency on a single resource. Consider alternate courses, i.e., alternate heat source, car pool, and public transportation, plant a garden, etc.
- c. Plan for emergency conservation before shortages occur.
- d. Keep a supply of emergency food, water, and medicine.
- e. Stock wood or other fuel, if you have an alternate heat source.
- f. Keep candles, flashlights, portable radio with batteries, and lanterns on hand.
- g. Learn how to sustain yourself on limited supplies.
- h. Protect windows from sun due to heat in the summer months, to keep your home cooler.

2. During Shortage

- a. Remain calm and listen to radio, TV and read the newspaper for information.
- b. During a power outage, food will keep in the refrigerator for two days if door is not opened often.
- c. If heat is lost, go to local shelter. Consult Morgan County EMA for locations.

3. After Shortage

- a. Recovery may be slow, don't hoard supplies.
- b. As supplies become available, take only what you need.
- c. If the shortage caused damage to your home, have the damage assessed and repaired.

D. Citizen Conservation Actions

1. Find out from your electric, gas or local government how to have an "energy audit" made of your home, to show ways of saving energy.
2. Improve insulation. Add enough materials in attic to bring thickness up to six inches. Seal cracks. Install storm doors and windows. Close drapes at night.
3. Save on lighting. Use lower watt bulbs, fluorescent type whenever possible. Turn off lights not in use.
4. Adjust hot water heat to about 105 degrees.

5. Use dishwashers at bedtime instead of peak times of early evening.
6. Purchase energy-efficient appliances.
7. Buy products made from recycled materials.
8. Set heating thermostat at 65 degrees during the day and 60 at night. Set cooling thermostat at 75-80 degrees.
9. Wash clothes in cold water.
10. Minimize the use of hot water generally. Less time in the shower, use full loads in dishwasher.
11. Close off unoccupied rooms and shut off their heat and air conditioning.
12. Clean or replace heat and air conditioning filters often.
13. Keep chimney dampers closed, or block off fireplaces to stop heat from escaping.
14. Practice good car maintenance and driving for best possible gas mileage.

SUGGESTED CITIZEN INSTRUCTIONS

STRUCTURE FIRES AND EXPLOSIONS

A. General Information

A structure fire is a fire in a house or building from human or technical causes. Explosions are rapid and powerful combustion. The threat of fire and explosion exists in every building, and along gas and oil lines. Fire and explosion can be accidental or deliberate.

B. Citizen Instructions

1. Preventive measures
 - a. Participate in Fire Safety Week every October.
 - b. Follow safe building codes when building a home. Buy fire insurance.
 - c. Install smoke detectors, fire extinguishers in home and car.
 - d. Have wiring inspected periodically.
 - e. Be sure wood stoves, if you have any, are installed properly.
 - f. Do not store combustibles in closed areas or near heat.
 - g. Do not carry containers of fuel in a car.
 - h. Prepare and plan escape routes and hold fire drills.
 - i. Install rope or metal ladders for fire escapes, if necessary.
 - j. Keep telephone number of fire department by phone.
 - k. Learn to treat burns.
2. If a fire occurs:
 - a. Report the fire immediately and accurately.
 - b. Contain the fire, if possible.
 - Electrical Fire – do not use water unless electricity is off.
 - Flammable Liquid – if burning, smother it, don't splatter it.
 - c. Stay low in a burning building, heat and smoke rise.
 - d. Be sure of your escape route.
 - e. Check doors before opening. If door is hot, don't open it. If cool open slowly keeping head aside to avoid burns.
 - f. If on fire, stop, drop and roll until fire is out.
 - g. If alarm sounds in a public building, leave immediately; remain calm and do not run. Use stairs or exits, not elevators.
 - h. If the fires or explosions are massive, listen to the radio for directions.
3. After a fire:
 - a. Have damage assessed and repaired, before moving back into your home.
 - b. If necessary, contact Morgan County Human Service, Morgan County Emergency Management Agency and Office of Homeland Security and the Red Cross for shelter and aid. (food, clothing, etc.)

SUGGESTED CITIZEN INSTRUCTIONS

DROUGHT/EXTREME HEAT

A. General Information

A drought occurs when a long period of time passes without any substantial rainfall. Extreme heat is defined as temperatures ten degrees or more above the average high temperature lasting for several weeks.

EXCESSIVE HEAT ADVISORY – is issued when a daytime heat index is expected to reach 105 degrees (F) or above (but less than 115 degrees) for less than 3 hours. Nighttime lows are expected to remain above 80 degrees for 2 consecutive days.

EXCESSIVE HEAT WARNING – daytime heat index reaches 105 degrees (F) and is expected to last more than 3 hours a day for 2 consecutive days or reach 115 degrees (F) for any length or time.

When drought and extreme heat happen at the same time, the conditions can be very dangerous, ranging from heat strain, impairment, strokes, and serious economic losses to the community in water, electricity and agricultural production.

B. Protective Actions

1. Drought

- a. Conserve water throughout the year.
- b. Conserve electricity.
- c. Curtail unnecessary water usage, i.e., watering of lawns.
- d. Reuse water whenever possible.
- e. Consider alternate sources and supplies of water.

2. Extreme Heat

- a. Teach family members to recognize and treat heat impairment symptoms: weariness, headaches, fatigue, nausea, personality changes, and abnormal pulse.
- b. Limit your heat exposure – wear loose-fitting clothing and a hat.
- c. Keep as much skin as possible covered from direct sunlight.
- d. Pace yourself while working and rest regularly.
- e. Drink fluids to replace fluid loss from sweating.
- f. Soak hands and feet in cool water.

SUGGESTED CITIZEN INSTRUCTIONS

SEVERE THUNDERSTORMS/LIGHTNING

A. General Information

Thunderstorms are storms caused by convections, which are comprised of high winds, lightning, and possible hail.

B. Warnings

The National Weather Service issues severe weather warnings to the public over radio and TV stations.

C. Suggested Safety Instructions

1. Preventive Measures

- a. Be aware of what the warnings mean.
- b. Install lightning rods.
- c. Designate a safe area in your home as a shelter. Stock with candles, flashlights, and a battery-operated radio.
- d. Teach family members what to do in a storm if at home, outside, or in a car.

2. During thunderstorms/lightning

Listen to radio or TV for weather information.

a. If Indoors

- (1) Remain indoors and stay away from windows.
- (2) Do not use appliances or the telephone.
- (3) Unplug the TV and appliances.
- (4) If a fire starts, extinguish it.

b. If Outdoors

- (1) Get away from bodies of water.
- (2) Avoid trees, tall objects, and hilltops or flat open areas.
- (3) Avoid unprotected shelters and stay away from fences and wire.
- (4) If in a car, pull off the road, turn on flashers until heavy rain and lightning subsides.

If a person is struck by lightning, get him help immediately; if not breathing, give artificial or cardiopulmonary resuscitation.

Continue to listen for the all clear from the radio; just because the storm eases up does not mean it has completely subsided.

SUGGESTED CITIZEN INSTRUCTIONS

EARTHQUAKES

A. General Information

An earthquake is the shaking or trembling of the crust of the earth, caused by underground volcanic forces or by breaking and shifting of rock beneath the surface. In recent years considerable progress has been made toward developing the science of earthquake predictions, but the ability to make precise predictions of earthquakes does not yet exist.

The actual movement of the earth, frightening as it is, seldom is a direct cause of death or injury. The earth does not yawn open, gulp down a neighborhood, and slam shut. The earth movement, however, can cause buildings and other structure to shake or collapse. Most casualties result from falling objects and debris, splintering glass, and fires.

B. Suggested Earthquake Safety Instructions for Citizens

1. During an earthquake:
 - a. Keep calm. Don't run or panic.
 - b. Stay where you are. If outdoors, stay outdoors. If indoors, stay indoors. Most injuries occur as people are entering or leaving buildings.
 - c. If the earthquake strikes when you are indoors, take cover under a desk, table, bench, or against inside walls or doorways. Stay away from glass, windows, and outside doors.
 - d. Don't use candles, matches, or other open flames either during or after the tremor. Douse all fires.
 - e. If the earthquake catches you outside, move away from buildings and utility wires. Once in the open, stay there until the shaking stops.
 - f. Don't run through or near buildings. The greatest danger from falling debris is just outside doorways and close to outer walls.
 - g. If you are in a moving car, stop as quickly as safety permits, but stay in the vehicle. Avoid stopping near or under buildings, overpasses, and utility wires. When you drive on, watch for hazards created by the earthquake, such as fallen objects, downed electric wires, or broken or undermined roadways.
2. After an earthquake:
 - a. Check for injuries. Do not attempt to move seriously injured persons unless they are in immediate danger or further injury.
 - b. Check utility lines and appliances for damage. If you smell gas, open windows and shut off the main gas valve. Then leave the building and report gas leakage to authorities. Don't re-enter the building until a utility official says it is safe.
 - c. If water pipes are damaged shut off the supply at the main valve. Emergency water may be obtained from such sources as hot water tanks, toilet tanks, and melted ice cubes.
 - d. Check to see that sewage lines are intact before flushing toilets.
 - e. If electrical wiring is shorting out, shut off current at the main box.
 - f. Check chimneys for cracks and damage. Unnoticed damage could lead to a fire. The initial check should be made from a distance. Approach chimneys with great caution.
 - g. Be prepared for additional earthquake shocks.

- h. Stay out of severely damaged buildings. After shocks can shake them down.
- i. Stay off the telephone, except to report an emergency. Turn on your radio or television to get the latest emergency information.
- j. Don't go sightseeing. Respond to requests for assistance from police, fire fighters, and relief organizations, but do not go into damaged areas unless your assistance has been requested.