

# In God's hands ... and ours



## **Disaster preparedness and response**

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**in the Episcopal Diocese of Tennessee**

**2009**

**In God's Hands... and Ours: Disaster Preparedness and Response  
in the Episcopal Diocese of Tennessee**

*Based on materials from Diocese of East Tennessee*

*Sharon Rasmussen, editor*

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# Table of Contents

## SECTION ONE: Overview

Letter from the bishop.....	5
What is a disaster? .....	7
Rescue.....	7
Relief.....	7
Recovery .....	8

## SECTION TWO: Developing a parish response plan

Assemble the team.....	9
Conduct a risk survey .....	11
Cover communications .....	12
Medical and survival.....	16
Property inventory and insurance .....	17
Shut-down and evacuation.....	20
Worship plans, resources .....	23
Parishioner preparedness .....	24
Ready-to-go kits.....	25
Community outreach.....	26
Mitigation.....	26
Plan distribution, updating.....	27

## SECTION THREE: How the diocese can help

Response team .....	29
Response chaplains .....	30

## Immediate Emergency?

*Call your priest:*

Priest's name \_\_\_\_\_

Telephone: Home (H), Work (W) \_\_\_\_\_

Cell (C), Other (O) \_\_\_\_\_

*Call the diocese:*

The Rev. Canon Fred Dettwiller  
615 251-3322, 615 456-4850

*Call local emergency numbers:*

**911: for police, fire or ambulance**

## SUPPLEMENTS

1: Special considerations	
Evacuation .....	S-1
Safety issues.....	S-3
Disaster-related stress .....	S-9
Individuals who have special needs...S-13	
Taking care of animals.....	S-15

## 2: Specific disasters

Winter weather.....	S-17
Extreme heat .....	S-19
Drought or water shortage .....	S-21
Hurricane .....	S-23
Flood .....	S-25
Tornado.....	S-27
Earthquake .....	S-29
Fire .....	S-31
Pandemic.....	S-33
Terrorism or civil unrest .....	S-35
Hazardous material incident .....	S-37
Chemical hazard or attack.....	S-41
Nuclear incident.....	S-43
Nuclear blast .....	S-45

## 3. Sources and resources

For more information.....	S-47
Photography credits .....	S-50

## Document Checklist

*To file with this parish response plan:*

\_\_\_\_\_ Parish roster/directory, including contact information for the parish response team members, the diocese, parish emergency responders, parish neighbors, local media, local government officials and law enforcement (see page 12)

\_\_\_\_\_ Inventory of church property and holdings (see page 17)

\_\_\_\_\_ Blueprint of church facilities marked for locations of first-aid kits, emergency supplies, utility cut-offs, alarm controls, etc. (see page 20)



# Dear Friends

*A letter from the bishop*

All of us should be conscious of the danger and disruption that a natural or man-made disaster can cause. Wildfires in the West or a snowstorm in the Northeast, a toxic waste spill anywhere or the failure of levees in the face of rising water: all pose problems for human community and threaten its well-being. The complexity of human life rests on a fairly fragile base. Natural and artificial disasters often bring environmental hazards to the fore. When these things happen elsewhere, we reach out as we can and continue to remember our neighbors in prayer.

At the same time, we're also conscious that what happens elsewhere can also happen here. Tornados in Nashville, Clarksville, and other places in Middle Tennessee have caused tremendous damage as well as loss of life. My own experience with Hurricane Katrina, which touched off a great societal crisis on the Gulf Coast, has convinced me that "it can happen here."

Though we know the dangers that might arise, and acknowledge the disasters that we cannot predict, Christians have a robust sense of God's providence and his continuing care for us. We prepare for what cannot be scheduled or foreseen because we have confidence in God who works through us to accomplish his perfect will.

The Episcopal Diocese of East Tennessee has graciously allowed us to base this Disaster Preparedness and Response Manual on their own research and information. Much of the information will only be used in case of specific disasters, such as Tornado, Fire, and Flood.

The first section, however, is to help clergy, wardens, and other lay leaders to look ahead and prepare a parish disaster plan. When a disaster happens, the life of the Church continues, and it is essential to have a plan in place for gathering the Christian community and continuing our ministries. Community and outreach will be even more needed in the new context in which we find ourselves. We need a place to begin, and the parish disaster plan represents that beginning.

Leadership is essential for such plan to succeed. We are asking each of the parishes and missions, chapels and mission stations, of the Diocese, to make such a plan, appoint people who will be responsible for the tasks included, and to familiarize yourself with the resources here. We are also asking you to file your plan with your local emergency officials, and with the office of the Diocese of Tennessee.

The time to develop such a plan is before there is a need for it. That time is now. Disaster occurs without much warning. Having your plan in place can save property and lives, safeguarding the life of the Church and the life of the community in which you live.

Yours faithfully,



**The Rt. Rev.  
John C. Bauerschmidt  
Bishop of Tennessee**



# What is a disaster?

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The American Red Cross defines a disaster as an emergency that causes the loss of life and property and a disruption in which survivors cannot manage without spiritual, monetary or physical assistance. A disaster can bring injuries and loss of life; the destruction of property including housing, hospitals, critical facilities, transportation capabilities and businesses and civic disorder.

Disasters and other crises that could require a response in Tennessee include, for example, fire - whether in a building or a wildfire; a hazardous material spill or other transportation accident; a chemical or biological threat; pandemic; a nuclear incident; an earthquake; a terrorist attack; or a riot or other civil unrest. Weather-related crises could strike in the form of extreme heat, drought or water shortage, severe winter weather, tornado, hurricane or flood (see Supplement 2: Specific Disasters, beginning on page S-17).

A disaster creates particularly hazardous conditions for vulnerable people and communities, and the location of a disaster can demand special handling (see Supplement 1: Special considerations, beginning on page S-13).

The American Red Cross has defined the life cycle of a disaster as years, not months, over which time a community progresses through phases of rescue, relief and recovery.

*The American  
Red Cross has  
defined the life  
cycle of a disaster  
as years,  
not months.*

## Rescue

---

In the first phase, the primary task is to save lives and property.

Essential personnel include emergency and law enforcement professionals such as firefighters, police officers, emergency medical technicians and those in the immediate vicinity who are able to call for help and provide first aid.

### **In the parish, clergy and lay leadership will respond as they...**

- **Assemble a team** and implement the parish disaster plan.
- **Communicate with parishioners** and with the larger community via the media.
- **Listen.** Listening can facilitate the process of “meaning making” - the struggle to come to terms with the disaster and its repercussions - and help to discern the needs of those affected, especially those with special needs and those who have lost friends or family members.
- **Plan opportunities for public worship.** This is an act of Christian hope and faith in God at work even in the midst of devastation. Public worship can be instrumental in healing.
- **Pay special attention** to the needs of family and loved ones.
- **Pray.** Practice self-care and maintain awareness of personal emotional state.

## **Relief**

---

The major task in the second phase is to create safe and sanitary conditions for survivors and emergency personnel so that they may alleviate suffering in the aftermath.

Essential personnel in this phase include government and healthcare personnel, relief agencies, law enforcement divisions and faith communities who provide clothing, shelter, health and medical attention to survivors.

### **Parishes will contribute to relief efforts as they...**

- *Mobilize trained response chaplains* to provide spiritual and pastoral assistance.
- *Deploy grief counselors* to help process and alleviate the emotional pain of those suffering loss.
- *Invite parishioners to participate* in recovery efforts.
- *Assess damage* to home, church and community. Contact insurance companies and perhaps an attorney.
- *Maintain communication* with local officials and other clergy, as well as the diocese, and ask for whatever help may be needed.

## **Recovery**

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In the short-term during a major crisis such as a widely experienced weather event, individuals must recognize the need to be initially self-sufficient. A 3- to 7- day supply of food, water and emergency supplies is recommended (see suggested emergency kits on page 25).

Short-term recovery includes the restoration of utilities and services, damage assessment, temporary repairs, feeding, re-establishment of communications, reinforcement of law and beginning the process to replace damaged property.



Over the long term, lives and communities are rebuilt, counseling offers ways to cope with physical, emotional and spiritual needs, and disaster responses are evaluated to develop or reshape strategies for addressing future occurrences.

Government agencies, disaster response agencies, community social service organizations and faith communities will work together cooperatively and collaboratively to foster healing and rebuilding of the community. Re-imagining the future in this phase is an act of hope and courage.

### **The parish may be called upon to...**

- *Assist in grief recovery* and nurturing.
- *Assess short- and long-term needs* of parishioners and community neighbors and match them with the available resources.
- *Continue to offer theologically nuanced sermons* and worship opportunities to assist in “meaning making” and interpretation.
- *Reflect on experiences* and discuss them with community and family. Use insights to revise parish response plans and mitigate future disasters.

# Developing a parish response plan

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Being prepared for a disaster is an important pastoral obligation. By preparing for a disaster, the congregation is demonstrating God's love for its own members and for the surrounding community. The diocese can assist in preparations (see page 29).

## **Assemble the team**

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Crises happen. There's no sure way to avoid one, but the best way to handle a crisis is to ensure a plan is in place and that personnel know the roles they are expected to fill.

In the tension of an emergency, few decisions can be made by committee. The rector, senior or junior warden or other persons should be designated as "in charge." Plan to consult legal counsel should the crisis require it.

*In the tension of an emergency, few decisions can be made by committee.*

### ***Chief decision maker:***

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Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

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Address: Street, Email

### ***Backup decision maker:***

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Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

### ***Backup decision maker:***

---

Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

Appoint a parish response coordinator and committee to arrange and oversee preparedness efforts, communications and the actual response to any emergency or disaster. Involve the building and grounds committee or other group responsible for property. In addition to clergy, participation of the wardens, vestry members and others is not only appropriate, but vital.

***Team Coordinator:***

---

Name / role

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

***Other members / roles:***

---

Name / role

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

---

Name / role

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

---

Name / role

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

---

Name / role

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

The parish response plan should designate a common place for all decision makers to congregate and share information.

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Location of "Control Center"

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Alternate or backup location

## **Conduct a risk survey**

Have the response committee discuss and provide answers to these two risk-survey questions:

*List disasters, crises and emergencies that have occurred locally in the past 10 years:*

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*Discuss the impact of potential disasters by first identifying those that are most likely to occur in the parish and community, including potential areas of vulnerability such as the parish's physical proximity to a river or possible flood source, railroad tracks, airport or other major transportation conduit, nuclear power plant or chemical manufacturer:*

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Brainstorming potential disasters can lead to thinking about the groups of people with whom the parish would need to communicate and what information would need to be included in public statements.



*Discuss the impact of potential disasters by first identifying those that are most likely to occur in the parish and community.*

## Cover communications

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Any parish that has faced a crisis can confirm the necessity of communications in crisis management. Effective internal communications enable a parish to connect with its staff, membership and the larger church, while a plan to communicate externally with media will enable the parish to control the story and its telling.

### Communicate within the parish

Establish a mechanism for reaching all members in the event of an emergency or disaster. What alternative means might be used if telephone lines or cell towers are down? Plan to check on parishioners with special needs at the earliest possible moment.

The early stage of a crisis is not the time to be searching for the parish directory or to discover that a key telephone number is unavailable. A roster of the members and all

contact numbers should be kept up to date; in addition to typical use, it may be needed to identify who was affected or lost in the disaster.

Copies of this directory should be stored in several protected places and in several formats, and a printed copy should be filed with this plan. Include in the list contact information for the parish response team members, the diocese, parish emergency responders, parish neighbors, local media, local government officials, and law enforcement.

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*The early  
stage of a  
crisis is not  
the time to  
be searching  
for the parish  
directory or to  
discover that a  
key telephone  
number is  
unavailable.*

---

Location of “Control Center”

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When roster was last updated

### Communicate with the media

One spokesperson should bear primary responsibility for communicating accurate, timely information to the media. Though the first impulse may be to refuse media access, designating someone to work with reporters is a solution that enables others to go about their work uninterrupted, and it gives the parish control over the story.

Remember also that in some situations, the media may be the only means of getting information beyond the crisis zone. Make sure this person has the latest information about the crisis at all times. Also consider assigning backup responsibility so that breaks may be taken.

#### **Media liaison:**

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Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

### ***Assistant spokespersons:***

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Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

---

Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

Instruct others that if they are not the designated spokesperson and a media representative contacts them, they should record contact information, ask for a response deadline and give assurance that questions will be communicated to the spokesperson.

The designated spokesperson should review the following materials and be ready to deliver the message crafted by the crisis response team.

In a crisis, the team must accept that some of the following points will not be under their control. However, the more the parish is able to control an interview or media conference, the better its message will be communicated.

### **What information will the media want?**

Make the most of the reporters who will be asking the parish spokesperson for information. They are a pipeline to neighbors and members. A firm plan for communications during a crisis will maximize the 24-hour window during which a crisis can be effectively managed. The first statement should be made within two hours if at all possible.

Have the parish response team (or the chief decision maker, coordinator and the spokesperson) prepare answers to the questions of what, who, where and when:

#### **1. What happened?**

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#### **2. Who was involved?**

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#### **3. Where did it occur?**

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#### **4. When did it occur?**

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*Reporters  
are a pipeline to  
neighbors and  
members.*

## **Before talking with the media...**

If possible, choose a face-to-face meeting to minimize potential miscommunication that can occur in a telephone interview. If the reporter wants an immediate interview, request a call-back in 15 or 30 minutes to allow time for some preparation.

- **What are the two key points that should be made?** Focusing on just a couple of ideas will help the parish control the interview.
- **Personal stories are powerful.** Think out a few ahead of time and use them to illustrate key points.
- **Think about the questions the parish hopes won't be asked** - then practice answering them.
- **What is the latest information media outlets have reported about the crisis?** Knowing the facts - and rumors - that already have been made public could have impact on what the parish would say.

*Amid  
the pain and  
suffering of a  
crisis, relate to  
the humanity  
and spirituality  
of the situation  
before talking  
about bricks  
and mortar.*

## **While talking with the media...**

For a TV interview, wear dark, solid-color clothing if possible. Note whether the backdrop is appropriate. Look at the reporter, not the camera. For any medium, interest, energy and responsiveness will improve the interview.

jargon and acronyms. Be honest and don't guess at an answer; it can backfire later.

- **Use "bridge" responses to make the desired point:**  
“No (or yes), but what's important for readers/listeners/viewers is...”  
“Maybe, but the real issue is...”  
“I don't know, but what I do know is...”
- **Never say “no comment.”** It can suggest there is something to hide. Try instead:  
“I don't want to speculate on that.”  
“I don't have an answer on that.”  
“I'll have to think about that. Can I get back to you?”
- **Assume everything that is said may become public.** If asked to “chat” while the cameraman shoots “B” roll (non-interview footage, cutaway shots, etc.) be aware of body language. If a microphone is still present, anything said is fair game.

Ask the spokesperson to keep a record of media interactions, along with the names and contact information of reporters. It will be helpful in later evaluation and future contact needs.

***Dates and times statements were delivered to media representatives:***

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***Reporters' names, employers and contact information:***

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*Assume  
everything  
that is said  
may become  
public.*

**After talking with the media...**

- ***Give contact information*** and encourage follow-up if needed for clarification or more facts. Ask for the reporter's contact information.
- ***Do respect deadlines*** if more information has been promised, and return phone calls promptly.
- ***If a reporter misquotes information*** supplied by the parish, contact him or her directly, but if the error is minor or just not quite the right words, think twice about reopening the conversation.
- ***Don't be overly anxious.*** Move on to the next task.



**How will the parish recover?**

Most crises are followed by a time of rebuilding. What message will need to be communicated to parishioners and the community? The parish response team should plan a schedule of messages to be delivered in a variety of formats such as prayer services, parish meetings, counseling, bulletin and newsletter progress reports and media releases.

***Methods and dates of communication with parish:***

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**How did the plan work?**

As part of the evaluation of the overall parish response plan, review communications and revise the plan for future improvement.

## **Medical and survival**

Identify medical practitioners and other emergency personnel among parishioners. Who has had CPR training or instruction in first aid? Ask an individual to take responsibility for assembling a parish first aid kit (or purchase the “Unitized Industrial First Aid Kit” in a metal or plastic wall-mountable box for 25/50 people from a local American Red Cross chapter). Gather survival supplies and take stock annually (see preparedness kits on page 25).

*Identify  
medical  
practitioners  
and other  
emergency  
personnel  
among  
parishioners.*

***Person responsible for assembling/maintaining first aid kit:***

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

***Identifying characteristics of a first aid kit and where it is stored:***

***Who in the parish is trained in first aid:***

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

***Who in the parish is trained in CPR:***

ADULT CPR: \_\_\_\_\_  
Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

CHILD CPR: \_\_\_\_\_  
Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

INFANT CPR: \_\_\_\_\_  
Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

**Where are survival supplies stored?**

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**Who will assess needs of parish/parishioners for these supplies, and then arrange for the distribution of the supplies?**

---

Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

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Address: Street, Email

## **Property inventory and insurance**

Develop a complete inventory of church property and holdings

- both a written list and a video or photographic record are advisable -  
and update the inventory annually.

Indicate which items should be transported offsite and which  
larger items should be wrapped in waterproof tarps.

Store a copy of these records safely in a second location,  
preferably offsite with copies of other irreplaceable records.

*Develop a  
complete  
inventory of  
church property  
and holdings.*

***Church property and holdings inventory annual review date:***

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***Individual(s) responsible for annual inventory:***

---

Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

***Inventory storage location:***

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***Vital records to be relocated in the event of disaster, where/by whom:***

1. \_\_\_\_\_  
Records

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

2. \_\_\_\_\_  
Records

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

3. \_\_\_\_\_  
Records

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

4. \_\_\_\_\_  
Records

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

Annually review church insurance coverage to determine its adequacy and extent of liability, especially with regard to natural disasters, disasters by human hands and the use of parish facilities in the event of a disaster. Store copies of the review with insurance-policies offsite.

***Offsite location(s) of insurance policy copies:***

\_\_\_\_\_

**Determine beforehand what especially valuable property should be removed for safekeeping if the church facility is threatened, where these items will be taken and who will get them there:**

1.

Valuable church property

Name of person who will relocate it

Telephone: Home (H), Work (W), Cell (C), Other (O)

Address: Street, Email

2.

Valuable church property

Name of person who will relocate it

Telephone: Home (H), Work (W), Cell (C), Other (O)

Address: Street, Email

3.

Valuable church property

Name of person who will relocate it

Telephone: Home (H), Work (W), Cell (C), Other (O)

Address: Street, Email

4.

Valuable church property

Name of person who will relocate it

Telephone: Home (H), Work (W), Cell (C), Other (O)

Address: Street, Email

**Does the church own oversized musical instruments such as a piano or organ, large furniture or other items that will need to be covered with waterproof tarpaulins?**

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*Does the church own large items that will need to be covered with waterproof tarpaulins?*

Determine who will assess church damage when the emergency has passed. Normal procedures involve insurance agents for damage claims. Work with wardens/vestry to designate leaders who will decide means for necessary repairs and/or replacements of damaged property.

***Individual who will contact insurance provider in the event of disaster:***

*On a blueprint,  
mark the  
location of  
"safe spots":  
windowless  
interior  
hallways  
or areas of  
reinforced  
structure.*

---

Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

***Insurance provider:***

---

Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

---

Parish policy number

## **Shut-down and evacuation**

On a blueprint, diagram or drawing of the church facility to be stored with this plan, clearly mark the location of safe spots (windowless interior hallways or areas of reinforced structure), first-aid and survival kits, fire extinguishers, utility cut-offs, building exits, alarm controls and fire-safe storage. Use surge protectors for all major electrical appliances. Consider purchasing a generator.

***Gas shut-down location / who is responsible:***

---

LOCATION: \_\_\_\_\_

---

Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

***Water shut-down location / who is responsible:***

---

LOCATION: \_\_\_\_\_

---

Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

---

Address: Street, Email

***Water shut-down location / who is responsible:***

LOCATION: \_\_\_\_\_

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_



Address: Street, Email \_\_\_\_\_

***Alarm location / who is responsible:***

LOCATION: \_\_\_\_\_

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

***Smoke detector/fire alarm location(s) / who is responsible:***

LOCATION: \_\_\_\_\_

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

***Fire extinguisher location(s) / who is responsible:***

LOCATION: \_\_\_\_\_

Name \_\_\_\_\_

Telephone: Home (H), Work (W), Cell (C), Other (O) \_\_\_\_\_

Address: Street, Email \_\_\_\_\_

***List of appliances and other electrical devices on surge protectors:***

---

---

***If parish has a generator, where is it stored?***

***Fire-safe storage location:***

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**Safe spots:**

---

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**Exits:**

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When community evacuations become necessary, local officials provide information to the public through the media. In some circumstances other warning methods, such as sirens or telephone calls, are also used (see “Evacuation” in Supplement 1: Special Considerations, page S-1).

Formulate plans for evacuation, should it become necessary, of church staff during the week, and on weekends when member traffic is high. These plans should be rehearsed and reviewed on a periodic basis. They also should be shared with community groups that use the parish facilities.



**Last date weekday evacuation plan was rehearsed with staff:**

---

**Last date Sunday evacuation plan was rehearsed:**

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*When  
community  
evacuations  
become  
necessary,  
local officials  
provide  
information  
through the  
media.*

**Community groups / dates they were given evacuation plan:**

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## **Worship plans and resources**

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In the aftermath of a disaster, public worship opportunities should be offered as soon as possible. It is particularly important to hold public worship the Sunday following a disaster, even if it is necessary to secure an alternate location for worship because the church has been damaged or compromised. This is an act of Christian hope that affirms that God is at work even in the midst of destruction.

### ***Location of alternate worship location and last date it was confirmed:***

---

It has been said that liturgy helps when we don't know what to say. Individuals and groups can "center" in the familiar words and be comforted by them.

### **Liturgical resources offered for use in the event of a disaster:**

#### **[Collect]**

O God, our times are in your hand. In the midst of uncertainty lead us by your never-failing grace as we seek to be agents of healing and hope.

Walk with us through difficult times; watch over us in danger; and give to us a spirit of love and compassion for those who suffer and mourn.

And finally remind us that you have promised never to leave us, so that even in the valley of the shadow of death your love may be felt, through Jesus Christ our Lord. *Amen.*

- *The Rev. Lyndon Harris, Diocese of New York*

*It is  
particularly  
important to  
hold public  
worship  
the Sunday  
following a  
disaster, even if  
it is necessary  
to secure  
an alternate  
location.*

#### **[Proper Preface]**

For you, O God, are the source of our hope.

In the midst of trying times, You give us comfort, courage and peace, wiping away tears from every eye, and through the power of the Holy Spirit, You make all things new.

#### **[Suggested readings]**

*Old Testament reading:* Isaiah 61:1-4 (a garland instead of ashes), Psalm 46 or 121

*Epistle:* Romans 8:31-39 (Neither death nor life can separate us from the love of God)

*Gospel:* Luke 10:25-37 (Parable of the Good Samaritan)

*or* Matthew 5:1-10 (Beatitudes)

#### **[“Church-in-a-box”]**

Prepare a “church-in-a-box” kit to use in the event of a disaster. This portable kit contains the basic elements needed for worship away from the church or under makeshift conditions.

## **Parishioner preparedness**

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Encourage parishioners to prepare a plan to protect their family members. The American Red Cross has identified five ways families and individuals can prepare for disasters and other emergencies:

### **Make a Plan**

Meet with family members to discuss possible threats to the residence and the neighborhood. Designate a place to meet if evacuation is necessary, and designate an out-of-town contact to call if the family is separated. Learn how to shut off home utilities and use a fire extinguisher. Consider how pets will be cared for, because most shelters cannot accept animals. Practice emergency drills periodically.

*Encourage  
parishioners  
to prepare a  
plan to protect  
their family  
members.*

### **Build a Kit**

Include enough supplies on which all family members can survive for at least three days. Kits should contain non-perishable food, bottled water, first aid supplies, medications and pet supplies. Especially important are flashlights and a battery operated radio, plus extra batteries for both. Keep supplies in backpacks so they will be quickly available if the family should need to evacuate (see next page for details.)

### **Get Trained**

The Red Cross offers many courses for emergency preparedness, including CPR/First Aid for adults, children and infants - even for pets.

### **Volunteer**

The Red Cross and other service organizations rely on volunteers, particularly following a disaster, and those who have received special training are especially valuable.

### **Give Blood**

The Red Cross always needs blood, but the need becomes acute after a disaster.

## **Ready-to-go-kits**

Each kit is outlined below may be contained in a standard backpack. Packs constructed of 600-denier polyester with water-repellent vinyl backing and padded back straps are advised. Each kit is a starting point. Individuals may want to adjust kit contents depending on the size and projected needs of their own households.

### **[Safety Kit]**

Waterproof flashlight with extended shelf life  
Non-perishable food such as energy bars and canned goods with pop tops  
Emergency drinking water in pouch bottles of still spring water  
Signal whistles  
N95 disposable respirator  
Nitrile protective gloves  
Cotton/leather industrial work gloves with elasticized cuffs  
Heavy plastic sheeting for constructing a makeshift shelter  
Rain poncho with drawstring and visor or hood  
Mylar blanket  
Hand-warmer packet  
Ice pack  
Safety vest  
Reflective arm band  
Multi-function tool (pliers, knife, screw driver, saw, bottle opener)  
Radio/flashlight/compass on lanyard  
Extra radio batteries  
Disposable carbon monoxide detector  
Duct tape  
WD-40 or similar lubricating spray

### **[First Aid Kit]**

Guide to performing basic first aid  
Tweezers  
Bandage strips  
Gauze pads  
Adhesive tape  
Safety pins  
Antiseptic wipes  
Waterless sanitizing wipes  
Alcohol wipes  
Ice pack  
Acetaminophen pain reliever tablets or capsules  
Antihistamines  
Chewable digestive aids  
Mylar blanket

### **[Personal Kit]**

Complete change of clothing, including heavy shoes or boots  
Bible  
Cash  
Extra eyeglasses/contacts  
Particle mask  
Prescription medications  
Bandana or cloth handkerchief  
Sewing kit  
Waterless sanitizing wipes  
Toilet paper  
Travel-sized tissue pack  
Toothbrush  
Travel-sized toothpaste  
Travel-sized body shampoo  
Travel-sized antiperspirant  
Travel-sized feminine hygiene products  
Comb/brush  
Razor  
Nail clippers



*Each kit  
may be  
contained in  
a standard  
backpack.*

### **[Vital Information Kit]**

Zippered vinyl portfolio  
Photocopies of bank, insurance, and employment information, medical records and current prescriptions, family birth certificates, extended family contact information  
Photographs of individual family members  
ID cards  
Waterproof pen  
Note pad with vinyl cover  
Mechanical pencil  
Disposable digital camera

## **Community outreach**

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- **Don't underestimate** the ministry of presence to a stricken community. Consider opening the church as a community center with available clergy on hand to respond to pastoral needs.
- **Consider stocking emergency supplies**, especially water, and arranging to make meals for people in the immediate vicinity.
  - **Encourage parishioners** to become familiar with aspects of relief and recovery in the community, including local helping organizations. The American Red Cross has local chapters, for example, and the ecumenical group National Voluntary Organization Active in Disaster ([www.nvoad.org](http://www.nvoad.org)) has a state chapter and local branches. County governments also usually have emergency management units.
  - **Make a list of parishioners** who are licensed and/or certified in CPR, first aid, life saving, health, law enforcement, fire, and emergency services. Post the list with the emergency phone numbers and include it in the parish plan (see page 16).
  - **Consider certifying** the church facility through the Red Cross as an emergency shelter (shower/bathing/facilities are generally necessary), feeding center or storage space, opening it to serve the community.

*If individuals,  
families, the  
parish and the  
community  
have to travel  
through a  
disaster, try  
to note  
improvements  
that would  
ease the  
process if there  
should be a  
“next time.”*



earthquakes, creating and enforcing effective building codes to protect property from hurricanes - and more.”

It's an important part of recovery to examine and evaluate response to a disaster. The knowledge that is gained may be used to revise a preparedness plan, to make decisions about insurance, construction and communications, and to improve response in case a similar event should occur in the future. If individuals, families, the parish and the community have to travel through the rescue, relief and recovery phase of a disaster, try to note improvements that would ease the process if there should be a “next time.”

## **Mitigation**

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According to The American Red Cross, “direct mitigation consists of the actions and measures that prevent or reduce disaster losses ... The steps are usually taken only once and have long-term effects, thereby reducing the amount of assistance people need time and time again after facing the same disasters over and over.”

The Tennessee Emergency Management Agency Web site defines mitigation as “any step taken to reduce the likelihood of a disaster occurring or, in the event a disaster cannot be prevented, lessening its impact.” It gives as examples of mitigation “keeping homes away from floodplains, engineering bridges to withstand

## **Plan distribution and updating**

Distribute the disaster plan to key lay leadership in the parish. Conduct an experiential exercise as part of the review session with wardens and vestry, which will help them to understand the importance of making and updating this plan for the parish.

When finalized, share the plan with the diocesan response team and with local law enforcement and the local emergency center. Review and update the parish disaster plan once a year (perhaps after vestry elections) and redistribute it with any changes made.

***Parish response plan annual review date:***

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***Date disaster plan was last sent to Diocesan Office:***

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***Date disaster plan was last sent to local law enforcement:***

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***Date disaster plan was last sent to local emergency center:***

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# How the diocese can help

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Just as parishes should give thought to what preparations are necessary while the weather is fair and the world hums along normally, so too must the diocese consider what is needed.

Disasters can and do occur - often without warning. But if the diocese prepares, we can face nearly any disaster backed by knowledge, skill and a network that will quickly and efficiently assess and address needs.

## Response team

A diocesan team has been formed and is available to respond to a disaster occurring anywhere within the diocese. The diocesan response team comprises individuals, both pastoral and administrative, who have been appointed by the bishop and are prepared to coordinate any diocesan response to a disaster.

Should disaster strike, please notify the response team coordinator immediately (see below for diocesan contact information). In the event of a disaster, the response team will be activated to consider and initiate appropriate actions.

### **Activation**

When activated, the response team will meet as soon as possible in a pre-determined location.

### **Assessment**

The team will assess the event and discuss possible responses with the bishop.

### **Implementation**

When the response is determined, the team will confirm and act upon the steps required to implement it.

### **Communication**

The diocesan spokesperson or other designated person will communicate details of the diocesan response throughout the diocese and with governmental and law enforcement contacts and media representatives as appropriate.

### ***Diocesan response team members/roles and how to contact them:***

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*In the event  
of a disaster,  
the diocesan  
response team  
will be activated  
to consider  
and initiate  
appropriate  
actions.*

## **Response team**

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### **What is a response chaplain?**

Response chaplains are clergy, religious or laity who have taken CPE or CISM courses, progressed through a screening interview and disaster preparedness orientation and are certified to respond in the event of a disaster. Invitations to serve as response chaplains will be issued on a periodic basis, and training opportunities will be provided.

*A response chaplain may serve in a family assistance center, in respite centers for uniformed personnel, and after additional screening for suitability, in temporary morgues.*

### **Who can become a response chaplain, and how?**

The opportunity to serve in response to a disaster is open to diocesan clergy, religious and laity. An individual letter of agreement that sets out the terms, conditions and policies under which chaplains will respond will be signed by the approved training agency and the individual response chaplain. There will be an annual refresher course for those involved in this ministry.

All clergy, religious and laity who have an interest in becoming response chaplains are invited to call the Rev. Canon Fred Dettwiler at 615-251-3322.

### **Diocesan policy for response chaplains:**

For urgent and compelling reasons of safety, it is diocesan policy, as well as that of the local emergency management authority, that no clergy are to deploy themselves to the scene of a disaster without proper training and as part of a coordinated disaster response.

### **Where response chaplains serve:**

Response chaplains are not first responders to any emergency or disaster. A response chaplain may serve in a family assistance center, in respite centers for uniformed personnel, and after additional screening for suitability, in temporary morgues.

If a response chaplain is brought onto the actual site of a disaster, he or she must be escorted onto and off the site by uniformed personnel at the uniformed personnel's request, subject to the local emergency management authority's rules.

### **Training course:**

A training course will be offered by an agency that is qualified to train chaplains for disaster response in accordance and conformity with the local emergency management authority's standards of care provided by chaplains across faiths and denominational affiliation. It will provide basic training in how to be with victims, families and members of the uniformed services during and after a disaster, as well as details on how to work as part of an overall response team.

***Certified response chaplains in the Diocese of Tennessee:***

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Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

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Address: Street, Email

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Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

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Address: Street, Email

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Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

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Address: Street, Email

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Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

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Address: Street, Email

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Name

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Telephone: Home (H), Work (W), Cell (C), Other (O)

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Address: Street, Email

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Name

---

Telephone: Home (H), Work (W), Cell (C), Other (O)

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Address: Street, Email



# In God's hands ... and ours



## Supplemental Guides

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Supplement 1: Special Considerations

Supplement 2: Specific Disasters

Supplement 3: Sources and Resources

2009



## Supplement 1: Special Considerations

# Evacuation

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- **Ask the local emergency management office** about community evacuation plans, and learn established evacuation routes. Find out where children will be sent if schools are evacuated.
- **Talk with household members** about the possibility of evacuation. Plan where to go and how to get there if forced to leave the community. If necessary, make transportation arrangements with friends or local government agencies.
- **Plan a place to meet** household members in case they are in different places when an emergency occurs or become separated in a disaster. Ask a friend or family member who lives in another region to be the family's primary contact, and be sure everyone in the household knows to call that person with their condition and location.
- **Assemble a disaster supplies kit.** Include a battery-powered radio, flashlight, extra batteries, food, water and clothing (see the parishioner preparedness kits on page 25).
- **Keep fuel in the car** if a weather-related or other evacuation seems likely. Gas stations may be closed during emergencies, or they may be unable to pump gas if there is an interruption of power.
- **Plan how to secure the house** by closing and locking doors and windows, unplugging appliances and having the tools needed to shut off the house's electricity, gas and water supplies at the main switches and valves.
- **If a hard freeze is likely**, take actions needed to prevent damage to water pipes by freezing weather, including turning off the water main, draining interior faucets and turning off exterior faucets' inside valves.

*Talk with  
household  
members about  
the possibility of  
evacuation.*



## When evacuation becomes necessary

A disaster can strike with little or no warning, providing local authorities scant time to issue an evacuation order. In the absence of evacuation instructions from local authorities, evacuate if danger threatens. Use pre-designated evacuation routes and let others know the final destination.

- **Listen to a battery powered radio** and follow local instructions. If instructions are to evacuate immediately, gather the household and go. If instructions are for staggered evacuation - as preparation for a hurricane, for example - there will be time to gather water, food, clothing, emergency supplies, insurance and financial records.
- **Change into sturdy shoes** and clothing that provides some protection, such as long pants, long-sleeved shirt, jacket and a cap.
- **Turn off** the house's main water valve and electricity if instructed to do so.

- ***Take one car*** per household when evacuation to keep household members together and reduce traffic congestion and delay. Leave early enough to avoid being trapped by severe weather.
- ***Follow evacuation routes*** as recommended. Do not take shortcuts; they may be blocked. Be alert for washed-out roads and bridges. Do not drive into flooded areas. Stay away from downed power lines.
- ***Let others know*** your destination.

## **Emergencies in high-rise buildings**

- ***Plan in advance*** - know several routes out of the building in case the first exit choice is blocked.
- ***Listen for instructions*** from authorities, and do as they say.
- ***Do not use elevators.*** Stay to the right while going down stairwells to allow emergency workers to come up the stairs.
- ***Take an emergency supply kit***, unless there is reason to believe it has been contaminated.
- ***Move away from exterior walls*** if unable to exit. Shelter under a desk or near other sturdy furniture and away from windows and glass, file cabinets, bookshelves or other things that might shatter or fall.

## Supplement 1: Special Considerations

# Safety issues

Safety should be the highest priority if unable to leave a disaster zone. Be aware of potential hazards, from downed power lines to contaminated water to increased insect populations. Some are noted below (see Supplement 2: Specific Disasters, beginning on page S-17, for additional safety issues).

### When evacuation becomes necessary

- **Drink lots of clean water** and take frequent breaks from activity. Set a manageable pace - stress is wearing, and it's easy to overdo without realizing it.
- **Debris-filled streets are dangerous.** Walk or drive cautiously. Snakes and rodents may be a hazard. Washouts may weaken road and bridge structures, which could collapse under a vehicle's weight.
- **Before entering a building,** be certain it's not in danger of collapsing. Turn off any outside gas lines, open windows and allow any gas to escape before spending time inside. Use a battery-operated flashlight instead of an open flame as a light source.
- **Wear protective clothing** on legs, arms, feet and hands while cleaning up debris. Heavy socks and at least ankle-high waterproof boots with steel toes will provide a high level of safety. Wear rubber gloves while scrubbing flood-damaged interiors and furniture. Shower after each workday. Do not store laundered clothing with clothing that has been worn.
- **Always wash hands** with soap and water that has been boiled or disinfected and cooled. Wash hands before preparing or eating food, after using the bathroom or changing a diaper, after handling uncooked food, after handling garbage, after tending to someone who is sick or injured, after participating in flood cleanup activities and after handling article contaminated with floodwaters or sewage. Keep hands and fingers away from the face and ears. Cut fingernails short; use a stiff brush to clean them. Keep any cuts or open sores as clean and dry as possible and apply antibiotic ointment to reduce the risk of infection.



*Drink lots  
of water  
and take  
frequent breaks  
from activity.*

### Food safety

Storm-damaged foods may not be safe to eat. If there is a question about the safety of any item, dispose of it. Otherwise, keep the following points in mind:

- **Destroy foods** if they have been covered by floodwaters
- **Foods in sealed cans** not fouled by industrial waste may be safe to eat if the cans don't have bulges or leaks, but first disinfect the cans before opening them. Remove labels and wash the containers with soap or detergent; rinse in a chlorine bleach solution using two tablespoons of household laundry bleach to each gallon of water; then rinse containers in clean water, dry and re-label them. The cans also may be sterilized by covering them with water and boiling for at least 10 minutes. Save liquids from canned vegetables to substitute for water in cooked dishes. Juices from canned fruits can be used a salad dressing or a beverage.

*Purify all  
water used  
for drinking,  
cooking  
and for  
washing  
dishes.*



- **In the event of a power failure**, frozen or refrigerated foods warmed to above 40° F for three hours may not be safe to eat. Once-frozen foods which have thawed completely should be cooked and eaten immediately or discarded. After cooking, items may be refrozen. Frozen foods that have partially thawed and still have ice crystals may be safely refrozen. Breads can be refrozen as well as fruits and vegetables that are still at or below 40° F. Do not refreeze frozen dinners that have thawed. Foods in a freezer without power may stay frozen from one to three days if the freezer door has remained closed, the freezer is large, mostly full and well insulated and the outdoor temperature is moderate.
- **Dry ice** may be placed in a top-opening freezer on boards or heavy paper atop packages. Plan for 2 1/2 to three pounds of dry ice per cubic foot of space. More will be needed in an upright freezer because dry ice should be place on each shelf. Don't handle dry ice with bare hands; it can cause burns.
- **Get food safety information** from local health department or County Extension Office, or call the USDA Meat and Poultry Hotline (800-535-4555, 9am-3pm CST weekdays). Protect household members by cordially refusing donations of home cooked foods during this uncertain time.

## Water safety

After a major storm producing widespread damage such as a hurricane or a tornado, assume that water sources are contaminated until proven safe. Purify all water used for drinking, cooking and for washing eating and cooking utensils. Also purify the water for washing hands, body and any kitchen and bathroom surfaces. Always use clean or purified water to wash any parts of the body that have come in contact with surfaces contaminated by flood waters.

- **Water in pipes** is safe to drink if the valve on the main water line was closed before flood conditions occurred.
- **Do not use water** that has a dark color, an odor or contains floating material.
- **Use chlorine or iodine** in tablet, crystal or drop form to disinfect water. It may be found in stores catering to hikers and campers, or in drugstores. Follow product directions carefully or use *one* of the following methods:
  1. Boil at a rolling boil for 10 minutes *or*
  2. Add eight drops of liquid chlorine bleach (such as Clorox) per gallon of water (about 1/8 tsp, about the size of a dime). Make sure the bleach has no active ingredient other than

4 percent to 6 percent sodium hypochlorite. (Household bleach is acceptable, as long as it is a pure bleach product, without additives such as soap, detergent, or perfumes.) Mix the bleach and water thoroughly. Let it stand for 30 minutes. The water should still have a slight chlorine odor. If it does not, add another dose of chlorine and let stand for another 15 minutes.

3. Add 20 drops of 2 percent iodine per gallon of clear water or 40 drops per gallon of cloudy water. Household iodine used for first aid purposes may be used to purify water, though it can cause the water to have an off-taste. Let the water stand for 20 to 30 minutes. If the water is below 50° F, wait at least an hour to use it

or

4. Add water purification tablets according to directions on the package. These tablets can be bought at most drug and sporting goods stores.

## **Basic first aid**

When encountering someone who is injured, make sure it is safe to approach, then check the victim for unconsciousness and life-threatening conditions, such as not breathing or severe bleeding. Such conditions require immediate care by trained responders. Call 911 or shout for help.

If there is no other immediate source of assistance, wash hands with soap and water before and after giving care; use disposable gloves and breathing barriers; avoid direct contact with blood or other body fluids.

- **If the injured person is bleeding**, apply a dressing and press firmly against the wound. If bleeding is extreme, squeeze the artery against bone at a pressure point - for a hand, inside of the wrist; for an arm, the inside of the upper arm; for a leg, the crease in the groin. If blood soaks through a dressing, do not remove it but instead, add another and continue applying pressure. Elevate the injured area above the level of the heart only if no broken bones are apparent.
- **Treat a burn** with large amounts of water, then cover with a dry, clean dressing or cloth.
- **To control swelling** and reduce pain, apply ice or a cold pack.
- **To treat shock**, cover the injured person against a chill or try to prevent overheating but do not give food or drink.
- **If it is necessary to move the victim** because the scene is unsafe, try to immobilize the body part that is injured.



*If an injured person is bleeding, apply a dressing and press firmly against the wound.*

## **Insect bites**

Though public health authorities will work to control the spread of any diseases transmitted by mosquitoes, including West Nile virus, the presence of excess water will encourage mosquito breeding.

- **Avoid being outdoors** when mosquitoes are feeding, mostly at dusk and dawn.
- **When outdoors**, wear clothing that covers most of the skin.
- **Use insect repellants** containing the chemical DEET, picaridin or oil lemon eucalyptus. DEET is a powerful substance that will dissolve plastics and similar materials, and its use is not recommended on children under 2 months of age.
- **Keep infants indoors** or under mosquito netting.

## **Snake bites**

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Learn to identify nonpoisonous and poisonous snakes native to the area. Information on snake identification can be obtained from the County Extension Office or from the state wildlife department.

- **Never step over logs** or other obstacles unless you can see the other side. Watch for snakes sunning on fallen trees, limbs and other debris. When encountering a snake, step back and allow the animal to proceed on its way. Snakes are usually not fast-moving animals, and a person can easily retreat from the snake's path.
- **When removing debris**, wear snake-proof boots at least 10 inches high and/or snake leggings. Be cautious about placement of hands and feet, and if possible, don't slide fingers under debris to move it. Do remove debris from around the house as soon as possible; it attracts rodents that snakes feed on and also provides shelter for the snakes. Vegetation should be kept closely mowed.
- **Openings 1/4 inch and larger** should be sealed to exclude snakes. Check corners of doors and windows, around water pipes and electrical service

## **Electrical safety**

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Beware of electrical hazards. Stay away from loose or dangling power lines, and report them immediately to proper authorities. If a residential service wire is connected to a downed feeder line at the road, it must be considered live and dangerous at the box.



- **Be sure all electric and gas services are turned off** at the main before entering buildings for the first time following a disaster.
- **Don't turn on** any lights or appliances until an electrician has checked the system for short circuits.
- **Electric motors** in appliances that have been in floodwaters should be thoroughly cleaned and reconditioned before they are put back into service.

## **Generator safety**

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Never use a generator indoors, including in homes, garages, basements, crawl spaces and other enclosed or partially enclosed areas, even with ventilation. Always locate a generator unit outdoors, on a dry surface, away from any vents or doors that will allow carbon monoxide to seep indoors.

- **Carbon monoxide** is an invisible, odorless, tasteless gas and it is highly poisonous. Opening doors and windows or using fans will not prevent carbon monoxide build-up. Be aware of these CO poisoning symptoms: fatigue, weakness, chest pains (especially in those with heart disease), shortness of breath upon exertion, nausea, vomiting, headaches, confusion, lack of coordination, impaired vision, loss of consciousness. If any of these symptoms are present, get to fresh air right away. Neglecting treatment can be deadly.
- **If there is a poisoning emergency** call the Tennessee Poison Center at 1-800-222-1222. Its website is [www.poisonlifeline.org](http://www.poisonlifeline.org). If a victim has collapsed or is not breathing, call 911 or find other qualified emergency assistance immediately.

## **Cleaning up sewage contamination**

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Flood waters may be contaminated with sewage, and when they receded, the contamination remains. Proper cleaning and disinfecting procedures are recommended to prevent illness:

- **Wear protective clothing** such as rubber boots and waterproof gloves.
- **Clean household surfaces** such as walls and hard-surfaced floors with soap and water and disinfect with a solution of 1/4 cup of bleach in one gallon of water. Do not mix ammonia cleansers with bleach as toxic vapors will form.
- **Wash all linens and clothing** in hot water, or dry clean them.
- **Discard items** that cannot be washed or dry cleaned, including mattresses, carpeting, wall coverings and upholstered furniture.
- **When cleanup is finished**, thoroughly dry all items to prevent the growth of mold.

## **Chain saw safety**

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Chain saws can be great labor-saving tools, especially for brush cleanup after a major storm. But a chain saw is a highly dangerous tool!

Read the owner's manual before operating one for the first time. Note especially how to check and adjust the chain tension, which is vital for safe operation. Get more information about specific operations from a saw dealer, a book or video or from an experienced operator.

- **Never allow a child** to use a chain saw.
- **To clear small branches**, use a hand saw or an axe.
- **Wear protective equipment:** safety glasses or goggles, heavy-duty non-slip gloves, sturdy non-slip shoes; hearing protection, close fitting long-sleeved shirt and pants (nothing loose or ragged) and a hard hat.
- **Engage the chain guard** when the saw is not in use.
- **Carry the saw** alongside with the cutting bar and chain to the rear and to the outside. Never carry a chain saw in the passenger area of a vehicle. Keep the chain sharp; dull chains can bind and cause accidents.
- **Mix fuel and oil** as recommended by the manufacturer, and fuel the chain saw only when cool to the touch. Always fuel in a clear area away from debris. If the fuel can has no spout, use a funnel, and wipe the saw clean of any spilled fuel. Never smoke while fueling.
- **Start the saw** while holding it firmly on the ground 10 feet or more away from the fueling area. In a clear, debris-free area, brace the saw with a foot through the rear handle and one hand on the top handle. Pull the starter cord with the other hand.
- **Keep both hands on the saw** when cutting. Saw with the lower part of the bar close to the bumper, not on the top near the nose. Maintain high saw speed when entering or leaving a cut. If the nose of the saw contacts an obstruction, be aware that it may kick back. Do not reach above shoulder-height or beyond the center of balance to cut. Do not cut from a ladder.
- **Take frequent breaks** and stay hydrated when using a chain saw; accidents are more likely to occur when an operator tires.

*To clear  
small branches,  
use a  
hand saw.*



## Ladder safety

When purchasing a ladder, consider getting the highest rating of 1A or 300 lbs. limit. The most versatile material for a ladder is fiberglass. Wood deteriorates when used outdoors.

- **Inspect a ladder** every time it is set up for use. Check for any visible defects or wear and that it is correctly anchored and properly positioned.

- **The proper angle** for an extension ladder is achieved when the ladder base is one-quarter the height of the wall away from the wall.

*Keep a  
belt buckle  
between a  
ladder's  
vertical rails.*

- **Never over-reach** to either side while on a ladder. A good rule is to keep a belt buckle between a ladder's vertical rails.
- **If electrical hazards** including power lines are in the vicinity, do not use a ladder, even if it is thought to be constructed of a non-conductive material.



## Roof safety

Wait to make roof repairs until its surface is dry - a wet roof may be slippery.

- **Wear rubber-soled shoes** or boots, which provide better traction than leather-soled boots.
- **Wear a safety harness** on a steeply pitched roof and be sure to tie it securely to a fall-resistant device.
- **Install temporary wood cleats** for toe-holds by nailing 2" x 4"

wood cleats or adjustable roof jacks to the roof. Remove the cleats or roof jacks when the roof work is complete.

- **Keep the work area clean** by frequently sweeping up sawdust, wood, shingle particles and other kinds of dirt.

- **Be aware of tripping hazards.** Look for and remove any tools, electric cords and other loose items that might cause a fall.

## Supplement 1: Special Considerations

# Disaster-related stress

The emotional toll that disaster brings can sometimes be even more devastating than the financial strains of damage and loss of home, business, or personal property.

Everyone who sees or experiences a disaster is affected by it in some way. It is normal to feel anxious about personal safety and that of family members and close friends.



People have different needs and different ways of coping. Profound sadness, grief and anger are normal reactions to an abnormal event. Acknowledging feelings helps speed recovery, and focusing on strengths and abilities aids in healing.

Children and older adults are of special concern in the aftermath of disasters. Even individuals who experience a disaster “secondhand” through exposure to extensive media coverage may be affected.

Contact faith-based organizations, voluntary agencies or professional counselors for counseling. FEMA and state and local governments of the affected area may provide crisis counseling assistance. Accepting help from community programs and resources is healthy.

The Episcopal Church’s Office of the Bishop Suffragan for Chaplaincies ([www.ecusa-chaplain.org](http://www.ecusa-chaplain.org)) prepared a DVD following the 9/11 terrorist attacks, “What to Do Next When a Disaster Strikes.” It includes video segments and other resources that may help a parish team understand how people react to disaster and consider appropriate responses and helping behaviors.

## Recognize the signs

When adults exhibit the following symptoms during a disaster, they may need crisis counseling or stress management assistance:

- ◆ Difficulty concentrating or communicating thoughts
- ◆ Difficulty sleeping
- ◆ Difficulty maintaining balance in their lives
- ◆ Low threshold of frustration
- ◆ Increased use of drugs/alcohol
- ◆ Limited attention span
- ◆ Poor work performance
- ◆ Headaches/stomach problems
- ◆ Tunnel vision/muffled hearing
- ◆ Disorientation or confusion
- ◆ Reluctance to leave home
- ◆ Depression, sadness
- ◆ Feelings of hopelessness
- ◆ Mood swings and bouts of crying
- ◆ Overwhelming guilt and self-doubt
- ◆ Fear of crowds, strangers or being alone

## **Ways to ease disaster-related stress**

Don't expect normalcy to be instantly restored. Realize that emotions and moods may change unexpectedly, and accept that restoration of emotional equilibrium, much like the damaged surroundings, will take time.

- **Determine what's really important**, keeping in mind that one person's top priority may be different from that of friends, neighbors and loved ones.



- **Talk with someone about feelings**, perhaps a professional counselor who deals with post-disaster stress.
- **Take steps to promote healing**: eat healthy, rest, exercise, relax and meditate. Be aware of the tendency to resort to bad habits when stress is present.
- **Refocus on the big picture**, instead of the little details and the little problems, to gain a sense of competency and help keep the situation in perspective.

- **Try to have extra patience** with those who are most valued. Although they're going through the same trauma, each person will show the stress differently and will heal at his or her own pace.
- **Maintain a normal family and daily routine**, limiting demanding responsibilities on self and family.
- **Participate in memorials**.
- **Use existing support networks** of family, friends and faith communities.
- **Ensure readiness for future events** by restocking disaster supply kits and updating the family disaster plan. Doing these positive actions can provide a measure of comfort.

## **Helping children cope**

Disasters can leave children feeling frightened, confused, and insecure. Whether a child has experienced trauma, has seen coverage of a disaster on television or has heard it discussed by adults, it is important for parents and teachers to be informed and ready to help if stress reactions occur.

Children may respond to disaster by demonstrating fears, sadness or behavioral problems. Younger children may return to earlier behavior problems such as bedwetting, sleep problems and separation anxiety. Older children may display anger, aggression or withdrawal or they may begin to have problems in school.

News coverage related to a disaster may elicit fear, confusion and anxiety in children. This is particularly true for large-scale disasters or a terrorist event where significant property damage and loss of life has occurred. Younger children who see repeated images of an event may believe the event is occurring over and over. If parents allow children to watch television or use the Internet where images or news about the disaster are shown, the parents should be with them to encourage communication and provide explanations.

How a child copes with disaster or emergencies is often tied to the way parents cope, because a child can detect an adult's emotional state. Parents and adults can make disasters less traumatic for children by taking steps to manage their own feelings and ways of coping.

In most cases, symptoms usually diminish over time. For those who experienced disaster, reminders such as high winds, smoke, cloudy skies, sirens or other reminders may cause distress. Any prior history with a traumatic event or other severe stress may contribute to these feelings.

Children share some common reactions to a disaster or traumatic event, according to their age:

♦ **Birth through 2 years** - When children are pre-verbal and experience a trauma, they do not have words to describe the event or their feelings. However, they can retain memories of particular sights, sounds or smells. Infants may react to trauma by being irritable, crying more than usual or wanting to be held and cuddled. The biggest influence on children of this age is how their parents cope. As children get older, their play may involve acting out elements of the traumatic event that was seemingly forgotten.

♦ **Preschool (3 through 6 years)** - Preschool children often feel helpless and powerless in the face of an overwhelming event. Because they lack the ability to protect themselves or others, they feel intense fear and insecurity about being separated from caregivers. Preschoolers cannot grasp the concept of permanent loss. In weeks following a traumatic event, their play activities may re-enact the incident repeatedly.

♦ **School age (7 through 10 years)** - The school-aged child can understand the permanence of loss. Some children become intensely preoccupied with the details of a traumatic event and want to talk about it often. Children may hear inaccurate information from peers at school, and their preoccupation with the event can interfere with their ability to concentrate on schoolwork. They may display sadness, generalized fear or specific fears of the disaster happening again, guilt over action or inaction during the disaster, anger that the event was not prevented or fantasies of being a rescuer.

♦ **Pre-adolescence to adolescence (11 through 18 years)** - Older children have a more sophisticated understanding of disasters, and their responses are similar to those seen in adults. Teenagers may become involved in dangerous, risk-taking behaviors, such as reckless driving or alcohol or drug use. They may become fearful of leaving home and avoid previous levels of activities. Much of adolescence is focused on moving out into the world. After a trauma, the view of the world can seem more dangerous and unsafe. A teenager may feel overwhelmed by intense emotions and yet feel unable to discuss them with others.

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## Meeting a child's emotional needs

Children's reactions are influenced by the behavior, thoughts and feelings of adults. Adults should encourage children and adolescents to share thoughts and feelings and they should attempt to clarify any misunderstandings about risk and danger. Maintain a sense of calm by listening to children's concerns and answering questions and by discussing plans for future safety.

Decide what level of information a particular child needs, given his or her age and level of maturity. If a younger child has difficulty expressing feelings, encourage him or her to draw a picture or tell a story of what happened. Ways to reassure a child include:

- **Personal contact** - hug and soothe children with touch. Spend time with them. The presence of an adult that is important in his or her life will be a comfort to a child.
- **Factual information** - calmly talk about the disaster and describe recovery plans for ensuring future safety.
- **Listen** - encourage children to talk about their feelings. Understand that children, like adults, will have a range of reactions to disasters.
- **Re-establish routines** - schedules for work, school, play, meals and rest are familiar and can be soothing. Assigning them specific chores will help them feel they are contributing to the restoration of family and community life. Encourage children to help update a family disaster plan. Praise and recognize responsible behavior.

If a child continues to exhibit stress, if the reactions worsen over time or if they cause interference with daily behavior at school, at home or with other relationships, seek professional help from the child's primary care physician, a mental health provider specializing in children's needs or a member of the clergy.

## Supplement 1: Special Considerations

### Individuals who have special needs

Learn who in the neighborhood or building may need special assistance during emergencies. For those who have a disability or special need, consider what steps should be taken to ensure personal and household protection in an emergency. For those who are caregivers for a special-needs individual, develop a plan to communicate if an emergency occurs.

Find out about special assistance that may be available in the community. Register with the office of emergency services or fire department for assistance, so needed help can be provided quickly in an emergency. If residing in an apartment building, ask the management to mark accessible exits clearly and to make arrangements for assistance in case it becomes necessary to evacuate the building.

Keep on hand extra wheelchair batteries, oxygen, catheters, medication, food for service animals or other items. Also, keep a list of the type and serial numbers of important medical devices.

Create a network of neighbors, relatives, friends and co-workers who can offer aid in an emergency. Discuss needs with them and with any employers and make sure they know how to operate necessary equipment.

- **Those who have impaired hearing** may need to make special arrangements to receive warning of an emergency or impending disaster.
- **Those who have impaired mobility** may need assistance in getting to a shelter. Those who are mobility impaired and live or work in a high-rise building may want to have an escape chair.
- **Households with a single working parent** may need help from others to care for children both in planning for disasters and during an emergency.
- **Non-English speaking people** may need assistance planning for and responding to emergencies. Community and cultural groups may be able to help keep these populations informed.
- **People who do not own vehicles** may need to make arrangements for transportation.
- **People with special dietary needs** should keep records of the prescribed type and amount as well as contact information for their doctors, insurance and primary and alternate pharmacies.



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**S-14** In God's Hands - and Ours

## Supplement 1: Special Considerations

# Taking care of animals

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Disaster disrupts and affects everything in its path, including pets, livestock, and wildlife. For more information, contact the Humane Society of the United States at 2100 L Street, NW, Washington DC, 20037, Attn: Disaster Services Program or by phone at 202-452-1100 or online at [www.hsus.org/disaster](http://www.hsus.org/disaster).



### Family pets

Pets should be included in any household disaster plan because they depend on their owners for their safety and well-being. If evacuation becomes necessary, do not leave pets behind; they may not survive or they may wander away and become lost.

- **Find out which hotels** and motels allow pets. With the exception of service animals, pets typically are not permitted in emergency shelters for health reasons.
- **Some animal shelters** will provide care for pets during emergency and disaster situations but they should be used as a last resort. Ask friends and family to help or keep pets nearby. Most boarding facilities require veterinary records to prove vaccinations are current. Contact several in the area to check requirements and services and note a few that are farther away in case local facilities are closed.
- **Make a disaster kit.** Include food, water, medications, veterinary records, litter box, can opener, food dishes, first aid kit and other needed supplies. Tuck in an information sheet noting each pet's name and any behavior problems and give the kit to someone who agrees to take on responsibility for a pet during a disaster.
- **Pets should have identification tags** securely fastened to their collars. Keep a current photo of a pet with family papers; it will assist in identification if needed.
- **In case a pet should become agitated** during a tense emergency situation, have available a secure carrier or leash to restrain it.
- **Call the local emergency management office** or animal shelter for further information.

*Keep a current photo of a pet with family papers; it will assist in identification if needed.*



### Large animals

If large animals such as horses or cattle are on the property, be sure to make some preparations before a disaster strikes.

- **Some form of identification** is needed for all animals.



- ***Evacuate animals*** whenever possible. Map out primary and secondary routes to evacuation destinations in advance; these locations should be prepared with, or ready to obtain, food, water, veterinary care and handling equipment. Vehicles and trailers needed for transporting and supporting each type of animal should be available along with experienced handlers and drivers. Allow animals a chance

to become accustomed to vehicular travel so they are less frightened during an emergency and are easier to move.

- ***The decision*** to shelter or turn large animals outside should be based on the disaster type, quality and location of shelter and the risks of harm or injury that might occur if they are permitted to run free.

*Evacuate  
animals  
whenever  
possible.*



## Wildlife

Disaster and life-threatening situations will exacerbate the unpredictable nature of wild animals. To protect household members, learn how to deal with wildlife.

- ***Do not approach*** or attempt to help a stranded or injured wild animal. Do not corner it. Wild animals will feel threatened and may endanger themselves by dashing off into floodwaters, fire or another unsafe area. Contact the local animal control office or animal shelter.
- ***Secure all food supplies*** from rats and other wildlife.
- ***Animal carcasses*** can present serious health risks. Contact local animal control authorities to remove any animal carcasses or local emergency management office or health department for other specific help and instructions.

- ***If an animal bites*** a family member, seek immediate medical attention. Health departments can provide information on the types of local wildlife that may carry rabies.
- ***For a snake bite***, try to accurately identify the type of snake so that, if poisonous, the correct anti-venin can be administered. Do not cut the wound or attempt to suck the venom out (see page S-6 for more information).

## Supplement 2: Specific Disasters

# Winter weather

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Snowfall and extreme cold can immobilize an entire region. Even areas that normally experience mild winters can be hit with a major snowstorm or extreme cold. The impacts include flooding, storm surge, closed highways, blocked roads, downed power lines and hypothermia victims. Protect the household from the many hazards of winter by planning ahead.



### When a winter storm threatens

Prepare to survive without power or outside assistance for at least three days. Assemble a survival kit (see page 25) and add winter-specific items such as rock salt to melt ice on walkways, sand to improve traction, snow shovels and other snow removal equipment. Include several days' worth of medicines, drinking water and foods that require no cooking or refrigeration.

*Protect the household from the many hazards of winter by planning ahead.*

### Terms used by weather forecasters

- ◆ **Frost/freeze warning** - Below freezing temperatures are expected.
- ◆ **Freezing rain** - Rain that freezes when it hits the ground, creating a coating of ice on roads, walkways, trees and power lines.
- ◆ **Sleet** - Rain that turns to ice pellets before reaching the ground. Sleet also causes roads to freeze and become slippery.
- ◆ **Winter storm watch** - A winter storm is possible in the area.
- ◆ **Winter storm warning** - A winter storm is occurring or will soon occur in the area.
- ◆ **Blizzard warning** - Sustained winds or frequent gusts to 35 mph or greater and considerable falling or blowing snow - reducing visibility to less than a quarter mile - are expected to prevail for a period of three hours or longer.

### Heat source

- **Power may be interrupted** and a home's source of heat may not function - even a gas furnace requires electricity to operate the blower.
- **Arrange for emergency heating** equipment and fuel, such as a gas fireplace or a wood-burning stove to keep at least one room of a residence livable.
- **Keep fire extinguishers on hand** and make sure household members know how to use them. Never burn charcoal indoors.

- **If a kerosene heater is used** refuel it outdoors, station it indoors at least three feet from flammable objects and maintain ventilation to avoid buildup of toxic fumes.
- **Winterize a home in advance** to extend the life of any emergency fuel supply. Insulate walls and attics; caulk and weather strip doors and windows; and install storm windows or cover a window with plastic.

## **Watch for signs of hypothermia**

If a loved one experiences uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness or apparent exhaustion, move him or her to a warm, dry location, warm the center of the body first and give warm, non-alcoholic beverages if the victim is conscious. Get medical help as soon as possible.

## **Winter driving**

About 70 percent of winter deaths related to snow and ice occur in automobiles. Consider public transportation if travel is necessary. If traveling by car, stay on main roads, travel during daylight hours and don't travel alone. Inform others of the planned itinerary and check in regularly.



*If traveling  
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Winterize each vehicle. Check the battery, antifreeze, wipers and washer fluid, ignition system, thermostat, lights and hazard lights, exhaust system, heater, brakes, defroster, oil level and tires. Keep the gas tank full or nearly so throughout the winter.

A ‘winter car kit’ stored in the vehicle should include a shovel, windshield scraper, battery-powered radio, flashlight with extra batteries, water, snacks, mittens, hat, blanket, tow chain or rope, tire chains, bag of road salt and sand, fluorescent distress flag, booster cables, road maps, emergency flares and a cell phone or two-way radio.

### **If the vehicle becomes trapped...**

- **Turn on hazard lights and hang a distress flag** from the antenna or window. *Remain in the vehicle.* Remember that distances can be distorted by blowing snow, and what seems to be a nearby building may be too far to walk in deep or blowing snow.
- **Run the engine and heater** for about ten minutes each hour to keep warm, opening a window slightly for ventilation to guard against possible carbon monoxide poisoning.
- **Clear snow from the exhaust pipe periodically.**
- **Move around** to maintain body heat, but avoid overexertion.
- **Huddle with passengers** and use any available loose materials to insulate from the cold.
- **Drink water for good hydration** and only sleep if a passenger is present with whom sleep and wake cycles may be alternated to watch for rescue.
- **If the car battery is strong**, turning on the interior light at night will help rescuers locate the vehicle.

## Supplement 2: Specific Disasters

# Extreme heat

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A prolonged period of excessive heat, often combined with excessive humidity, is called a *heat wave*. The *heat index* is a number in degrees Fahrenheit that tells how hot it feels when relative humidity is added to the air temperature. Exposure to full sunshine can increase the heat index by 15 degrees.

Heat kills by pushing the human body beyond its limits. Under normal conditions, the body's internal thermostat produces perspiration that evaporates and cools the body. However, in extreme heat and high humidity, evaporation is slowed, and the body must work extra hard to maintain a normal temperature.



Conditions that can induce heat-related illnesses include stagnant atmospheric conditions and poor air quality. Consequently, people living in urban areas may be at greater risk from the effects of a prolonged heat wave than those living in rural areas. Also, asphalt and concrete store heat longer and gradually release heat at night, which can produce higher nighttime temperatures, known as the "urban heat island effect."

Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. The elderly, young children and those who are ill or overweight are more likely to succumb to extreme heat.

### Heat-induced illness

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- ◆ **Sunburn** - Skin redness and pain, possible swelling, blisters, fever, headaches. *First Aid:* Take a shower, using soap, to remove oils that may block pores and prevent the body from cooling naturally. If blisters occur, apply dry, sterile dressings and get medical attention.
- ◆ **Heat cramps** - Muscular pains and spasms, usually in leg and abdominal muscles, often accompanied by heavy sweating. *First Aid:* Get the victim to a cooler location. Lightly stretch and gently massage affected muscles to relieve spasm. Give sips of up to a half-glass of cool water every 15 minutes. Do not give liquids with caffeine or alcohol. If victim complains of nausea, discontinue liquids.
- ◆ **Heat exhaustion** - Heavy sweating, though skin may be cool, pale or flushed; weak pulse; normal body temperature is possible but temperature will likely rise. Fainting or dizziness, nausea or vomiting, exhaustion and headaches are possible. *First Aid:* Get victim to lie down in a cool place and fan him or her. Loosen or remove clothing. Apply cool wet cloths. Give sips of up to a half-glass of cool water every 15 minutes. Do not give liquids with caffeine or alcohol. If victim complains of nausea, discontinue liquids. If vomiting occurs, seek immediate medical attention.

- ♦ **Heat stroke** - Also called sunstroke, heat stroke is life threatening and occurs when the victim's temperature-control system stops working. Body temperatures can rise to 105 or more, and brain damage and death may result if the body is not cooled quickly. The skin will be hot, red and dry; the pulse will be rapid but weak; and breathing is likely to be fast but shallow. The victim may lose consciousness. *First Aid:* Heat stroke is a severe medical emergency. Call 911 or get the victim to a hospital immediately. Delay can be fatal.

## **Combating heat effects**

- *Stay indoors* as much as possible. If air conditioning is not available, stay on the lowest floor out of the sunshine and use a circulating or box fan to stir the air. Cover windows that receive morning or afternoon sun with drapes, shades, awnings or louvers. Outdoor awnings or louvers can reduce the heat that enters a home by up to 80 percent. Temporary reflectors, such as aluminum foil-covered cardboard, will reflect heat back outside during brief periods of extreme heat. Consider keeping storm windows up all year, and weather-strip doors and sills to keep cool air in.
- *Use a sunscreen lotion* with a sun protection factor (SPF) of 30 or greater if being outside is unavoidable. Sunburn slows the skin's ability to cool itself.
- *Dress in loose fitting clothes* that cover as much skin as possible. Lightweight, light-colored clothing reflects heat and sunlight and helps maintain normal body temperature. Protect the face and head by wearing a wide-brimmed hat.
- *Eat a well-balanced diet* of light and regular meals. Avoid using salt tablets unless directed to do so by a physician.
- *Drink plenty of water* for good hydration, even if thirst isn't present. This is particularly true on days when temperatures reach 90 degrees F and higher. Limit intake of alcoholic beverages; they cause dehydration. Children 12 months and older should be reminded to drink water throughout the day and more on hot days. Healthy infants normally do not need extra water until they are receiving solid foods - check with the pediatrician.
- *Consult a doctor* before increasing liquid intake if medical conditions exist such as epilepsy or heart, kidney or liver disease, or if a fluid-restrictive diet or fluid retention is a consideration.
- *Avoid strenuous work* during the warmest part of the day. Use a buddy system when working in extreme heat, and take frequent breaks.
- *Spend at least two hours per day* in an air-conditioned place. If the home is not air-conditioned, consider spending the warmest part of the day in a public building such as a library, movie theater, shopping mall or other community facility.
- *Never leave children* or pets alone in closed vehicles.
- *Check on family*, friends and neighbors who do not have air conditioning and who spend much of their time alone.



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## Supplement 2: Specific Disasters

# Drought or water shortage

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An emergency water shortage can be caused by prolonged drought, poor water supply management or contamination of a surface water supply source or aquifer. The contamination of ground water or an aquifer also may disrupt the use of well water.

A drought is a period of abnormally dry weather that persists long enough to produce serious effects including crop damage and water shortages.

Drought is a silent but very damaging phenomenon that is rarely lethal but enormously destructive. It can ruin local and regional economies that are agricultural and tourism based, and it creates environmental conditions that increase risk of other hazards such as fire, flash flood and landslides.

During water-shortage emergencies, action is important at all levels of society. Individuals can practice water-saving measures to reduce consumption. Cities and towns can ration water. Farmers can change irrigation practices or plant crops that use less water. Factories can alter manufacturing methods.



## Water conservation

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- **Never pour water down the drain** when there may be another use for it, such as watering indoor plants or a garden. Don't let the water run while dishwashing, tooth-brushing or shaving.
- **Repair dripping faucets** by replacing washers. One drop per second wastes 2,700 gallons of water per year.
- **Consider purchasing a low-volume toilet** that uses less water, or install a toilet displacement device to cut down on the amount of water needed to flush.
- **Replace showerheads** with low-flow versions. Further reduce use by turning on the water to get wet, turning it off to soap and turning it back on to rinse. Catch rinse water by placing a bucket in the shower, and then use the water for houseplants. Do not take baths; they use far more water than showers.
- **Hand wash dishes** by filling two containers - one with soapy water and the other with rinse water containing a small amount of chlorine bleach.
- **Operate automatic dishwashers** and clothes washers only when they are fully loaded. Use reduced-water settings where possible. Most newer dishwashers clean soiled dishes very well; do not rinse dishes before loading them. Also, front-loading clothes washers typically use far less water than top-loading ones.
- **Store drinking water** in the refrigerator. Don't let the tap run while waiting for water to become hot. To get warm water, heat it on the stove or in a microwave oven.

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- ***Do not use running water*** to thaw meat or other frozen foods. Defrost food overnight in the refrigerator, or use the microwave oven's defrost setting.
- ***Clean produce*** in a pan filled with water rather than running water from the tap.
- ***Kitchen sink disposals*** require a lot of water to operate properly. Start a compost pile as an alternate method of disposing of food waste, or wrap and place in garbage.
- ***If a well is onsite***, check the pump periodically. If the automatic pump turns on and off while water is not being used, there is a leak.
- ***Use a shut-off nozzle*** on outdoor hoses to reduce water flow while washing a vehicle or manually watering outdoor plants. Park on the grass when washing a vehicle so the lawn will make use of runoff, or consider using a heavy commercial carwash that recycles water.

*Use  
mulch  
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- ***A heavy rain*** eliminates the need to water a lawn for up to two weeks. Most of the year, lawns only need one inch of water per week. Position sprinklers so water lands on the lawn and shrubs and not on paved areas. Avoid sprinklers that spray a fine mist, which can evaporate before it reaches plants. Do not leave sprinklers or hoses unattended. A garden hose can pour out hundreds of gallons of water in only a few hours.
- ***Raise the lawn mower blade*** to three inches or to its highest level. A higher cut encourages grass roots to grow deeper, shades the root system and holds soil moisture. Plant native or drought-resistant grasses and landscape plants, and use fertilizers that contain slow-release, water-insoluble forms of nitrogen. Over-fertilizing increases the need for water.
- ***Use mulch*** to retain moisture in the soil and to control weeds that compete with landscape plants for water.
- ***Use a broom or blower*** instead of a hose to clean leaves and other debris from the driveway or sidewalk.
- ***Cover a swimming pool*** when not in use to reduce evaporation.

Consider installing a new water-saving filter. A single back flushing with a traditional filter uses as much as 250 gallons of water.

- ***Participate in water conservation*** programs of the local government, utility or water management district. Follow water conservation and water shortage rules in effect. Even if water comes from a private well, these rules apply. Support community efforts that help develop and promote a water conservation ethic. Contact the local water authority, utility district, or local emergency management agency for information specific to the area.

## Supplement 2: Specific Disasters

### Hurricane

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A hurricane is an intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 mph or higher.

They form from June through November and cause the greatest damage in the Atlantic and Gulf Coast areas , although the stronger ones can sustain strong winds and heavy rain as they travel over land into the northern regions.

Hurricanes can spawn tornadoes and microbursts, and flooding and landslides or mud slides are a concern in mountainous regions for several days or more after the storm passes.

When a *watch* is posted, hurricane/tropical storm conditions are possible in the specified area, usually within 36 hours. A *warning* indicates a hurricane or tropical storm is expected in the specified area, usually within 24 hours. These alerts are widely given via broadcast and cable TV, radio and Internet weather sites.



### Before a hurricane threatens

- **Create a household hurricane plan**, and arrange with household members to meet at a place away from the residence in the event they become separated. Choose an out-of-town contact for everyone to call to say they are safe.
- **Prepare disaster supply kits** (see page 25) to enable family members to survive without public services for at least three days.
- **Consider special needs** of neighbors, such as people who are disabled or those who have limited vision.
- **Ask the local emergency management** office about evacuation plans governing the neighborhood. Learn evacuation routes, determine a destination and how to get there. Plan alternate routes in case the preferred route is inaccessible or overcrowded.
- **Know how to secure the property**. Learn how to shut off utilities and where gas pilots and water mains are located. Clear loose and clogged rain gutters and downspouts. Keep trees and shrubs around buildings trimmed - dead limbs or trees could cause personal injury or property damage. Take photographs or videotapes of belongings and store with insurance documents in a safe place.
- **Check compliance** of roofs with local building codes. Roofs destroyed by hurricanes often were not constructed or retrofitted according to code. Straps or clips can securely fasten a roof to the frame structure and substantially reduce roof damage.
- **Decide where to secure a boat** or recreational vehicle.
- **If the house is in a low-lying area** or near a body of water, consider flood insurance. Know that there is a 30-day waiting period before flood insurance takes effect.

## **When a watch or warning is issued**

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- **Listen to newscasts**, and follow the plan that was prepared.
- **Be ready to evacuate**. Fuel vehicles, because service stations may be closed after the storm, or make arrangements for transportation with a friend or relative. Review evacuation routes.
- **If the family lives in a mobile home** or in a high-rise building and authorities announce an evacuation, grab the disaster kits and leave immediately, following set evacuation routes according to plan.

*Be ready  
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*Make  
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- **If not required or if unable to evacuate**, stay indoors away from windows and glass doors. Secure outer doors, close interior doors and take refuge in a small interior room, closet or hallway, on the floor under a table or another sturdy object. In a two-story residence, go to an interior first-floor room, such as a bathroom or closet. In a building with more than two floors, go to the first or second floors and stay in interior rooms away from windows. Keep curtains and blinds closed. A lull in the storm may be the hurricane's "eye." After it passes, winds will rise again.
- **Turn off propane tanks**. Turn off utilities if told to do so by authorities. If not instructed to turn off utilities, turn the refrigerator to its coldest setting and keep it closed, in case power is interrupted.
- **Avoid using the phone** except for emergencies. Local authorities need first priority on telephone lines.

## **After a hurricane**

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- **If in a secure location** or evacuated, stay there until local authorities say it is safe to return home. Tune to local radio or television stations for this information and for information about caring for household members, where to find medical help, how to apply for financial assistance and other storm-related topics.
- **Drive only when necessary**. Streets will be filled with debris, and some may have weakened and could collapse. Do not drive on flooded or barricaded roads or bridges. Remember that as little as six inches of water may cause loss of control of a vehicle, and two feet of water will carry most cars away.
- **Stay away from moving water**, riverbanks and streams until any danger of flooding has passed (see "Flood," page S-25).
- **Stay away from downed power lines**, and report them to the power company. Standing water may be electrically charged. Report broken gas, sewer or water mains to local officials.
- **Do not drink tap water** or use it to prepare food until notified by officials it is safe to do so.
- **Don't use candles or other open flames indoors**; gas lines may have been compromised. Use a flashlight to inspect property damage.
- **Consider family members' health** and safety needs. Be aware of symptoms of stress/fatigue.
- **Contact the insurance agent**. An adjuster will be assigned to visit the residence. Make photos or videotapes of belongings and the structure, then separate damaged from undamaged goods. Set up a manageable schedule to repair property. Keep receipts and records of cleanup costs for later reimbursement by the insurance company.

## Supplement 2: Specific Disasters

# Flood

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Floods are one of the most common hazards in the United States. River floods develop slowly, sometimes over days. Flash floods can develop in a few minutes, sometimes without any sign of rain. The first sign of a flash flood may be a dangerous wall of roaring water carrying rocks, mud and other debris. Flooding from a dam break can produce effects similar to flash floods.



If a building is in a low-lying area, near a body of water or downstream from a dam, it is particularly susceptible to flooding. However, culverts, dry streambeds, low-lying ground, small streams, gullies or creeks that appear harmless in dry weather still can flood.

### Terms to know

- ◆ **Flood Watch** - Stay tuned to NOAA Weather Radio or commercial radio or television for information. Watches are issued 12 to 36 hours in advance of a possible flooding event.
- ◆ **Flash Flood Watch** - Be prepared to move to higher ground, because a flash flood could occur at any time.
- ◆ **Flood Warning** - Flooding is occurring or will occur soon. If advised to evacuate, do so immediately.

### What to do before a flood

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- **Identify dams** and determine whether they pose a hazard.
- **Purchase a NOAA Weather Radio** with battery backup. In some areas, a tone-alert automatically signals a watch or warning.
- **Be prepared to evacuate.** Learn flood evacuation routes and scout for nearby high ground.
- **Plan a place to meet** household members if separated from one another. Choose an out-of-town contact everyone can call to check in.
- **Determine any special needs** neighbors might have, and plan how to assist.
- **Prepare a disaster kit** that will enable survival for at least three days (see page 25).
- **Know how to shut off** electricity, gas and water at main switches and valves. Know where gas pilot lights are located and how the heating system works.
- **Consider purchasing flood insurance**, available in most communities through insurance agents. Be aware of a 30-day waiting period before most flood insurance goes into effect.
- **Make a record of personal property.** Make photographs or videotapes of belongings, and store them with property and insurance documents in a safe place in waterproof containers, preferably off-site.



## *Construct barriers to stop floodwaters from entering buildings.*

- **Elevate furnace, water heater and electric panel** to higher floors or the attic if the house is susceptible to flooding. Install “check valves” in sewer traps to prevent flood water from backing up into the drains. Seal walls in basements with waterproofing compounds.
- **Construct barriers** around the property such as levees, berms and floodwalls to stop floodwaters from entering the buildings.

## **When a flood occurs**

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- **Listen to radio or television stations** for local information and orders to evacuate.
- **Secure the house.** Tie down or bring outdoor equipment and lawn furniture inside. Move valuable items to upper floors.
- **If instructed, turn off utilities** at the main switches or valves.

Disconnect electrical appliances. Do not touch electrical equipment if wet or standing in water.

- **Sterilize bathtubs** with a diluted bleach solution and fill with water in case tap water becomes contaminated or service is interrupted.
- **Do not walk through moving water.** Six inches of moving water can knock a person off his or her feet. If walking in a flooded area is unavoidable, walk where the water is still, and use a stick to check for hidden hazards and firm ground ahead of each step.
- **Do not drive into flooded areas.** Six inches of water can cause loss of control and/or engine stall. A foot of water will float many vehicles. Two feet of water will wash away almost all vehicles. If floodwaters rise around the car, abandon it and move to higher ground.

## **After a flood**

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- **Avoid standing water**, which may be contaminated by oil, gasoline or raw sewage, may be electrically charged from underground or downed power lines or may contain snakes or hidden hazards.
  - **Roads may have weakened** and could collapse under the weight of a car in areas where floodwaters have receded.
  - **Report downed power lines** and broken gas, sewer or water mains.
  - **Stay away from designated disaster areas** unless authorities ask for volunteers.
  - **Return home** only when authorities indicate it is safe. Stay out of buildings that are surrounded by floodwaters, because there may be hidden damage, particularly in foundations.

- **Wash frequently with soap** and clean water if in contact with floodwaters, and throw away food that has come in contact with floodwaters.
- **Listen for news reports** to learn whether the community’s water supply is safe to drink and for information about where to get assistance for housing, clothing and food.
- **Service damaged septic tanks**, pits and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- **Contact the insurance agent.** Take photos or videos of belongings in the house, then separate damaged and undamaged belongings. Keep detailed records of cleanup costs, and keep financial records handy.

## Supplement 2: Specific Disasters

# Tornado

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Tornadoes have been reported in every state. They can occur at any time, though spring and summer have high frequency. A funnel cloud of wind swirling at 200 miles an hour or more can destroy anything in its path. Though warning systems have improved, it's best to prepare when the skies are clear so that quick reaction is possible.

A tornado watch is issued when conditions are favorable for a tornado to develop. Stay tuned to local news stations for more information. If a tornado warning is issued, a tornado has been sighted in the area; take shelter right away.

Tornado danger signs include a dark, often greenish sky, large hail, a massive, dark, low-lying cloud (particularly if rotation is visible) and if a loud roar similar to the sound of a freight train is heard, take shelter immediately!



*If a tornado warning is issued, a tornado has been sighted in the area; take shelter right away.*

### **If indoors**

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- **Go to a pre-designated shelter area** such as a safe room, basement storm cellar or the lowest building level. If there is no basement, go to the center of an interior room, closet or hall on the lowest level away from corners, windows, doors and outside walls. Put as many walls as possible between family members and the outdoors.
- **Avoid sheltering under wide-span roofs**, such as auditoriums, theaters, gymnasiums, cafeterias or shopping malls.
- **A sturdy table** will give additional protection; crawl underneath, then cross arms above head and neck to protect them.
- **Stay away from metal pipes**, sinks, shower or bathtub, and stay off the toilet.
- **Unplug all major appliances** and do not use a corded telephone or a computer.

### **If in a vehicle or mobile home**

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- **Get out immediately** and go to the lowest floor of a sturdy, nearby building or a storm shelter. Never try to out-drive a tornado!
- **If there isn't time to go indoors**, leave the vehicle and lie flat in a ditch, culvert or low-lying area away from the vehicle, but be aware of the potential for flooding. Cross arms above the head and neck to protect them.

### **If outdoors**

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- **Hurry to the lowest floor** of a sturdy, nearby building or lie flat in a ditch, culvert or low-lying area, but be aware of the potential for flooding. Cross arms above the head and neck to protect them.

- ***Do not take shelter under an overpass***, bridge, open carport or tree, and avoid leaning against metal structures or vehicles.
- ***Avoid the tallest structure*** in the area. Watch out for flying debris.



## After a tornado passes

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- ***Stay away from damaged areas.*** Be alert for fallen power lines.
- ***Listen to the radio*** for information and instructions.
- ***Assist injured or trapped individuals.*** Call for help and give first aid, if appropriate.
- ***Return home*** only after authorities say it's safe. If power is out, use a flashlight to inspect the house. For insurance purposes, take pictures of damage to the house and its contents.
- ***Do not use candles*** at any time, because gas lines may ignite. If the smell of gas is in the air, don't turn on any appliances or switches and leave the building.
- ***Clean up*** spilled medicines, bleaches, gasoline or other flammable liquids immediately.

## Supplement 2: Specific Disasters

# Earthquake

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An earthquake is a phenomenon that is powered by the sudden release of stored energy from the earth, which radiates seismic waves. At the surface, earthquakes may manifest in shaking or displacement of the ground. Earthquakes may occur naturally or as a result of human activities. In its most generic sense, the word “earthquake” is used to describe any seismic event.



According to the US Geological Survey ([www.usgs.gov](http://www.usgs.gov)), the Southern Appalachian Seismic Zone is the second most active zone in the eastern United States; New Madrid in West Tennessee is the most active.

While the earthquakes have been felt in East Tennessee and West Tennessee, it's rare to experience any earthquake activity in Middle Tennessee. However, it's not impossible: on January 4, 1843, a severe earthquake affected Memphis and was sharply felt in Nashville. The area's seismic potential argues for hazard awareness.

### **Household preparedness**

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- ***Assemble and maintain disaster kits*** that will help members of the household to survive at least three days (see page 25).
- ***Fasten shelves***, mirrors and large picture frames securely to walls.
- ***Place large*** or heavy objects on lower shelves.
- ***Brace high*** and top-heavy objects.
- ***Store bottled foods***, glass, china and other breakables on low shelves in cabinets that fasten shut.

### **Construction issues**

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Whether building or renovating, keep in mind a few common-sense tremor-proofing guidelines, such as firmly anchoring the building to its foundation and installing flexible pipe fittings to prevent gas or water leaks. Plan to bolt down and secure to studs heavy appliances including the water heater, refrigerator, furnace and any gas appliance.

### **During an earthquake**

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- ***Drop, cover and hold on.*** Minimize movements and stay put until the shaking has stopped and it is safe to exit.
- ***Indoors, take cover*** under a sturdy desk, table or bench or against an inside wall or corner. Instruct household members to protect their eyes by pressing their faces against their arms.
- ***Stay away from glass,*** windows, outside doors and walls, and anything that could fall (such as lighting fixtures) or tall furniture (such as shelving units).

- **If in bed** and the ceiling above is clear of heavy light fixtures, stay there and use a pillow as additional head protection.
- **Do not use an elevator** to get to a safer level.
- **Use a doorway for shelter** only if it is in close proximity and if it is a well-supported, load-bearing frame.
- **Place home fire extinguishers** near potential fire sources and know how to use them. Recharge them as necessary.
- **If outdoors**, move away from buildings, streetlights, trees, overpasses and utility wires.
- **If in a moving vehicle**, stop in an open area as quickly as safety permits and stay in the vehicle.



## After an earthquake

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- **Check for injuries** and administer first aid as needed.
- **Open cabinets cautiously**, as contents may have shifted and could fall when doors are opened.
- **Look for small fires** and extinguish them.
- **Turn off gas supply lines** if the smell of gas is present.
- **Be prepared for aftershocks**. Secondary shockwaves are usually less violent than the main quake but can be strong enough to further damage weakened structures.
- **If trapped under debris**, do not light a match, move about or kick up dust. Hold a handkerchief or clothing over nose and mouth. Tap on a pipe or wall to signal rescuers. Use a whistle if one is available. Shout only as a last resort, to avoid inhaling dust.
- **Stay away from damaged areas** unless police, fire or relief organizations specifically request assistance.
- **Listen to the radio** for instructions, and only use the telephone to report any life-threatening emergencies.

## Supplement 2: Specific Disasters

# Fire

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The National Fire Protection Agency has found that the age group most likely to die in house fires are those 75 and older.

Approximately 2.4 million burn injuries are reported in the United States each year. Burns and fires are the leading cause of accidental death in the home for children 14 and under and are second only to motor vehicle crashes in causing accidental deaths.



### To protect a residence from fire

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- **Place smoke alarms** on every level - outside bedrooms on the ceiling or no more than 12 inches from the ceiling, at the top of open stairways or at the bottom of enclosed stairs and near (but not in) the kitchen. If household members sleep with doors closed, install smoke alarms inside sleeping areas, too. Test smoke alarms once a month, and replace batteries at least once a year. Smoke alarms become less sensitive over time so replace the units every 10 years.
- **Keep an A-B-C type fire extinguisher** in the house, and get training from the fire department in how to use it. Consider installing an automatic fire sprinkler system in the house.
- **Clean out storage areas** and don't allow cobwebs, dust and trash to accumulate - including newspapers and magazines.
- **Store flammable liquids** in approved containers in well ventilated storage areas. Never use gasoline, benzene, naptha or other flammable liquids indoors. Allow any flammable liquid-soaked rags to air outdoors in a metal container, and after fumes are dispersed, seal the rags in plastic and dispose of them.
- **A chimney** should be at least three feet higher than the roof, insulated and have spark arresters on top. Trim nearby tree branches.
- **Use a fireplace screen.** Dispose of ashes in a metal container outdoors and away from the residence.
- **Never smoke near flammable liquids**, in bed or when drowsy or medicated. Douse lighted tobacco products in water before disposing of them.
- **Store matches** and lighters up high, away from children.
- **Keep open flames** of candles, lanterns and tobacco products away from walls, furniture, drapery and flammable items.
- **Check with the fire department** on the legality of using kerosene heaters. Place heaters at least three feet away from flammable materials, and ensure the floor and nearby walls are properly insulated. Have the units inspected and cleaned annually by a certified specialist. Take kerosene heaters outdoors to refuel them, and be sure they have cooled before moving them. Use only the type of fuel designated for the unit and follow manufacturer's instructions.

*Check  
with  
the fire  
department on  
the legality  
of using  
kerosene  
heaters.*

- **All electrical outlets** and junction boxes should have cover plates. Make sure insulation does not touch bare electrical wiring. No wiring should be exposed or run across nails, under rugs, or through high-traffic areas.
- **Inspect extension cords** for frayed and/or exposed wires or loose plugs and do not overload them. If multiple appliances are needed, use only UL-approved units with built-in circuit breakers.



*Once out of  
a burning  
building, stay  
out. Call  
the fire  
department  
from a  
neighbor's  
house.*

## **Plan escape routes**

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- **Determine ways to escape** from every room, and review them with family members. Together, practice escaping from each room.
- **Make sure windows open easily** and that all security gratings and other anti-theft mechanisms that block outside window entry have a fire safety feature that permits them to be easily opened from the inside.
- **Sleeping areas on upper floors** should have escape ladders. Learn how to use them and store them near the window at which they would be used.
- **Teach family members to stay low** to the floor, where the air is safer, when escaping from a fire. Select a location outside the house where all household members would meet after escaping from a fire.

## **During a fire**

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- **Check closed doors for heat** before opening them. Use the back of a hand to feel the top of the door, the doorknob and the crack between the door and door frame before opening it. Never use the palm of a hand or fingers to test for heat because burning those areas could impair the ability to climb or crawl to safety.
- **If an exit route is blocked** by smoke, heat or flames, stay in the room with the door closed. If there is a telephone in the room, call the fire department and describe family members' locations, then signal locations with bright-colored cloths at those windows.
- **Smoke and poisonous gases** collect first along the ceiling so be prepared to crawl; the air will be clearer and cooler near the floor. Close doors as passing through them to delay the spread of the fire.
- **If clothing catches on fire**, stop, drop and roll until the fire is extinguished. Running only makes the fire burn faster.
- **Once out, stay out.** Call the fire department from a neighbor's house.

## **After a fire**

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- **Cool and cover any burns** to reduce the chance of further injury or infection.
- **If heat is felt or smoke is seen** when entering a damaged building, do not enter.
- **A safe or strong box** can hold intense heat for several hours. Opening one before it cools could endanger the contents.
- **If forced to leave the house** because a building inspector says it is unsafe, ask someone trustworthy to watch the property.

## Supplement 2: Specific Disasters

# Pandemic

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According to the World Health Organization, a pandemic can occur when a new virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with enormous numbers of deaths and illnesses.

Given the high level of global traffic, a virus may spread rapidly, leaving little or no time to prepare. Vaccines, antiviral agents and antibiotics to treat secondary infections could be in short supply and unequally distributed. Widespread illness could result in sudden and potentially significant shortages of personnel to provide essential community services. Medical facilities could be overwhelmed.

In the past, new strains of influenza have generated pandemics causing high death rates and great social disruption. Influenza's effect also is relatively prolonged throughout a community when compared to other natural disasters, because outbreaks can reoccur.



During the past few years, the world has faced several threats with pandemic potential, making the occurrence of the next pandemic a matter of time. Knowing the facts is the best preparation. Identify sources of reliable information, such as [www.pandemicflu.gov](http://www.pandemicflu.gov) and the agency's hotline at 1-800-232-4636. Listen to local and national radio, watch news reports on television and read the newspaper and other sources of printed and Web-based information.

### Household preparedness

- ***Stock a supply of water and food.*** A pandemic may make shopping difficult, or stores' stocks may be reduced. Public utility services may be interrupted, so water supplies may become limited. Store foods that are non-perishable, require little or no water and minimal preparation.
- ***Stay away from*** areas where crowds gather; illness may spread easily.
- ***If children are in the house,*** contact the school nurse, teachers, administrators and parent-teacher organizations to plan home learning activities and exercises in the event schools are closed.

### Personal protections

- ***Take common-sense steps*** to limit the spread of germs. Wash hands frequently with soap and water or a waterless, cleanser, and as much as possible, avoid touching the eyes, nose or mouth.
- ***Make good hygiene a habit.*** Cover the mouth and nose with a tissue when coughing or sneezing and dispose of used tissues.
- ***Eat a balanced diet,*** drink lots of water and go easy on salt, sugar, alcohol and saturated fat.



*Get a  
flu  
shot  
which will  
bolster  
resistance to  
illness.*

- **Exercise regularly** and get plenty of rest.
- **If ill, stay at home.** Don't take the chance of communicating your illness to co-workers and others.
- **Avoid close contact** with others who are ill.
- **Get a seasonal flu shot**, which will bolster resistance to illness. Any household member who is over the age of 65 or has a chronic illness, such as diabetes or asthma, also should get a pneumonia shot to prevent secondary infection; these offer protection for five to ten years.

### **Pandemic effects on the community**

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- **Crowds increase the risk of contagion.** Contact the local public health department or area Red Cross chapter for safety rules and advice. Church services, movie showings, concerts and other public gatherings may have to be cancelled. Public services could be disrupted: hospitals and other health-care facilities, banks, stores, restaurants and government offices may curtail service or close temporarily.
- **Ask employers** about how business will continue during a pandemic and how employee leave will be scheduled. Consider ways other than public transportation to get to work, or better yet, work at home. Plan for the possible reduction or loss of income if a place of employment is temporarily closed. Meet with colleagues and list locations of materials and information people will need: insurance, leave policies, work-from-home policies, illness and absentee policies.
- **Locate and list volunteers** who will be available to assist elderly neighbors, single parents of small children or people who lack the resources to get medical help they will need. Identify other information resources in the community, such as mental and public health hot lines or electronic bulletin boards. Prepare backup plans to care for loved ones who are far away.
- **Educate staff and members** about pandemic effects using current materials found at [www.pandemicflu.gov](http://www.pandemicflu.gov) and other reliable sources. Because the type of virus may alter the recommended response, it will be important to access and communicate current information regularly as it becomes available.

## Supplement 2: Specific Disasters

### Terrorism or civil unrest

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Terrorism and acts of civil disobedience use force or violence against people or property in violation of criminal laws in order to intimidate, coerce or seek ransom. Perpetrators use threats to create widespread fear, to try to convince citizens that governments are powerless and to get immediate publicity for their causes.

Acts of terrorism and civil unrest may include assassinations, kidnappings, hijackings, bomb scares and bombing, computer-based or “cyber” attacks and possibly the use of chemical, biological, nuclear and radiological weapons.

High-risk targets include military and civilian government facilities, airports, large cities, high-profile landmarks, large public gatherings, water and food supplies, utilities and corporate centers. Explosives or chemical and biological agents may be sent via the mail (see page S-39 for information about chemical hazards and page S-41 for information on biological hazards).



#### Ways to prepare

- ***Trust gut instinct.*** Be aware of surroundings, and leave if something unidentifiable just does not seem right.
- ***Take precautions when traveling.*** Be aware of unusual behavior. Do not accept packages from strangers. Do not leave luggage unattended. Promptly report to the police or security personnel unusual behavior, suspicious or unattended packages and strange devices.
- ***Learn where emergency exits are located*** in buildings that are frequently used. Plan how to get out in the event of an emergency.
- ***Be prepared*** to do without standard services - electricity, telephone, natural gas, gasoline pumps, cash registers, ATMs and Internet.

#### If there is an explosion

- ***If things are falling,*** get under a sturdy table or desk. Leave quickly when items settle, watching for weakened floors and stairways. Do not stop to retrieve personal possessions or make phone calls. Do not use elevators. Be especially watchful of falling debris while exiting.
- ***Once out,*** move away from sidewalks or streets. They will need to be clear for use by emergency officials or others exiting buildings. Do not stand in front of windows, glass doors or other potentially hazardous areas. Rely on police, fire and other officials for instructions.
- ***If trapped in debris,*** use a flashlight, a whistle or tap on a pipe or wall to signal rescuers. Avoid unnecessary movement so additional dust isn't kicked up, and cover the nose and mouth with any breathable fabric on hand. Shout only as a last resort, because it can cause inhalation of dangerous amounts of dust.

*If trapped  
in debris, use  
a flashlight a  
whistle or tap  
on a pipe  
or wall to  
signal rescuers.*



**S-36** In God's Hands - and Ours

## Supplement 2: Specific Disasters

# Hazardous material incident

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Many communities have Local Emergency Planning Committees whose responsibilities include collecting information about hazardous materials releases in the community, such as an oil spill, freight train derailment or over-the-road trucking accident. They generally make this information available to the public upon request. They also develop emergency plans to prepare for and respond to such emergencies.



### What to do

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- ***Listen to local radio*** or television stations for detailed information and instructions.
- ***If outdoors***, stay upstream, uphill and upwind. In general, try to go at least one-half mile (8-10 city blocks) from the danger area. Do not walk into or touch any spilled liquids, airborne mists or condensed solid chemical deposits.
- ***If in a motor vehicle***, stop and seek shelter in a permanent building. If a building is not nearby and it is necessary to remain in a car, keep windows and vents closed and shut off the air conditioner and heater.
- ***If asked to remain indoors*** by public officials, close and lock all exterior doors and windows. Close vents, fireplace dampers and as many interior doors as possible. Seal the room by covering each window, door and vent using plastic sheeting and duct tape. Fill cracks and holes, such as those around pipes. Turn off air conditioners and ventilation systems.
- ***In large buildings***, set ventilation systems to 100 percent recirculation so that no outside air is drawn into the building. If this is not possible, ventilation systems should be turned off.
- ***Evacuate immediately if asked to do so***, and return home only when authorities say it is safe, opening windows and vents and turning on fans to ventilate the house.
- ***If exposed to hazardous materials***, follow decontamination instructions from local authorities, such as a thorough shower or perhaps to stay away from water and follow another procedure. Place exposed clothing and shoes in tightly sealed containers and ask local authorities how to properly dispose of them. Seek medical treatment for unusual symptoms as soon as possible.
- ***Find out from local authorities*** how to clean up land and property. Report any lingering vapors or other hazards to the local emergency services office.

*Listen  
to local radio  
or television  
stations for  
detailed  
information and  
instructions.*



## Supplement 2: Specific Disasters

# Chemical hazard or attack

In a major chemical emergency, a hazardous amount of a chemical is released into the environment. Accidents sometimes result in a fire or explosion, or small animals such as fish or birds may die suddenly, but many times, there are no signs of a chemical release.

A chemical attack is the deliberate release of a toxic material that can poison people and the environment.

Household chemicals also can cause emergencies and must be handled with care.



### What to do

- **To notify the public** of a chemical accident or attack, authorities may sound a siren, or emergency personnel may drive by and give instructions over a loudspeaker. Officials could call or come to the door. Listen carefully to radio or television emergency alert stations, and strictly follow instructions.
- **Define the affected area** or the chemical source as quickly as possible. Then locate the fastest means of protection: Is it possible to leave the area, or would it be better to seek shelter in a nearby building?
- **If the chemical is inside the building**, try to exit without passing through the contaminated area. Cover the mouth and nose with a damp cloth to provide a minimal amount of protection for breathing.
- **If there has been an explosion in the building**, exit as quickly as possible without using an elevator. If the exits are blocked, check for fire and other hazards, then take shelter against a desk or a sturdy table as far away as possible from the location of the explosion or suspected chemical release.
- **If at home**, close all windows and turn off all fans, heating and air conditioning systems. Close fireplace dampers. Go to an above-ground room with the fewest windows and doors.

*Watery eyes, twitching, stinging skin, choking, difficulty breathing or losing coordination may be signs of a chemical hazard or attack.*

### Physical responses

- **Watery eyes**, twitching, stinging skin, choking, difficulty breathing or losing coordination may be signs that a chemical hazard or attack is occurring. Dizziness, sudden headache, blurred vision or a sore throat are other possible symptoms.
- **If toxic vapors overcome someone**, the first priority is to avoid becoming a victim.
- **If trained in CPR or first aid** and confident there is no personal danger, check an injured person for the degree of harm. Administer appropriate treatment first for life-threatening injuries, then deal with any chemical burns.

- **If calling for emergency medical care**, tell the dispatcher the location of the emergency and the telephone number. Describe what has happened, how many people are involved and what is being done to help. Stay on the phone until the operator hangs up.

- **To treat someone** who may have been exposed to a hazardous chemical, immediately wash affected areas with soap and water, if possible, but do not scrub the chemical into the skin.



*If eyes are affected, clear them with running water.*

- **If eyes are affected**, clear them with clean water. Cool running water will dilute the chemical fast enough to prevent the injury from worsening.
- **If clothing is contaminated**, remove it starting from the topmost point. Take care not to touch contaminated clothing to bare skin. Place clothing in a plastic bag so it cannot contaminate other people or things.
- **Cover any wound very loosely** with a dry, sterile or clean cloth so that the cloth will not stick to the wound. Do not put any medication on the wound.

## **Household chemical dangers**

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- **Read and follow directions** printed on containers of household chemicals, paying special attention to any need for gloves, eye protection and ventilation. To prevent poisoning, avoid mixing such products - some combinations, such as ammonia and bleach, can create toxic gasses.
- **Don't use household chemicals** near the open flame of an appliance, pilot light, candle, fireplace, wood-burning stove or tobacco product.
- **Store any chemical product** tightly closed in the original container so that labels alert to possible danger and proper use.
- **Clean up spilled chemicals** immediately and allow fumes in the rags to evaporate outdoors in a safe, shaded place, then wrap the rags in newspaper, seal them in a plastic bag and place them in a trash receptacle.
- **Keep handy a fire extinguisher** labeled for A, B, and C class fires, and know how to use it. Remember that extinguishers must be periodically checked and recharged.
- **Recycle or dispose** of unused chemicals properly. Improper disposal - such as pouring a chemical fluid onto the ground or down a household drain or storm drain - may contaminate the local water supply or harm people who come into contact with the chemical. Local waste collection facilities may accept pesticides, fertilizers, household cleaners, paint, drain and pool cleaners, antifreeze, motor oil and brake fluid. If there are questions about how to dispose of a chemical, call a local recycling or disposal facility or environmental agency.
- **If a child eats or drinks** a non-food substance, call 911 and follow the dispatcher's instructions, because instructions printed on the container may not provide the best solution.

## Supplement 2: Specific Disasters

# Biological hazard or attack

A biological attack is the release of germs or other biological substances. Many agents must be inhaled, enter through a cut in the skin or be eaten to make the body ill.

A biological attack may or may not be immediately obvious. The danger may only become known via radio or TV after local health care workers report a worrisome pattern of illness.



### What to do

- **If aware that an unknown substance** has been released nearby, get away from the area as quickly as possible, covering mouth and nose with layers of fabric that can filter the air but still allow easy breathing. Wash exposed skin with soap and water, and contact authorities.
- **Watch TV, listen to the radio** or check the Internet for official news as it becomes available. In the event of a biological attack, public health officials may not immediately be able to provide information on what to do.
- **Do not automatically assume** during this time that all symptoms of this illness are the result of an attack. Use common sense to determine the cause. Practice good hygiene and cleanliness to avoid spreading germs, and see medical advice if a loved one becomes ill.

*Many agents must be inhaled, enter through a cut in the skin or be eaten to make the body ill.*

### Suspicious mail

- **If a letter or package arrives** and it seems to present a danger, answer these questions: Did it arrive unexpectedly? Does it bear excess postage? Is the name and/or address dramatically misspelled, and does it lack a return address? Is there an unusual odor? Is the packaging material stained, or does the package show any other signs of contents leaking or having spilled? These clues may suggest a call to local law enforcement to check it out.
- **If a threat is received through the mail** contact local law enforcement authorities, because sending a communication through the US mail that states a threat is a federal crime. If a letter or package contains a threat along with an undetermined substance, contact the local police, FBI and the public health department. If someone nearby has opened the object and developed physical symptoms, call 911.

**S-42** In God's Hands - and Ours

## Supplement 2: Specific Disasters

### Nuclear incident

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Though the debate rages on in Middle Tennessee regarding the building of nuclear power plants, in East Tennessee, they are the primary sources of potential nuclear incidents. About 30 percent of TVA's power supply comes from three nuclear plants: Browns Ferry near Athens AL, Sequoyah in Soddy Daisy TN, and Watts Bar near Spring City TN. The plants make enough electricity to power more than three million homes in the Tennessee Valley.

Although the construction and operation of these facilities are closely monitored and regulated by the Nuclear Regulatory Commission, an accident could result in dangerous levels of radiation that could affect the health and safety of people living nearby.

Local and state governments, federal agencies and the electric utilities have emergency response plans in the event of a nuclear power plant incident. The plans define two "emergency planning zones." One covers an area within a 10-mile radius, where it is possible that people could be harmed by direct radiation exposure. The second zone covers up to a 50 mile radius from the plant, where radioactive materials could contaminate water supplies, food crops and livestock.

If within 10 miles of the power plant, public emergency information materials should arrive yearly from TVA or state or local government.



*In East Tennessee, nuclear power plants are the primary source of potential nuclear incidents.*

### Terms to know

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- ◆ **Notification of Unusual Event** - A small problem has occurred at the plant. No radiation leak is expected. No action will be necessary.
- ◆ **Alert** - A small problem has occurred, and small amounts of radiation could leak inside the plant. No action is required.
- ◆ **Site Area Emergency** - Area sirens may be sounded. Listen to the radio or television for safety information.
- ◆ **General Emergency** - Radiation could leak outside the plant and off the plant site. The sirens will sound. Tune to a local radio or television station for reports. Be prepared to follow instructions promptly.

### Radiation dangers

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The potential dangers from an accident at a nuclear power plant is exposure to radiation. This exposure could come from the release of radioactive material from the plant into the environment, usually characterized by a plume of radioactive gases and particles which may be deposited on the ground, inhaled and/or ingested. Radiation has a cumulative effect. The longer a person is exposed, the greater the effect. A high exposure can cause serious illness or death.

## **What do to**

If an accident at a nuclear power plant were to release radiation, local authorities would activate warning sirens or another approved alert method and offer instruction thought the Emergency Alert System on local television and radio stations.

Take cover immediately, below ground if possible, though any shield or shelter will offer some protection from immediate effects. The thicker the shield from radioactive materials, the less radiation will leak through.

## Supplement 2: Specific Disasters

### Nuclear blast

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A blast is another possible source of a nuclear accident. This is an explosion with intense light and heat, a damaging pressure wave and widespread radioactive material that can contaminate the air, water and ground surfaces for miles around and cause fires. A nuclear device can range from a weapon carried by an intercontinental missile launched by a hostile nation or terrorist organization, to a small portable unit transported by an individual.

The dispersion of hazard effects will be defined by the following:

- ◆ **Size of the device** - A more powerful bomb will produce more distant effects.
- ◆ **Height above ground at detonation** - Blasts that occur near the earth's surface creates much greater amounts of fallout than blasts that occur at higher altitudes, because the tremendous heat produced from a nuclear blast causes an up-draft of air that forms the familiar mushroom cloud. When a blast occurs near the earth's surface, millions of vaporized dirt particles also are drawn into the cloud. As the heat diminishes, radioactive materials that have vaporized condense on the particles and fall back to Earth as radioactive fallout. The fallout material decays over a long period of time and is the main source of residual nuclear radiation.
- ◆ **Nature of the surface beneath the explosion** - Some materials are more likely to become radioactive and airborne than others. Flat areas are more susceptible to blast effects.
- ◆ **Existing meteorological conditions** - Wind speed and direction will affect arrival time of fallout; precipitation may wash fallout from the atmosphere. Fallout from a nuclear explosion may be carried by wind currents for hundreds of miles if the right conditions exist. Effects from even a small portable device exploded at ground level can be potentially deadly.



*A nuclear device can range from a weapon carried by a missile launched by a hostile nation to a small unit transported by an individual.*

### Radiation dangers

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Nuclear radiation cannot be seen, smelled or otherwise detected by the five human senses. Radiation can only be detected by radiation monitoring devices. Monitoring can project the fallout arrival times, which will be announced through official warning channels. However, any increase in surface build-of gritty dust and dirt should be a warning for taking protective measures.

In addition to other effects, a nuclear weapon detonated in or above the earth's atmosphere can create an electromagnetic pulse, a high-density electrical field that can seriously damage electronic devices including communication systems, computers, electrical appliances and automobile or aircraft ignition systems. Battery-powered radios with short antennas generally would not be affected.

## **How to prepare**

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- ***People living near potential targets*** may be advised to evacuate if there were a threat of an attack. In general, potential targets include strategic missile sites and military bases, centers of government, transportation and communication centers, manufacturing, industrial, technology and financial centers, petroleum refineries, electrical power plants and chemical plants and ports and airfields.
- ***Find out from officials*** if any public buildings in the community have been designated as fallout shelters. If none have been designated, make a list of potential shelters near home, workplace and school. Tunnels, basements and windowless center areas of middle floors in high-rise buildings are good options.
- ***During periods of increased threat***, stock disaster supplies to be adequate for up to two weeks.
- ***Keep a battery-powered radio*** nearby and listen for specific instructions.

## **What to do**

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- ***If told to evacuate***, keep car windows and vents closed; re-circulate interior air only.
- ***If advised to remain indoors***, turn off the air conditioner, ventilation fans, furnace and other air intakes. Go to a basement or other underground area, if possible. Do not use the telephone unless absolutely necessary.
- ***If exposed to nuclear radiation***, remove exposed clothing and seal it in a plastic bag. Take a thorough shower. Seek medical treatment for any unusual symptoms, such as nausea, that may be related to radiation exposure.
- ***Keep food in covered containers*** or in the refrigerator. Food not previously covered should be washed before being put in containers.
- ***If caught outside*** and unable to go indoors immediately, take cover behind anything that might offer protection - the denser the better. If no protection is evident, lie flat on the ground, crossing arms above the head and wait. If the explosion is some distance away, it could take 30 seconds or more for the blast wave to hit.
- ***Take shelter as soon as possible***, even if many miles from the attack location; radioactive fallout can be carried by the winds for hundreds of miles. Remember the three protective factors: distance, shielding and time.

## Supplement 3: Sources and Resources

### For more information

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The Episcopal Dioceses of New York, Western New York, Southwestern Virginia and Southeast Florida all have preparedness manuals that they freely shared while this manual was being developed by the Diocese of East Tennessee in mid-2006.

Other sources of information include:

The American Academy of Experts in Traumatic Stress  
Christian Church (Disciples of Christ)  
The Religion Communicators Council  
Virginia Cooperation Extension  
The National Voluntary Organizations Active in Disaster  
The National Park Service

The discussion in the previous supplement about preparedness for specific disasters borrows liberally from materials found on the sites listed below. All of them offer tremendous volume and variety of materials. They are listed in alphabetical order:

*The internet is a treasure trove of materials related to emergency and disaster preparedness; however, not all sites are authoritative.*

#### **American Red Cross**

([www.redcross.org/services](http://www.redcross.org/services); [www.prepare.org](http://www.prepare.org))

The Red Cross is widely known and respected for its response to disasters, and the “services” area of its website shares the organization’s expertise in an alphabetical, clickable index. In addition, its “prepare.org” site offers information specific to “vulnerable populations” in the United States: seniors, children, immigrants (the materials are offered in eight languages), people who have disabilities and owners of animals.

#### **Centers for Disease Control and Prevention**

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

In addition to the expected information about the spread of disease, the CDC has an up-to-date and easy-to-use emergency response and preparedness sub-site with areas on bioterrorism, chemical threats, weather emergencies, natural disasters and more. Many of its resources are available in multiple language translations.

#### **Disaster Help**

([www.disasterhelp.gov/portal/jhtm/index.jhtml](http://www.disasterhelp.gov/portal/jhtm/index.jhtml))

DisasterHelp is part of the US President’s Disaster Management E-Gov Initiative, which is designed to enhance disaster management cooperation among governmental agencies and branches. This information portal will bring up other sites within its window, and it offers citizens weather forecasts, preparedness tip sheets, news of recovery efforts and more. First responders are invited to register for access to additional materials.

### **The Episcopal Church's Bishop Suffragan for Chaplaincies**

([www.ecusa-chaplain.org](http://www.ecusa-chaplain.org))

This office prepared a DVD following the 9/11 terrorist attacks, “What to Do Next When a Disaster Strikes.” It includes video segments and other resources that may help a parish team to understand how people react to a disaster and to consider appropriate responses and helping behaviors. It has links to Web, liturgical and other resources.

### **Episcopal Relief and Development**

([www.er-d.org](http://www.er-d.org))

In 2006, the relief arm of the Episcopal Church hired Richard Ohlsen as director for domestic disaster response and preparedness. The organization also maintains a speakers bureau, and it freely offers printed resources, such as bulletin inserts, for congregational use. Many are photocopy-ready and available for immediate download.

### **National Institute of Mental Health**

([www.nimh.nih.gov/healthinformation/index.cfm](http://www.nimh.nih.gov/healthinformation/index.cfm))

This site offers a wealth of materials on common mental health conditions including coping with traumatic events and related stress. It indexes by condition and by population subsets, such as gender and age.

### **New York Disaster Interfaith Services**

([www.nydis.org/resources/2db2.php](http://www.nydis.org/resources/2db2.php))

Following the terrorist attacks of September 11, 2001, organizations in New York were among the first to mobilize for future preparedness, and in its “disaster resource library,” this site offers extensive databases of articles searchable by keyword and/or category.

### **ReadyAmerica**

([www.ready.gov/american/index.html](http://www.ready.gov/american/index.html))

A governmental site targeting private citizens. Ready America focuses on three primary areas: emergency kits, family plans in the event of a disaster and information about specific threats.

### **Tennessee Emergency Management Agency**

([www.tnema.org/EP/Default.htm](http://www.tnema.org/EP/Default.htm))

On its emergency preparedness page, the state arm of FEMA has information specific to the places we live. See Davidson County Emergency Management’s website at [www.nashville.gov/oem/index.htm](http://www.nashville.gov/oem/index.htm), Williamson County’s site at [www.williamson-tn.org/co\\_gov/depts/ema/home.htm](http://www.williamson-tn.org/co_gov/depts/ema/home.htm), Rutherford County’s site at [www.rutherfordcounty.org/rcema](http://www.rutherfordcounty.org/rcema), Sumner County’s site at [www.sumnerema.org](http://www.sumnerema.org) or visit your county’s website for more information.

The internet is a treasure trove of materials related to emergency and disaster preparedness; however, not all sites are authoritative. For example, Wikipedia, an open-source Internet site, relies on community policing of content. In general, plan to check sources and ask the advice of local authorities when unsure of Internet recommendations.

**Tennessee Voluntary Organizations Active in Disaster**

([www.tnvoad.org](http://www.tnvoad.org))

Tennessee VOAD is a consortium of recognized state voluntary organizations, governmental agencies, and others with an interest in, and / or who are active in disaster relief. Their mission is to foster more efficient service to people who are affected (imperiled or impacted) by disasters in the State of Tennessee through: Cooperation, Coordination, Communication, Collaboration, Education, and Mitigation at all community levels.

**National Organization for Victim Assistance**

([www.trynova.org](http://www.trynova.org))

The National Organization for Victim Assistance is a private, non-profit 501(c)3 of victim and witness assistance programs and practitioners, criminal justice agencies and professionals, mental health professionals, researchers, former victims, and survivors and others committed to the recognition and implementation of the rights and services for victims of crime and crisis.

## Supplement 3: Sources and Resources

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