



Disaster Preparedness Newsletter

February, 2009

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COMPREHENSIVE AGENCY PLAN FOR EMERGENCIES (CAPE)

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This document provides an outline of issues for you to consider in developing your emergency response plan for disasters. CAPE is designed for hospitals, consumer agencies, and long term care facilities. It is not intended to limit or exclude other information that you may decide to include in order to address other arrangements that have been made for emergency preparedness. It is recommended that you review your plans with the emergency management officials in your local jurisdiction for additional guidance. Copyright permission is granted for agency use, provided the author's name is cited in the final document.

I. INTRODUCTION

- A. Provide an introduction to the plan which describes its purpose, time of implementation, and the desired outcome that will be achieved through the planning process.
- B. Provide the following agency information:
 - 1. Name of agency, address, telephone number, emergency contact telephone number and pager number if available, email, fax number, and type of agency.
 - 2. Address and telephone number and contact person for
 - a. Agency licensee, and
 - b. Building owner/ landlord, if different from licensee.

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3. Year facility was built, type of construction, and date of any subsequent construction.
 4. Name, address, work/home/cell telephone numbers of:
 - a. Agency administrator,
 - b. Alternate administrator/ designee,
 - c. Person implementing the provisions of this plan, if different from the administrator/ alternate administrator, and
 - d. Person(s) who developed this plan.
 5. Provide an organizational chart, including phone/ cell numbers, with key management positions identified.
- C. Provide site specific information concerning the agency to include:
1. Number of agency beds, maximum number of residents on site, average number of residents on site.
 2. Type of residents served by the agency to include, but not limited to:
 - a. Residents with Alzheimer Disease.
 - b. Residents requiring special equipment or other special care, such as I.V.'s, oxygen or dialysis.
 - c. Number of residents who are self-sufficient.
 - d. Other characteristics requiring consideration.
 3. Number and type of clients or consumers served who are not residents.
- D. Identify reference materials used to develop this plan.

II. ORGANIZATIONAL STRUCTURE

- A. Provide an organizational chart that identifies key emergency positions, with names and contact information:
1. Administrator
 2. Director of Nursing/ Director of Resident Services
 3. Maintenance Supervisor
 4. Food Service Supervisor
 5. Activities Director
 6. Director of Housekeeping
 7. Financial Officer/ Person authorized to obligate funds (Clearly identify and authorize specific individual(s) to make emergency purchases and enter into emergency contracts.)
 8. Other key staff positions and subordinates
- B. Identify a community spokesperson who will communicate for the agency during a disaster, and during the recovery period.
- C. Identify an Incident Command Leader who will be in charge of operations during a disaster.

III. HAZARD ANALYSIS

- A. List the potential hazards that the Plan addresses, such as:
- NATURAL
- Hurricanes
 - Tornadoes
 - High winds
 - Winter storms/heavy snow/ice

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- Earthquakes
- Volcanic eruptions
- Landslides/debris flow
- Tsunamis
- Building fires
- Wild fires
- Droughts
- Floods
- Other:
- Other:

MANMADE THREATS

- Hazardous material spills
- Nuclear power plant accidents
- Other:
- Other:

TERRORISM

- Explosions
- Biological threats
- Chemical threats
- Nuclear blasts
- Other:
- Other:

COMMUNICABLE DISEASES

- Pandemic Flu:
- Other:
- Other:

IV. OPERATIONS DURING A DISASTER

This section of the plan defines the policies, procedures, responsibilities and actions that the agency will take before, during and after any emergency situation. At a minimum, the agency plan needs to address: control authority; notification and communication; and evacuation and sheltering.

A. Incident Command Team

Define the management function for emergency operations. The Incident Command Team provides a basis for decision making and identifies who has the authority to make decisions for the agency during an emergency.

1. Identify, by name and title, who is in charge during an emergency, and one alternate, should that person be unable to serve in that capacity.
2. Identify the chain of command to ensure continuous leadership and authority in key positions.
3. Identify a community spokesperson who will make public announcements during a disaster-as needed.
4. State the procedures to ensure timely activation of emergency staffing and ongoing twenty-four hour staffing of the agency in emergency situations.
5. State the agency's policies to address the staff's responsibilities to their families and agency residents. Consider:
 - a. How far away the staff lives from the agency and how much time would it take to travel between home and the agency during the emergency, if travel is possible.

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- b. The ages and numbers of dependent family members.
 - c. Other emergency supports available to staff members' families, such as other family or neighbors.
 - d. The relative advantages and disadvantages of staff families coming to the agency so staff would not be torn between residents and families.
6. Define the specific roles, tasks and responsibilities for each staff person/ position for each type of emergency, i.e. staff responsibilities may be different in cases of an agency fire and an earthquake and an extended power outage. This may be accomplished through the development of Standard Operating Procedures which should be attached to this plan.
7. State the procedures to ensure the following needs are supplied for a minimum of 72 hours.
- a. Food
 - i. Emergency menus planned ahead
 - ii. Food storage without refrigeration
 - iii. Ability to prepare food without normal functioning of kitchen appliances
 - iv. Sanitation, including means of washing utensils, plates or disposable, one-time use of utensils, plates, etc.
 - b. Water: sources of, or means to produce, water suitable for:
 - i. Drinking
 - ii. Cooking
 - iii. Personal hygiene
 - c. Medications
 - i. Proper conditions of storage
 - ii. Security/ accountability
 - d. First aid and medical supplies
 - e. Sanitation and infection control
 - i. Medical and human waste
 - ii. Garbage/ refuse
 - iii. Personal hygiene
 - iv. An extended supply of personal protective equipment (gloves, masks, etc.) to be used during an outbreak of infectious disease.
 - f. Sleeping arrangements
 - g. Backup source of heat and lights
 - h. Transportation (may be covered in evacuation section).
 - i. Other essential supplies for staff and residents.
8. Develop plans for responding to requests for assistance from the surrounding community, especially in Continuing Care Retirement Communities.
9. Develop plans for mental health support for residents and staff.
10. Develop a business continuity plan that includes an off-site copy of all important business records and resident and employee information, including off-site backup of electronic files.
11. Develop plans to enforce isolation or quarantine procedures if necessary to respond to an outbreak of pandemic flu/ infectious disease.

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B. Critical Services, Suspended Services, Modified Services.

Identify the services which will be provided during a disaster.

1. Identify critical services which must be continued for the health and safety of clients.
2. Identify services which will be suspended during a disaster.
3. Identify services which will be modified and describe how they will be modified during a disaster.

C. Identify triggers for initiating disaster plans.

D. Policies for limiting visitation during disasters. *Identify the policies that will be in place related to isolation, quarantine, and social distancing.*

1. Isolation
2. Quarantine
3. Social distancing

E. Notification/ Communication Plan.

Procedures must be in place for the agency to receive timely information on impending threats, and the alerting of agency decision makers, staff and residents of potential and current emergency conditions.

1. Define primary and alternate means for how the agency will receive warnings and current emergency information, to include off hours and weekends/holidays. (Consider battery operated radios/ weather radios, volunteer

HAM radio operators, walkie-talkies, Citizen Band radios, cell phones, couriers, etc. Coordinate with local emergency management officials.)

2. Identify the agency's 24 hour contact number, if different than number listed in introduction.
3. Define primary and alternate means of how key staff will be contacted.
4. Define the procedures and policy for key workers reporting to work.
5. Define how residents and clients will be alerted and the precautionary measures that will be taken. Develop procedure for immediately accounting for residents and staff after the emergency.
6. Identify alternative means of notification should the primary system fail.
7. Identify procedures for notifying those facilities to which agency residents will be evacuated.
8. Identify procedures for notifying families of residents that agency is being evacuated, and the location where residents will be transferred.

F. Technology Plan.

What technical services including computer services will be critical during a disaster? What policies and procedures will be in effect?

1. Develop a comprehensive plan for technology continuity and recovery.
2. Provide for backup power during a disaster.
3. Identify procedures to safeguard technical during a disaster.
4. What plans have been made to transport backup data to a safe location during a

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disaster?

5. How will critical services be documented if technology is not available during a disaster?
6. Has a disaster plan-building exercise been conducted with key employees? What procedures were recommended?
7. Identify which aspects of operations can be suspended temporarily and which must be maintained. List the business tools needed to perform operations essential to sustaining business during a disaster and the recovery period that follows.
8. Review communications capabilities for maintaining contact with employees. Email and text messaging should play a large role in employee communications planning.
9. What alternative operational locations have been identified? Are any agreements in place for use of the alternative locations?
10. Have backup operations sites been equipped with critical equipment, data files and supplies;

G. Quarantine Plan

1. Have provisions been made to update vaccinations for staff and clients?
2. Have provisions been made for identification and quarantine of infected individuals?
3. Have provisions been made for tight-fitting face masks for staff and clients?
4. Have staff and clients been educated to distance themselves from others by not going to public places (school, religious events, cultural events, sporting events, and other public events or places)?
5. Have staff and clients been educated to wash hands frequently and avoid touching self and

others?

6. What plans are in place to cleanse surfaces which may be touched?
7. Are sufficient quantities of vaccines and medications in place?
8. Are procedures in place for proper disposal of tissues used to cover sneezing and coughing?
9. Have provisions been made for safe food and water during quarantine?

H. Fire Safety Plan

1. Have smoke protectors been installed and tested in all possible locations? Have fire alarms been tested?
2. Have escape routes been planned and rehearsed by staff and clients?
3. Make sure windows are not nailed or painted shut. Make sure security gratings on windows have a fire safety opening feature so they can be easily opened from the inside.
4. Consider escape ladders if your residence has more than one level, and ensure that burglar bars and other antitheft mechanisms that block outside window entry are easily opened from the inside.
5. Have staff and clients been taught to stay low to the floor (where the air is safer in a fire) when escaping from a fire.
6. Are storage areas frequently cleaned to avoid accumulation of trash, such as old newspapers and magazines?
7. Are flammable liquids stored in approved containers in well-ventilated storage areas?

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- 8. Has smoking been prohibited or limited to safe areas?
- 9. Discard all rags or materials that have been soaked in flammable liquids after you have used them. Safely discard them outdoors in a metal container.
- 10. Have chimneys been insulated and equipped with spark arresters on top. The chimney should be at least three feet higher than the roof. Remove branches hanging above and around the chimney.
- 11. Are heaters placed at least three feet away from flammable materials? Make sure the floor and nearby walls are properly insulated.
- 12. Are ashes stored in a metal container outside and away from your facility?
- 13. Have heating units inspected and cleaned annually by a certified specialist?
- 14. Has the electrical wiring in your facility been checked by an electrician?
- 15. Has the local fire department inspected your facility for fire safety and prevention?

J. Sheltering Plan

If your agency will provide emergency shelter or temporary shelter during a disaster, have the following provisions been made?

- 1. Is there adequate space for each sheltered person (40 - square feet per bed)?
- 2. Does your facility have secured storage areas, separate rooms for the elderly and families with children, disabled (as needed), nursing, and office space.
- 3. Have adequate supply of drinking water (5

Gal/ person/day for all uses); toilet and bathing facilities (one toilet/40 people).

- 4. Does your plan include provisions for cooking, serving, and storing food (each person will need 2500 calories per day).

- 5. Does your plan provide for fire and police protection?
- 6. Does your facility have adequate parking?
- 7. Can your facility provide for persons with disabilities and persons who have limited mobility?
- 8. Describe the receiving procedures for residents arriving from evacuating agency.
- 9. Identify where additional residents will be housed.
- 10. Provide a floor plan which identifies the space allocated for additional residents
- 11. Identify provisions of additional food, water, medical needs of those residents being housed at the receiving agency for a minimum of 72 hours.
- 12. Describe the procedures for ensuring 24 hour operations.
- 13. Describe procedures for providing sheltering for family members of critical workers.
- 14. Describe procedures for tracking additional residents or residents sheltered within the agency.

K. Evacuation Plan.

Describe the policies, roles, responsibilities and procedures for the evacuation of residents from the agency.

- 1. Identify the individual responsible for implementing agency evacuation procedures, i

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- including coordination with local emergency management officials. Separately consider plans for building evacuation, such as in the case of a fire, and the need to evacuate the building and transport residents to another location.
2. Identify evacuation routes that will be used and secondary routes that would be used should the primary route be impassable.
 3. Has provision been made for the movement of residents, clients, and/or consumers and staff to an immediate area of safe refuge within the agency in the event the area must be evacuated or staff and consumers relocated?
 4. Have satellite locations been pre-determined and confirmed for the housing of consumers and staff in the event of an evacuation?
 5. Is there a written, mutual assistance partnership agreement or memorandum of understanding, or contract, or similar document concerning evacuation?
 6. Have transportation requirements been pre-designated for movement of clients and staff?
 7. Is there a copy of written documentation confirming the commitment of primary and secondary transport resource availability when needed?
 8. Has provision been made for the movement of client records and documents? Is there a process to assure security and confidentiality of these records until returned to the agency?
 9. Is there a procedure to secure the transport of 3 days of supplies and controlled substances during a disaster?
 10. What are the procedures to ensure agency staff will accompany evacuating residents, including:
 - a. Identifying individuals whose personal/family situations allow them to accompany residents.
 - b. Plans for supervising residents with cognitive impairments and providing essential care during evacuation, such as medication administration and care for incontinence?
 11. Identify procedures that will be used to keep track of residents once they have been evacuated (to include a log system).
 12. Establish procedures for responding to family inquires about residents who have been evacuated.
 13. Is there a time sequence in the evacuation plan designating appropriate moving times, assigned personnel, including professional staff assignments, and priority of clients when moving to specific locations?
 14. Determine what personal items and how much each resident should take. Provide for a minimum 72-hour absence from the agency, including medications, water, emergency food, blankets, incontinent supplies, essential medical equipment.
 15. Are procedures established for the orderly disposition of consumers and clients to their homes or residential facilities, if applicable?
 16. Is there a process to verify that all offices, rooms, restrooms, maintenance, and kitchen facilities have been evacuated and visually documented?
 17. Is there an Evacuation Road Map?
- L. Work Schedule and Compensation Plan.
Identify work schedules for use during a disaster, and how employees will be compensated for extra work.

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1. Who will have to work during a disaster to guarantee critical services?
2. Have you developed a work schedule identifying employees and time slots?
3. How will employees be notified that a disaster schedule is in effect?

M. Re-Entry Plan

Once an agency has been evacuated, procedures need to be in place for allowing residents to re-enter the agency.

1. Identify who is the responsible person(s) for authorizing re-entry into the agency, and who will be in charge of recovery operations.
2. Identify procedures for inspecting the agency to ensure it is structurally sound.
3. Identify how residents will be transported from the host agency back to their home agency and identify how you will receive accurate and timely data on re-entry operations.
4. Does your re-entry plan make provision for the following during recovery?
 - a. Documentation
 - b. Financial matters
 - c. Inventory and resupply
 - d. Records preservation
 - e. Cleanup
 - f. Hazard removal and cleanup
 - g. Salvage
 - h. Garbage and waste removal
 - i. Utility and equipment services
 - j. Physical plant restoration and renovation
5. Which operations and client services will be initiated, and in what order of priority?
6. What security will be in place while the facility is closed, and during re-entry?

7. Does the re-entry plan address the following programs?
 - a. Critical Incident Stress Debriefing Program
 - b. Employee Assistance Program
 - c. Group/Individual Counseling Services
 - d. Family Support Program

E. Identify a schedule for exercising/ testing all or portions of the disaster plan on an annual basis in consultation with local emergency management officials.

F. Establish procedures for correcting problems noted during training exercises.

V. TRAINING PLAN

A. Staff / Employee training

Provide detailed plans for training of staff.

1. Develop initial training materials
2. Develop ongoing training materials
3. Develop training materials for new employees
4. Develop a schedule for training

B. Resident training

1. Provide training for residents in fire safety, evacuations, etc.

C. Provide training for clients/consumers

1. Develop brochures, manuals, PowerPoint presentations, etc.
2. Develop schedules for ongoing training

VI. AGREEMENTS AND UNDERSTANDINGS

A.. Identify and describe Host Agency Agreements.

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- B. Identify and describe Transportation Agreements
- C. Identify and describe Vendor Agreements
- D. Identify and describe Inter-Agency Agreements

description of how to get to a receiving agency for drivers.

- F. Support material
 1. Any additional material needed to support the information provided in the plan.
 2. Copy of the agency's fire safety plan that is approved by the local fire department.

VII. ATTACHMENTS

Attach the following information if the material is not included in the body of the plan:

- A. Procedures for responding to each of the threats identified in Section III Hazard Analysis, and describe staff responsibilities and required actions.
- B. Roster of employees and companies with key disaster related roles.
 1. List the names, addresses, and telephone numbers of all staff with disaster related roles.
 2. List the name of the company, contact person, telephone number and addresses of emergency service providers such as transportation, emergency power, fuel, water, police, fire, Red Cross, etc.

- G. Emergency Organization Contacts

VIII. EMERGENCY SERVICES CONTACTS

NAME	PHONE
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Fire Department	
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Police/Sheriff Department	
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Paramedics/Ambulance	
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Local Emergency Management Director	
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Public Health Department	
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UTILITIES / NAME	PHONE
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Electric Company:	
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Gas Company:	
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Water Company:	
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- C. Locations of Emergency shut-offs
- D. Agreements and understandings
 1. Provide copies of any mutual aid agreement entered into pursuant to the fulfillment of this plan. This should include reciprocal host agency agreements, transportation agreements, current vendor agreements or any other agreement needed to ensure the operational integrity of this plan.
- E. Evacuation route map
 1. Provide a map of the evacuation routes and

For Information contact John Trifiletti at JohnTrif007@yahoo.com or view online at <http://www.jsca.org>

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		EMERGENCY ORGANIZATIONS	
		NAME	PHONE
Propane Company:			
Other:		Red Cross	
		Salvation Army	
OTHER EMERGENCY SERVICES			
NAME		PHONE	
Medical Rental Supply:		Other:	

		IX. LOCATION OF EMERGENCY SHUT-OFFS
		UTILITY BUILDING / LOCATION COMMENTS
Medical Supply:		
Food Suppliers:		Electrical
1.		
2.		Gas
3.		Water
Fire Alarm Company:		Generator
Fire Extinguisher Company:		Oxygen
Heating Company:		
Bottled Water Company:		
Emergency Transportation Resource:		

Note: An electronic copy of CAPE can be obtained by sending an email request to JohnTrif007@yahoo.com

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Protecting Plants from the Effects of Winter

<http://www.humeseeds.com/wntrng2.htm>

If the weather suddenly turns cold, early-flowering and tender plants may need special protection to avoid damage by freezing temperatures. There are several ways you can provide winter protection, including 1) mulching; 2) covering the plants; 3) moving them; or 4) taking advantage of a light snow covering.

MULCHING: This is one of the best ways to protect plant roots. Bark, straw, sawdust, peat moss, leaves and even grass clippings are the most common mulching materials. Remove the weeds (if possible) before applying the mulch. As a rule the mulch should be about 2 inches in depth. However, there are exceptions that will be stated a little later in this information bulletin. Keep the mulch an inch or two away from the trunk or main stem of the trees and shrubs. Again, there are exceptions, such as roses and cane berries, where the mulch is actually mounded over the canes. Then when spring arrives, after all danger of frost has passed, these mulching materials are pulled away.

Occasionally check through the mulching material, (about once a month) to be sure that moisture is getting to the soil below. This is especially important for plants that are situated under the eaves of the house or under tall evergreens where the soil is likely to dry out. It is important to note, that the combination of dry soil and cold temperatures can cause serious freeze damage to garden trees and shrubs. In fact, in some of the drier areas of the garden, such as under the eaves or under tall evergreens, you may need to water in mid-December or mid-January, if you find the soil dry.

COVERING: This is one of the most effective ways of protecting the foliage of broadleaf evergreen shrubs. Rhododendrons, camellias, azaleas and early flowering plants will often benefit from being covered with some type of cloth material during extremely cold weather..

Start by placing three or four stakes around the plant being protected. Next drape some type of cloth material over the stakes, being careful that the cloth does not come in contact and freeze on the leaves. Notice I said cloth material, do not use clear polyethylene for this job, as it not only cuts off air to the plant, it also acts much like a greenhouse, taking plants from nightly lows to high daily temperature in a relatively short time period. This rapid temperature change can cause serious freeze damage or may be fatal to plants.

Any type of covering should only be left in place during the cold spell. As soon as the weather moderates or it begins to rain, remove the covering completely. However, leave the stakes in case it gets cold again.

Burlap, old moving blankets, sheets, Reemay or similar cloth or fabric materials are the best types to use as a cover over plants.

LIGHT SNOW COVER: Mother Nature actually provides the best blanket of protection in the form of a light snow. Up to two or three inches of snow not only insulates the ground around your plants it also provides a blanket of protection over the leaves.

On the other hand, it should be noted, that a heavy wet snow can cause considerable damage. As it tends to place too much weight on the leaves and branches, often causing them to break. And, in some cases even causing trees to break off. So if the snowfall is wet and heavy, you should make it a point to shake-off the excess snow before any damage occurs. Try to do this carefully so some snow remains as a winter protection.

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PLANTS NEEDING SPECIAL CARE

ROSES: Mound mulch up over the base of rose canes, to a depth of 8 to 12 inches. Bark, sawdust and straw are among the best materials to use for this job. Pull the mulch material away in early spring. A frame of rabbit or chicken wire can be made around tree roses, then filled with straw to completely protect the stem and upper parts of the tree rose. Most climbing roses are very hardy and seldom need covering protection.

CONTAINERS: One of the easiest ways to give them winter protection is to simply take them into the basement of garage during a cold spell. (Avoid putting them into a heated room.) Then once the weather improves put them right back outside. Do not leave the planted containers inside all winter, unless you have a greenhouse or sun-porch, for them.

Remember containers are exposed to air on all four sides, plus the top and the bottom, so they can freeze very easily. And, exceptionally cold weather can damage the container too.

If the planted container is too large to move into the garage, during cold weather, you can mulch around the sides of the container. Simply mound bark or sawdust up around the sides of the pot, or wrap the container with blankets or packing. (Either way, this is not attractive, so even if you have to borrow a hand-truck, it's best to move the large container into the garage during coldest weather.)

CANE BERRIES: Berries like raspberries seldom need winter protection, however if you live in a very cold spot, you can mound 10 to 12 inches of mulch around the base of the canes. Straw is excellent for this, then in springtime use the straw as mulch between the rows.

TENDER PERENNIALS: Plants like chrysanthemums, hardy fuchsias, penstemons; and other tender plants can be covered with only about one inch of straw during a cold winter. (usually not necessary in a mild winter.)

HALF-HARDY SUMMER ANNUALS: Stock and snapdragons are only two prime examples of annuals that will sometime become perennials and winter-over if given a little mulching attention. Straw, bark or sawdust are the best materials to use for mulching over these plants. Use only about one inch of mulch.

HALF-HARDY SHRUBS & VINES: This group would include: Bougainvillea, Euryops (Yellow daisies), Hibiscus, Gardenias, Mandevilla, Citrus, etc. In the Pacific Northwest and other areas where the temperatures dip below freezing, these plants should be treated as indoor houseplants over-winter.

OTHER ANNUALS: New Guinea impatiens, fibrous begonias (Wax Begonias), coleus and Abulton (flowering Maple) are just a few of the summer annuals that you can pot-up and bring into the home to use as houseplants. Then next spring, after all danger of frost is over, these plants could be once again planted outside.

GERANIUMS: Geraniums and begonias must-be taken indoors before the first heavy frost or they are apt to rot and die. Most varieties of fuchsias will tolerate temperatures down to about 25 to 28 degrees before serious damage is done. However, don't take a chance. Start preparing them for winter before the first heavy frost.

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BEGONIAS: To winter begonias, simply take them indoors, placing them in a cool, well-ventilated room. Begin withholding water from them and the foliage will die back. Within a few weeks you can easily remove the stem and leaves without damage to the tuber. Next, remove the tuber from the soil, clean it off, dust it with a complete soil dust and store it on top of dry peat moss until it is ready to be restarted early next year.

FUCHSIAS: Fuchsias and geraniums require somewhat similar conditions for wintering. Of the many methods that can be used, the most popular one is to treat them like houseplants all winter. This method simply requires that the plants be potted in containers and placed either in a cool basement or garage where they will be warm enough to keep from freezing. The plants require limited sun and only weekly watering. Any leggy growth should be kept pruned back and the plant should be fertilized about once a month with an all-purpose liquid fertilizer that is low in nitrogen. These plants should be repotted into fresh soil in January or February and continue to be treated as houseplants until it is time to set them outdoors. After repotting, move them into a warmer room where they will get plenty of light, and begin a regular watering and fertilizing schedule.



Protecting plant with cloth covering.

Emergency Heat Sources

Stay Warm and Live!

Adapted by MU Extension specialists from material prepared by Cooperative Extension Service, University of New Hampshire, Durham.

Your home heat is gone. You've just discovered your heating system may be off for several days. It's cold outside; the inside temperature is dropping, and you have a first class emergency on your hands. What can you do?

Your first concern should be to conserve body heat. Keep your household warm while you provide emergency heat. The simplest solution to this problem is to dress warm or perhaps get in bed.

Safety is of paramount importance in a heating emergency. Few (if any) Americans have frozen to death in their homes in recent times. Many have perished from burns, smoke inhalation or carbon monoxide poisoning. Loss of home heat constitutes an emergency, but it needn't result in tragedy.

Handling a heating emergency, once immediate requirements for body heat are met, can be broken down into five steps:

1. Finding a heat source or improvising one.
2. Obtaining fuel.
3. Selecting a room or area to be heated.
4. Setting up, testing and operating an emergency system.
5. Dealing with related problems caused by heat loss.

Selecting an alternate heat source

What kinds of heating devices do you have that can use readily-available fuel such as wood, coal, electricity, gas or oil? Perhaps you have a space heater; perhaps a stove or an electric, gas or oil heater. Do you

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have a camp stove? Don't overlook the oven in your gas or electric range. If the fuel is available, turn the range on and open the oven door.

Stoves should be connected to a chimney flue if at all possible. Many older homes have capped stovepipe thimbles in rooms once heated by stoves. You can also remove the nonfunctioning furnace pipe from its flue entrance and hook up your stove or heater in its place. Sometimes a stove pipe can be extended through a window to provide proper venting of gases.

Note: Be sure no heated surfaces are close to the sash or other flammable materials

When setting up emergency stove piping, be careful about running it too close to flammable materials. This is particularly true when using a window-mounted flue. The wood sash is flammable as are curtains or shades that might normally be on the window.

Flues and piping for gas-burning appliances primarily vent vapors and may be unsafe for use with higher temperature oil, coal or wood smoke.

A damper in your emergency flue will help facilitate satisfactory burning and regulation of the heat. Cutting down an excessive draft helps keep the heat in the room and prevents the flue from over-heating. Close the damper as far as possible without reducing combustion or forcing smoke into the room.

Natural gas appliances will not burn bottled gas without a mechanical conversion. Your local gas supplier has the materials needed for conversion.

If you use a catalytic or unvented heater, provide plenty of ventilation. Keep a nearby window open at least one inch whenever the device is in use.

The least desirable solution is to rely on a makeshift heater, including charcoal burning grills, camp-stoves, stackless kerosene space heaters or industrial-type oil or kerosene jet heaters. If you must use them, do so only with plenty of ventilation.

Depending on the weather severity and the available resources, there may be other options. A camping family might have a catalytic heater (a gas or oil-fueled heater which provides heat with no flame.) One of these units can keep a room livable in cold weather. A travel trailer or camper can be inhabited in the winter if it has a heater. More than one farm family has taken refuge in the relative warmth of a livestock barn under extreme conditions. For shorter periods, there is the family car, a last resort which will be dangerous without proper ventilation.

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Bed may be the safest, warmest place for short periods. Use of adequate blankets and coverings will trap and conserve vital body heat, and two or more people in the same bed can share heat. This is an especially good way to keep children warm.

Don't overlook the possibility of solar heat. An appreciable amount of heat can be gained through large windows on the southern side of the house.

Providing fuel for heating

Many combustibles can be considered for fuel. Some of the common ones include:

- Furnace or cannel coal
- Kerosene or gasoline
- Straw
- Furnace oil
- Firewood and scrap wood
- Wood chips
- Motor oil
- Campstove fuel
- Fats, grease
- Alcohol
- Corncobs
- Newspapers or magazines
- Charcoal briquettes
- Charcoal fluid lighter



Coal can be burned in a fireplace or stove if a grate is fashioned to hold it, allowing air to circulate underneath. "Hardware cloth" screening a placed on a standard wood grate will keep coal from falling through.

Paper "logs" can be made by rolling newspapers or magazines tightly into small log-sized bundles, which can be burned if they are stacked to allow proper air circulation.

There may be plenty of burnable wood around, including lumber and furniture if the situation is critical. Store fuels in a handy place but not in the heated area. This is particularly true for highly combustible items such as gasoline, kerosene and papers.

Which room should be heated?

The location of a fireplace, stove or chimney flue may dictate the decision. Use the following guidelines:

Confine emergency heat to a small area.

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Try to select a room on the "warm" side of the house away from prevailing cold winds. Avoid rooms with large windows or uninsulated walls. Interior bathrooms probably have the lowest air leakage and heat loss. Your basement may be a good place in cold weather because of the heat gain from the earth.

Isolate the room from the rest of the house by keeping doors closed, hanging bedding or heavy drapes over entryways or erecting temporary partitions of cardboard or plywood.

Hang drapes, bedding, shower curtains, etc., over doors and windows, especially at night.
Check your efforts for safety

As soon as emergency heating is working and the room protected against exterior cold, stop and appraise the safety of your situation. If there is any hazard or question of safety posed by the emergency heating, make changes immediately. Check carefully for fire hazards.

All heaters except electric heaters should be vented to provide oxygen for complete combustion and to safely remove exhaust gases and smoke.

Note: Do not attempt to burn anything larger than candles in your home without providing adequate ventilation to the outside

Asphyxiation from lack of oxygen or poisonous gases is a great danger when there is not enough ventilation. There is no simple rule for determining how much ventilation you need. For safety, provide cross ventilation by opening a window an inch on each side of a room. It is better to let in some cold air than to take a chance of not having enough air.

As an additional safety factor, you should have a firewatch whenever emergency heat is being used. One person should stay awake to watch for fire and to detect the possibility of inadequate ventilation. Drowsiness is one sign of carbon monoxide poisoning. If the firewatch feels sleepy, it may be a sign of poor ventilation.

If you have not already done so, set up some firefighting items near your emergency heating device. Dry powder fire extinguishers will put out most types of burning materials. Sand, salt, baking soda or water can be used on most non-oil materials. A tarpaulin or heavy blanket can be used for smothering flames. Post your local fire department's telephone number near your telephone. Finally, discuss safety, firefighting techniques and a home evacuation plan with all members of your family. Be prepared for the worst.

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