TO: All Faculty, Staff and Students
USC School of Medicine

FROM: Jeffrey L. Perkins, CPA, CIA, CHFP, MBA
Associate Dean for Administration & Finance

Larry Knott
Director, Facilities Planning & Project Management
2 Medical Park & 4 Medical Park

Rick Campbell
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VA Campus & 15 Medical Park

Tony Johnson
Manager, Custodial & Safety Services
VA Campus & 15 Medical Park

DATE: July 1, 2015

SUBJECT: USC SOM Emergency Management Plan

We are pleased to provide you with copies of the University of South Carolina School of Medicine’s Emergency Management Plan Supplement. Access to the USC Emergency Management Plan, Columbia Campus, is provided through the USC Home Page (http://www.sc.edu/emergency/EmergencyManagement.pdf.)

Please read this important information immediately and understand your personal responsibility for preparedness. All members of the School of Medicine have a role to play before, during and after an emergency to protect their own safety and the mission of the institution.

Future emergencies will present new challenges to our school. However, we are quite confident that a prepared community of faculty, staff and students will be ready to meet these challenges with strength and flexibility.

This plan will be reviewed on an annual basis and updated as needed.

Thank you for your support.

Encls.
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## TO REPORT AN EMERGENCY INCIDENT

FIRE/EXPLOSION/CHEMICAL/BIOLOGICAL/HOSTAGE SITUATION/BOMB THREAT/WORK PLACE VIOLENCE/ UTILITIES FAILURE/MEDICAL AID:

*(ALL LIFE SAFETY EMERGENCIES)* ...................................................... 911

- USC Police ...................................................................................... 777-4215
- SOM VA Campus EMERGENCY INCIDENT NUMBERS: *(DAYTIME)*
  - Facilities Management & Support Services ................................... 216-3150
  - SOM Custodial & Safety Services ................................................ 216-3319
- USC Environmental Health & Safety .............................................. 777-5269
  - Radiation Safety
    - Chemical/Biological Safety
- SOM MP2 & MP4
  - Lillibridge ................................................................................... 779-2680
  - (After Hours Emergencies) ......................................................... 351-4807

**WHEN YOU CALL TO REPORT AN EMERGENCY:**

**TELL THE RESPONDENT:**

1. The type of emergency
2. If there are victims
3. The location of the emergency
4. Your name, location and phone number

**STAY ON THE PHONE UNTIL THE RESPONDENT ENDS THE CALL**

(OR OBVIOUSLY IF PERSONAL SAFETY IS AT RISK GO TO AN ALTERNATIVE LOCATION).
PURPOSE:

The University of South Carolina School of Medicine Emergency Management Plan outlines the University’s procedures for managing major emergencies that may threaten the health and safety of the campus community or disrupt its programs and activities. The Plan identifies departments and individuals that are directly responsible for emergency response and critical support services.

At the USC School of Medicine, planning ahead for emergencies is part of normal business planning and campus life, and all members of the campus community share a responsibility for preparedness. An emergency can strike anytime or anywhere, and a disaster will affect everyone. Therefore,

- Every administrative and academic unit is asked to review the USC School of Medicine/USC Emergency Management Plan to protect personnel and programs and to support campus response and recovery actions. The School of Medicine’s Director of Facilities Management will distribute the Department Emergency Planning Guidelines along with the University of South Carolina Emergency Management Plan to the various departments on all School of Medicine campuses.

- The School of Medicine maintains a comprehensive emergency preparedness and safety training program to mitigate potential hazards and to familiarize faculty, staff and students with emergency procedures.

SCOPE:

The University of South Carolina School of Medicine Emergency Management Plan guides preparedness, response, and recovery actions. It applies to a broad range of emergency incidents, and may be activated during:

- Earthquakes
- Hazardous Materials Releases
To Implement an Emergency Evacuation:

(See specific evacuation plan for Fire Evacuation)

• Keep calm

• Alert Emergency Response personnel to assist in the evacuation (in case of fire, fire monitors will assist)

• Use communication tools that are appropriate for the type of incident and the time of occurrence:
  
  • Alarms
  • Phones away from buildings
  • Messengers

• Communicate clearly and succinctly

“We have a_______________emergency.

Evacuate to___________________(gathering place designated during fire drills).

Take your belongings (quickly), do NOT use elevators.”
• Check offices, classrooms, labs and restrooms

• Turn equipment off, if possible

• Take emergency supplies and staff rosters, if possible

• Keep exiting groups together

• Account for personnel

• Wait at the designated gathering point for further instructions

EMERGENCY RESPONSE ACTIONS:

The following are basic instructions for various emergency incidents:
• ACCIDENT
  • Call 911 – for all life safety emergencies
    • If work-related accident, Call 434-2479/434-6113 (8:00 AM - 5:00 PM) - Family Practice Center,
      3209 Colonial Drive, Columbia, SC
    • See “USC School of Medicine Work-Related Injury Policy”
    • Dir., USC SOM Employee Health (434-4575),
    • USC SOM Employee Health Nurse (303-0035)
    • Palmetto Richland Memorial Hospital Emergency Department (after working hours)
    • Administer first aid if you are trained (See Attached AED Policy)
    • Do not attempt to move a seriously injured person
    • Notify Supervisor, Department Chair, School of Medicine Human Resources

• FIRE
  • Call 911 - for all life safety emergencies
  • During Working hours also Call USC Police 777-4215 (See Fire Evacuation Policy)
  • Notify Supervisor and staff
  • Feel doors for heat
    • If cool, exit carefully
    • If hot, do not open the door
  • If you see smoke, crouch near floor as you exit
  • If you see fire, confine it by closing doors and windows
  • Use extinguishers on small fires only if safe to do so
    • Pull the pin in the handle
    • Aim at the base of the fire
    • Squeeze nozzle, sweep back and forth
  • Evacuate DOWNstairs, go upstairs or to roof as last resort
  • Never use an elevator during a fire evacuation
  • Go to the Emergency Assembly Point

• HAZARDOUS MATERIALS SPILL
  • MINOR RELEASE IN THE LAB
    • Follow lab eyewash, rinse or shower procedures
    • Vacate persons in immediate area if necessary
    • Clean spill if you have suitable training
(Spill kits are located in Bldg. 1, beside B-6 and in Bldg. 4, beside the gross lab).

(Other spill kit materials are located in the Hazardous Waste Storage and in the Office of Custodial & Safety Services.)

- Wear protective equipment
- Use appropriate kit to contain, neutralize and absorb
- Collect, containerize, and label waste

**Call** – During working Hours:
- 216-3319 (USCSM Custodial & Safety Services)
- 216-3150 (USCSM Facilities Management & Support Services)
- FM&SS nor Custodial & Safety Services shall not clean up hazardous materials
- 777-5269 (USC Environmental Health & Safety)

**Call** – After Working Hours:
- 777-4215 - USC Police

**Call** - 216-3319 to make arrangements to have chemical waste picked up (Custodial & Safety Services)
See Chemical Waste Pick up
Request: [http://custodial.med.sc.edu/Chemicals/chemicals.asp](http://custodial.med.sc.edu/Chemicals/chemicals.asp)

**MAJOR RELEASE IN THE DEPARTMENT**

- **Call**
  - 777-4215 – (USC Police)
  - 777-5269 – (USC Environmental Health & Safety)
  - 216-3150 – (USCSM Facilities Management & Support Services)
  - 216-3319 – (USCSM Custodial & Safety Services)

**Material spilled, possible injuries:**
- Assist injured persons
- Isolate contaminated persons
- Avoid contamination or chemical exposure
- Close doors or control access to spill site
- Alert Supervisor, Department Chair
- Communicate critical spill information to responders
- Follow evacuation instructions
• **POWER OUTAGE**
  
  • Assess the extent of the outage in your area
  • **Call** – 216-3150 – Report the outage to Facilities Management
  • **After 4:30 PM and weekends call USC PD 777-4215**
  • Help co-workers in darkened work areas move to safe locations
  • If practical, secure current experimental work, then move it to a safe location. If you move chemicals on carts between floors, get assistance. Hazardous spills are a significant risk during transport.
  • Keep lab refrigerators or freezers closed throughout the outage
  • Unplug personal computers, non-essential electrical equipment and appliances
  • Open windows for additional light and ventilation
  • If you are asked to evacuate your building, secure any hazardous materials work and leave the building
  • Release of personnel after an extended outage is determined by the Office of the Dean

• **FOR OTHER DISASTERS, REFER TO THE UNIVERSITY EMERGENCY MANAGEMENT PLAN**
HOW TO ASSIST PEOPLE WITH DISABILITIES DURING AN EVACUATION:

• TO ALERT VISUALLY IMPAIRED PERSONS
  • Announce the type of emergency
  • Offer your arm for guidance
  • Tell person where you are going, obstacles you encounter
  • When you reach safety, ask if further help is needed

• TO ALERT PEOPLE WITH HEARING LIMITATIONS
  • Turn lights on/off to gain person’s attention, or
  • Indicate directions with gestures, or
  • Write a note with evacuation directions

• TO EVACUATE PEOPLE USING CRUTCHES, CANES OR WALKERS
  • Evacuate these individuals as injured persons
  • Assist and accompany to evacuation site if possible, or
  • Use a sturdy chair (or one with wheels) to move person, or
  • Help carry individual to safety

• TO EVACUATE WHEELCHAIR USERS
  • Non-ambulatory persons’ needs and preferences vary
    • Individuals at ground floor locations may exit without help
    • Others have minimal ability to move-lifting may be dangerous
    • Some non-ambulatory persons have respiratory complications
    • Remove them from smoke and vapors immediately
      (Stairwell usage during an emergency is for the safe evacuation of personnel, as well as access for emergency responders.)
  • Wheelchair users with electrical respirators get priority assistance
• Most wheelchairs are too heavy to take down stairs
• Consult with person to determine best carry options
• Reunite person with the chair as soon as it is safe to do so

While an "emergency" by its very definition is an unforeseen event, it also usually requires immediate action.

Persons with disabilities have four basic evacuation options:

1. **Horizontal evacuation.** This entails using building exits to gain access to outside ground level, or going into unaffected wings of multi-building complexes.
2. **Stairway (vertical) evacuation.** This means of evacuation means using stairwells to reach ground level exits from the building.
3. **Staying in Place.** Unless danger is imminent, remaining in a room with an exterior window, a telephone and a solid or fire resistant door may be your best option.

**NOTE:** The Stay in Place approach may be more appropriate for sprinkler protected buildings, or buildings where an "area of refuge" is not nearby or available. It may also be more appropriate for an occupant who is alone when the alarm sounds. A label on the door jamb or frame can identify a fire resistant door. Non-labeled 1 ¾ inch thick solid core wood doors hung on a metal frame also offer good fire resistance.

4. **Area of Refuge.** With an evacuation assistant, going to an area of refuge away from obvious danger is another emergency plan option. The evacuation assistant will then go to the building evacuation assembly point and notify the on-site emergency personnel of the location of the person with a disability. Emergency personnel will determine if further evacuation is necessary.

The safest Areas of Refuge are **stair enclosures** common to high-rise buildings, and **open-air exit balconies**. Other possible Areas of Refuge include **fire-rated corridors or vestibules adjacent to exit stairs and elevator lobbies**. Many campus buildings feature fire rated corridor construction that may offer safe refuge.

Taking a position in a rated corridor next to the stairs is a good alternative to a small stair landing crowded with the other building occupants using the stairways as a means of egress in an emergency.
For false alarms or an isolated and contained fire, a person with a disability may not have to evacuate. Suggested Guidelines for Different Types of Disabilities

1. **Mobility Impaired - Wheelchair**
   Persons using wheelchairs should Stay in Place, or move to an Area of Refuge with their assistant when the alarm sounds.

2. **Mobility Impaired - Non Wheelchair**
   Persons with mobility impairments who are able to walk independently may be able to negotiate stairs in an emergency with minor assistance.

3. **Deaf/Hard of Hearing**
   Most buildings on campus are equipped with fire alarm strobe lights; however, some are not.

4. **Visually Impaired**
   Most people with a visual impairment will be familiar with their immediate surroundings and frequently traveled routes.
DATE:       June 25, 2015

TO:     FIRE DRILLS AND OTHER EMERGENCY EVACUATIONS

Please follow the following guidelines for emergency evacuation:

1. Please advise employees in your department not to call Facilities Management and Support Services regarding whether or not a fire drill is "real" or whether to exit the building. Facilities Management and Support Services will be evacuating the building the same as all other personnel when a signal is sounded. When you hear the signal to evacuate, please do so promptly.

2. Please pay special attention to "2a" and "2b" on the attached page.

3. Keep your monitor/co-monitor list up-to-date. Please review the attached list of monitor/co-monitor names for your department and revise them if necessary. (Please send a copy to the School of Medicine Custodial and Safety Services.)

The following is being reprinted to refresh your memory. Please inform departmental employees of the subsequent procedures:

1. Monitors/co-monitors should:

   (a) **INFORM ALL PERSONNEL NOT TO USE THE ELEVATORS.**

   (b) Inform all employees of the location of the designated assembly point. (Location should be 200'-300' away from the building.)
Any close exit may be used to exit the building, but make sure everyone in your group gathers at the same point or can be accounted for by another department monitor. (Please give a copy of the attached map to all employees in your department.)

(c) Make sure all restrooms, darkrooms, and other enclosed rooms are checked.

(d) Make sure all handicapped employees are assisted in exiting the building.

(e) Make sure all visitors to your department are accounted for.

(f) Once assembled at the pre-arranged meeting site, take an accurate roll call so that all employees are accounted for. Monitors/co-monitors should use the attached "Emergency Evacuation Log Sheet" for this purpose. (It may be helpful to have a list of the names of your departmental employees accessible in order that they can quickly be reviewed.)

(g) After the drill or emergency evacuation, send a copy of this log to the Custodial & Safety Services so that we might make a post-evaluation of the results. Also, please notify the Custodial and Safety Services of any substitutions of monitors/co-monitors.

2. (a) When the Fire Department responds to a call, only their personnel will call an "all clear" to return to the building.

(b) During a "test drill", designated School of Medicine personnel will call an "all clear" to return to building.

3. **DURING AN ACTUAL FIRE:**
(a) Use the nearest Fire Call Box to notify the Columbia Fire Department.

(b) If the fire is large or uncontrollable, close off the area and leave immediately.

(c) From a safe area, call 911 - if call is made on the School of Medicine campus or 911 - if the call is made outside of the School of Medicine campus).

(d) Give emergency personnel all necessary information:

(1) Location of fire (building, room, etc.)

(2) Telephone number from which you are calling.

(3) Any other pertinent information that is requested.

(4) Have someone stay near the telephone in case additional information is needed.

4. BEFORE YOU BEGIN TO FIGHT A FIRE:

(a) Make sure everyone has left, or is leaving, the building.

(b) Make sure the fire is confined to a small area and that it is not spreading beyond the immediate area.

(c) Make sure you have an unobstructed escape route to which the fire will not spread.
(d) Make sure that you know the nearest device location, have read the instructions and that you know how to use the extinguisher.

It is reckless to fight a fire under any other circumstances. Instead, leave immediately and close off the area.

NOTE: All faculty, staff, and students should follow the same guidelines in cases of emergency.

PLEASE DISTRIBUTE TO DEPARTMENTAL PERSONNEL

USC Main Campus Emergency Phone Numbers

Emergency hotline (recorded outgoing messages only) 803-777-5700

CAROLINA ALERT
In an emergency call 911 from any campus phone or cell phone
Non-emergency: 803-777-4215

WORKPLACE VIOLENCE
Signs of Workplace Violence
Consider the specific circumstances when evaluating the following signs. The presence of one characteristic may not necessarily mean a person is prone to workplace violence, but if in doubt, call USC Police.

• Threats, threatening behavior, display of aggression, or excessive anger
• A history of threats or violent acts.
• Unusual fascination with weapons.
• Verbal abuse of coworkers and/or customers, or harassment via phone/e-mail.
• Bizarre comments or behavior, especially if it includes violent content.
• Chronic, hypersensitive complaints about persecution or injustice.
• Making jokes or offensive comments about violent acts.
• Significant changes in mood or behavior.

BOMB THREATS

• Remain calm
• Do not hang up; keep the caller on the line as long as possible, and listen carefully.
• Obtain as much information as possible
• Ask questions such as:
  - When is the bomb going to explode?
  - Where is the bomb right now?
  - What kind of bomb is it?
  - What does it look like?
  - What will cause it to explode?
  - Why did you place the bomb?
What is your name?

- Takes notes about the call such as:
  - Identity: Male, female, age range
  - Voice: Loud, soft, high-pitched, deep, raspy, hoarse, nasal, pleasant
  - Background noise: Office, factory, street, traffic, airplane, animals, party, music
  - Speech: Accented, deliberate, fast, slow, lisp, slang, taped/recorded, stuttered, slurred
  - Manner: Calm, angry, rational, coherent, incoherent

- Time of call
- Exact words
- Phone number (Caller ID)
- Any pertinent information

Call, or have someone else call, USC Police at 911. State your location and report the information noted from the threat. If you are unable to speak, dial 911 and leave the line open to allow emergency officer to listen to the conversation.

Active Shooter

Division of Law Enforcement and Safety > Crime Prevention & Safety Resources > Active Shooter

Over the past few decades, violent events have occurred in workplaces and schools with catastrophic results. If you are involved in a situation where someone has entered the building and begun shooting, the following actions are recommended:

If an active shooter is OUTSIDE your building:

- Proceed to a room that can be locked.
- Close, lock, and barricade windows and doors.
- Turn off the lights.
- Get down low, ensuring you are not visible from the outside.
- Silence all cell phones and remain quiet.
- Have one person call 911.
- Do not unlock the door or respond to voices unless absolutely certain it is the police.

If an active shooter is INSIDE your building:

- Determine whether the room can be locked.
- If so, follow the instructions above.
- If not, determine if there is a nearby room that can be locked and whether it is safe to proceed or whether it is safe to escape outside.
If an active shooter enters your room:

- Try to remain calm.
- If possible, dial 911. If you cannot speak, leave the line open to allow the dispatcher to hear what is going on.
- If you are unable to escape or hide, act within your abilities, but do not do anything to further jeopardize your safety.
- If the shooter leaves, proceed immediately to a safer location.

Video

Readyhoustontx.gov has produced this video to educate the public on some options if faced with an active shooter situation. If your group or class is interested in this topic and would be interested in more information, we would encourage you to contact us to schedule a class taught by a certified instructor.

Warning: This video contains some violent content.


Presentation

Community Response to an Active Shooter is a presentation to educate you on what to expect in the event of an active shooter: what to do, how to protect yourself and how police will respond. Request this presentation for your U101 class, academic course, meetings, student / faculty organizations, residence halls, and other meetings free of charge. Contact Major Geary at 803.777.0507 or email him at iageary@mailbox.sc.edu.

Active Shooter
• Behavioral Intervention
• Emergency Call Boxes
• Holiday Safety
• Identity Theft Safety
• Make An Anonymous Tip
• Moped, Motorcycle and Scooter Safety
• RAIDS Online Crime Mapping
• Rave Guardian Safety App
• Register Your Property
• Request An Officer For An Event
• Request Training or a Presentation
• Safety Tips
• Sex Offender Registry
• Workplace Violence

1415 Henderson Street
(1600 Hampton Street Annex)
Columbia, SC 29208
### VA Campus

#### Building 1
- B-1 Classroom
- B-1A Classroom
- Cell Biology & Anatomy
- Instrumentation Resource Facility
- Pathology, Microbiology & Immunology
- Pharmacology, Physiology & Neuroscience

#### Building 2
- Pathology, Microbiology & Immunology

#### Building 3
- Admissions & Enrollment Services
- Alumni Office
- Curricular Affairs & Faculty Support
- Facilities Management & Support Services
- Graduate Studies
- Medical Education & Academic Affairs
- Minority Affairs
- MI Classroom
- Office of the Dean
- Student Services
- Student & Career Services

#### Building 4
- Animal Resources Facility
- Research Labs
- Student Lounge

#### Building 101
- Internal Medicine
- Medical Library
- Office of Information Technology
- Radiology

#### Building 104
- MI Classroom

#### Building 28
- Research Labs
- Ultrasound Institute
TO: All Employees and Students  
USC School of Medicine

FROM: Tony Johnson  
Custodial & Safety Services  
USC School of Medicine

DATE: June 25, 2015

SUBJECT: USC School of Medicine Work-Related Injury Policy
Effective immediately, all School of Medicine employees (clinical and non clinical on all campuses) and students who sustain work-related injuries/illnesses, should follow the attached procedure:

(However, in case of extreme emergency, call 911.)

Encl.
This policy and procedure applies to all University of South Carolina School of Medicine employees and students.

For all work-related injuries that occur during the normal working hours (Monday – Friday, 8:00 AM – 5:00 PM), please report to the School of Medicine Family Practice Center, Department of Family & Preventive Medicine, located 3209 Colonial Drive on the campus of Palmetto Richland Memorial Hospital, (Telephone 434-2479 or 434-6113). (See map)

For all work-related injuries that occur after normal working hours (between 5:00 PM and 8:00 AM, the following workday), on weekends or on holidays, please report to the Emergency Department at Palmetto Richland Memorial Hospital.

**For Needle Stick Injuries**

- You should seek treatment as soon as possible after exposure to a dirty needle or human blood or body fluids.

- If possible, wash or flush the exposed area with soap and/or water immediately.

- Be sure to inform the School of Medicine Family Practice Center or Emergency Department personnel that the injury is an exposure to bloodborne pathogens and/or a needle stick.
For employees or students working in satellite clinics and hospitals that are located out of town:

➤ Report to the nearest hospital’s Emergency Department.

➤ If you do not receive immediate attention for a bloodborne pathogen exposure, call the USC Campus Police Department at (803) 777-9111

Automated External Defibrillator (AED) Policy

USC School of Medicine

PURPOSE:

An Automated External Defibrillator (AED) is used to treat victims who experience sudden cardiac arrest. It is only to be applied to victims, who are unconscious, not breathing normally and showing no signs of circulation such as normal breathing, coughing or movement. The AED will analyze the heart rhythm and advise the operator if a shockable rhythm is detected. If a shockable rhythm is detected, the AED will charge to the appropriate energy level and deliver a shock.
DEFINITIONS:

**Automated External Defibrillator or AED** means an automated external defibrillator which is a medical device heart monitor and defibrillator that:

(a) has received approval of its pre-market notification filed pursuant to the United States Code, Title 21, Section 360(k), from the United States Food and Drug Administration;

(b) is capable of recognizing the presence or absence of ventricular fibrillation or rapid ventricular tachycardia and is capable of determining, without intervention by an operator, whether defibrillation should be performed; and

(c) upon determining that defibrillation should be performed, automatically charges and requests delivery of an electrical impulse to an individual's heart.

**Automated External Defibrillator Response Team or AED Response Team** means the individuals at the USC School of Medicine Veterans Administration (VA) and/or Palmetto Health Richland (PHR) facilities where an AED(s) is located who have been trained to use an AED.

**Trained Rescuers** means a person identified by the person or entity acquiring an AED who has received training in the use of a Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillators.

**Sudden Cardiac Arrest (SCA)** – refers to a sudden stop in the beating of the heart when the electrical impulses of the human heart malfunction causing ventricular fibrillation, an erratic and ineffective rhythm, characterized by the absence of a pulse, and respiration.

**Immunity from civil liability for use of AED in compliance with requirements.**

(1) Any person or entity acting in good faith and gratuitously shall be immune from civil liability for the application of an AED unless the person was grossly negligent in the application.
(2) Any designated AED users meeting the requirements of Section 44-76-30(1) and acting according to the required training shall be immune from civil liability for the application of an AED unless the application was grossly negligent.

(3) A person or entity acquiring an AED and meeting the requirements of Section 44-76-30 or an AED liaison meeting the requirements of Section 44-76-30 shall be immune from civil liability for the application of an AED by any person or entity described in items (1) or (2) of this section.

(4) A prescribing physician shall be immune from civil liability for authorizing the purchase of an AED, unless the authorization was grossly negligent.

USC School of Medicine Automated External Defibrillator Staff

MEDICAL OVERSIGHT DIRECTOR

AED PROGRAM/TRAINING MANAGER

Tony Johnson

Custodial & Safety Services Manager

USC School of Medicine

Building 3, Room 230

Columbia, SC 29209

(803) 216-3319 (Office)

(803) 629-8545 (Cell)

VA CAMPUS - AED SITE CONTACT PERSON--------------Tony Johnson
LOCATION OF AUTOMATED EXTERNAL DEFIBRILLATOR'S

&

PERSONNEL WITH KEY TO TURN OFF ALARM

The University of South Carolina School of Medicine has 9 Automated External Defibrillators throughout both the VA and PHR campuses. They are located in the following places:

VA CAMPUS

1.) Located in building # 1 on the 1st floor across from the elevators on the 1st floor.
   
   (Key is held by Custodial & Safety Services 216-3319 and FMSS 216-3150)

2.) Located in building # 2 on the 1st floor beside the elevator.

   (Key is held by Custodial & Safety Services 216-3150 and FMSS 216-3150)

3.) Located in building # 28 on the 1st floor beside the men's room.

   (Key is held by Custodial & Safety Services 216-3150 and FMSS 216-3150)

4.) Located in building # 4 on the 1st floor beside the student kitchen.

   (Key held by Custodial & Safety Services 216-3150 and FMSS 216-3150)

5.) Located in building # 101 in the Library across from Receptionist Desk.

   (Key is held by at the Receptionist Desk – 216-3200)

6.) Located in building # 3 beside the elevator on the back hall.
PHR CAMPUS

7.) Located in 15 Medical Park on the 1st floor foyer beside Support Services.

(Key is held by (TBA) – 434-4200)

8.) Located in 2 Medical Park on the 2nd floor to the right of the elevator as you exit.

(Key is held by (TBA) – 545-5250)

9.) Located in 4 Medical Park on the 2nd floor across from the elevator.

(Key is held by (TBA))

Response Procedure

In the event of a medical emergency involving a cardiac arrest victim, the responder should immediately call 911 and inform the dispatcher of the incident, location and provide a phone number. An AED-trained individual should transport, or have another person bring the AED to the scene.

Initial Response

☐ Assess responsiveness of the victim. Tap the shoulder and shout: "Are you OK?"

☐ Check ABC's:

A. Assess airway. Head tilt, chin lift to open airway.

B. Assess breathing. Look listen and feel. If not breathing, use mask to deliver two rescue breaths.

C. Assess circulation. Check pulse. If absent, and the AED is immediately available, begin its use. If AED is unavailable, begin chest compressions and continue CPR.

Early Defibrillation
Place the AED near head of the victim.

Turn on the unit and follow AED prompts.

Bare the chest. If excessive hair, shave away and dry the chest.

Make sure the victim is not in contact with water or any metal objects.

Apply electrodes to bare chest.

Connect electrodes to AED.

Allow AED to analyze data. Do not touch victim.

If indicated, administer a shock. Be sure nobody touches victim.

Continue as indicated by AED prompts.

Transfer of Care

When EMS arrives, responders working on the victim should communicate important information to the EMS providers:

- Victim’s name, if known.
- Any known medical problems, medications, or allergies.
- Time victim was found.
- Initial and current condition of victim.
- Number of shocks delivered, and length of time AED used.
- Assist EMS providers as requested.

Post-Use Procedure

The authorized user should place the AED in a secure location.

The Campus AED Coordinator should be notified no more than twenty four hours after the incident.

The Coordinator will take the following actions:

- Replace used electrode pads, batteries, razors, gloves and other items.
- Unused supplies will be inspected for damage and replaced as needed.
- The electronic data card will be removed from the AED.
- Battery will be removed and reinserted into the AED to do a Battery Insertion Test.
- The AED will be cleaned if needed.
- The incident will be documented using the AED Incident Report Form.
- A copy of the AED Incident Report Form and the incident’s data card will be forwarded to the Medical Oversight Coordinator no more than twenty four hours after the incident.

AUTOMATED EXTERNAL DEFIBRILLATOR

AED INCIDENT REPORT

DATE OF INCIDENT:______________ TIME OF INCIDENT:_____________________
LOCATION OF INCIDENT:___________________________________________________
VICTIM’S NAME: ________________________DEPARTMENT:____________________
AED PROGRAM COORDINATOR: ____________________________________________
WITNESS(s)________________________________________________________________
NAME OF AED USER: ______________________________________________________
AED USER TELEPHONE NUMBER: ___________________________________________
WAS 911 CALL? YES___________ NO___________
NAME OF PERSON WHO CALLED 911: _______________________________________
COMMENTS:______________________________________________________________
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WHAT IS A HURRICANE?

A hurricane is a severe tropical storm that forms in the southern Atlantic Ocean, Caribbean Sea, Gulf of Mexico, or in the eastern Pacific Ocean. Hurricanes need warm tropical oceans, moisture, and light winds above them. If the right conditions last long enough, a hurricane can produce violent winds, incredible waves, torrential rains, and
floods. Hurricanes rotate in a counterclockwise direction around an “eye.” The most violent activity takes place in the area immediately around the eye, called the eye wall. Hurricanes have winds at least 74 miles per hour. There are on average of six Atlantic hurricanes each year.

As a hurricane approaches, the skies will begin to darken and winds will grow in strength. A single hurricane can last for more than 2 weeks over open waters and can run a path across the entire length of the eastern seaboard. August and September are peak months during the hurricane season that lasts from June 1 through November 30.

Storm Classifications:
**Tropical Depression** - An organized system of clouds and thunderstorms with a defined circulation and maximum sustained winds of 38 mph or less.

**Tropical Storm** - An organized system of strong thunderstorms with a defined circulation and maximum sustained winds of 39 to 73 mph.

**Hurricane** - An intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 mph or higher. Hurricanes are called "typhoons" in the western Pacific, while similar storms in the Indian Ocean are called "cyclones."

**Hurricane Watch:** Hurricane conditions are possible, usually within 36 hours. Stay tuned to radio and television for more information. Prepare to take immediate action to protect your family and property.

**Hurricane Warning:** Hurricane conditions are expected, usually within 24 hours. Complete all storm preparations and evacuate if directed by local officials.
HURRICANE DANGERS

Hurricane hazards come in many forms:

- **Storm Surge:** The greatest potential for loss of life related to a hurricane is from the storm surge. Storm surge is a massive dome of water, often 50 miles wide, that sweeps across the coast near the area where the eye of the hurricane makes landfall. The storm surge acts like a bulldozer, sweeping away everything in its path. The stronger the hurricane, the higher the storm surge will be. For those who live along the coast, storm surge is one of the most dangerous hazards in a hurricane.

- **High Winds:** The intensity of a landfalling hurricane is expressed in terms of categories based on the wind speeds and potential to cause damage.

**HURRICANE CATEGORIES**

Category One Winds 74-95 mph
Category Two Winds 96-110 mph
Category Three Winds 111-130 mph
Category Four Winds 131-155 mph
Category Five Winds greater than 155 mph

Hurricane force winds can easily destroy poorly constructed buildings and mobile homes. Debris such as signs, roofing material, and small items left outside become flying missiles in hurricanes. Extensive damage to trees, towers, water and underground utility lines (from uprooted trees), and fallen poles cause considerable disruption.
High rise buildings are also vulnerable to hurricane force winds, particularly at the higher levels since wind speed tends to increase with height. Recent research suggests you should stay below the tenth floor, but still above any floors at risk for flooding.

- **Tornadoes:** Hurricanes can also produce tornadoes that add to the storm’s destructive power. Most land falling hurricanes spawn at least one tornado. Hurricanes may spawn tornadoes up to three days after landfall, although most of the tornadoes occur on the day of landfall, or on the next day.

- **Flooding:** In the last 30 years, more deaths have occurred from a hurricane’s freshwater (rain) flooding than any other hurricane hazard. Both hurricanes and tropical storms are capable of creating this type of flooding. At least 23% of U.S. tropical cyclone deaths occur to people who drown in, or attempting to abandon, their cars.

**YOU CAN REDUCE THE EFFECTS OF A HURRICANE DISASTER BY**

**BEING PREPARED**

**HURRICANE PREPAREDNESS**

The most important thing you can do is to be informed and prepared. Disaster preparedness should include:

1. **Developing a family disaster plan:**

   a. Plan an evacuation route - learn safe routes inland and the location of official shelters.
b. Make sure that all family members know how to respond after a hurricane – teach family members how and when to turn off gas, electricity and water. Teach children how and when to call 911, and what radio station to tune to for emergency information.

c. Develop an emergency communication plan – in case family members are separated from one another during a disaster (a real possibility while adults are at work and children are at school), have a plan for getting back together. Ask an out-of-state relative or friend to serve as the "family contact." After a disaster, it's often easier to call long distance. Make sure everyone in the family knows the name, address, and phone number of the contact person.

2. **Creating a disaster supply kit:** Be prepared to be self sufficient for at least three days (water, food and other supplies). It may take at least that long for outside emergency workers to provide aid to you after a major hurricane. Power may be interrupted for weeks. If you and your family choose to stay at home during the hurricane, shop ahead and assemble a disaster supply kit.

   - Flashlight and extra batteries
   - Portable, battery operated radio and extra batteries
   - First aid kit
   - Fire extinguisher
   - Non-perishable, packaged or canned food (canned meats, beans, bread, crackers, peanut butter, dried fruits, dry cereals, snack foods, dry milk, canned fruit juices, etc.)
   - Bottled drinking water - allow one gallon of water per person per day
   - Non-electric can opener
   - Paper products – plates, cups, napkins, plastic utensils, toilet paper, garbage bags, etc.
   - Have ample supply of medications, at least a two week supply
   - Toiletries/hygiene items/moisture wipes
   - Charcoal and matches/lighter
   - Duct tape/masking tape
   - Special items for infant, elderly or disabled family members
   - Pet care items – ample supply of food and water, proper identification, immunization records, medications, muzzle, leash, carrier/cage
   - Cash/credit cards
   - Keep important family documents in a waterproof container (insurance, medical records, bank account numbers, Social Security card, etc.)
3. **Having a place to go:** One of the most important decisions you will have to make is “should I evacuate?”

a. If you are asked to evacuate, you should do so without delay. Material possessions are replaceable – your life is not. Leave as soon as possible, as roads and bridges frequently become crowded and traffic moves slow.

b. Decide where to go if you must evacuate and how to get there. Be familiar with your county’s evacuation shelter locations. Remember, shelters are not designed for comfort and do not usually accept pets. If you and your family choose to evacuate to a designated shelter location or leave the area, take along items to make your stay as comfortable as possible.

- Medicines – ensure you have at least a two week supply
- Identification
- Bedding: sleeping bags, blankets, pillows, etc.
- One gallon of water per person per day
- Prescription glasses or contacts
- First aid kit
- Flashlight (one per person) and extra batteries
- Portable, battery operated radio and extra batteries
• Cash and credit cards
• Clothing, rain gear and sturdy shoes
• Toiletries
• Games, books, cards, etc.
• Valuable papers – insurance papers, birth certificates, etc.
• Special items for infants, elderly or disabled family members
• Any special dietary requirements

➢ Securing your home: put shutters and/or plywood on windows and glass doors to keep glass from shattering; close and lock windows and glass doors, lower blinds and close curtains to keep flying rubble out; fill bathtubs and other clean containers with water for later should water become unavailable; do not stay in a mobile home during a hurricane.

• Having a pet plan: Make arrangements for pets – specialized pet shelters, animal control shelters, veterinary clinics and friends and relatives are all potential refuges for your pet during a disaster.

TAKING ACTION IS AS EASY AS 1-2-3:

1. BEFORE: Before hurricane season starts, you should:
   a. Assemble your disaster supply kit
   b. Develop your family disaster plan

2. WATCH: When a hurricane watch is issued, you should:
   a. Check your disaster supply kit – make sure nothing is missing
   b. Activate your family disaster plan

3. WARNING: When a hurricane warning is issued, you should:
   a. Ready your disaster supply kit – if you need to evacuate, take your supply kit with you.
   b. Use your family disaster plan
**DURING A HURRICANE WATCH** (a Hurricane Watch is issued when there is a threat of hurricane conditions, usually within 36 hours)

- Listen to radio and/or television for hurricane progress reports.

- Check emergency supplies.

- Fuel car.

Have money on hand – ATMs may not be operable after a storm.

- Bring in outdoor objects such as lawn furniture, toys, trash cans and garden tools; anchor objects that cannot be brought inside.

- Secure buildings by closing and boarding up windows. Remove outside antennas.

- Turn refrigerator and freezer to coldest settings. Open only when absolutely necessary and close quickly.

- Store drinking water in clean bathtubs, jugs, bottles and cooking pots.

- Store valuables and personal papers in a waterproof container on the highest level of your home.

- Review evacuation plan.

- Moor boat securely or move it to a designated safe place. Use rope or chain to secure boat to trailer. Use tie downs to anchor trailer to the ground or house.

**DURING A HURRICANE WARNING** (A Hurricane Warning is issued when hurricane conditions are expected in 24 hours or less)

- Listen constantly to radio/television for official instructions.
• If in a mobile home, check tie downs and evacuate immediately.

If officials indicate evacuation is necessary:

• Leave as soon as possible. Avoid flooded roads and watch for washed-out bridges.
• Secure your home by unplugging appliances and turning off electricity and the main water valve.
• Tell someone outside of the storm area where you are going.
• Take disaster supply kit.
• If time permits, and you live in an identified surge zone, elevate furniture to protect it from flooding or better yet, move it to a higher floor.
• Lock up home and leave.

**DURING HURRICANE**

• Listen constantly to radio/television for official instructions.

• Stay inside, away from windows, skylights and glass doors.

• If the “eye” of the storm passes over your area, be aware that weather conditions will return with winds from the other direction in a very short time.

• Keep flashlight and batteries handy. Avoid open flames, candles and kerosene lamps.

• If power is lost, turn off major appliances to reduce power “surge” when electricity is restored.

• Be alert – tornadoes are often spawned during hurricanes.

**AFTER THE STORM**
• Stay tuned to local radio/television for information.

• Return home only after authorities advise that it is safe to do so.

• Avoid loose or dangling power lines and report them immediately to the power company, police, or fire department.

• Enter your home with caution. Beware of snakes, insects, and animals driven to higher ground by flood water.

• Open windows and doors to ventilate and dry your home.

• Check refrigerated foods for spoilage.

• Do not drink or prepare food with tap water until the public water system has been declared safe. There are several ways to purify water until the public water system has been declared safe: (1) boil vigorously for at least one minute; (2) use water purification tablets – available at grocery/drug stores; (3) use eight drops of unscented liquid household bleach per gallon of water and let stand for 30 minutes before using.

• Take pictures of the damage, both to the house and its contents, for insurance claims.

• Drive only if absolutely necessary and avoid flooded roads and washed-out bridges.

• Use telephone only for emergency calls.

INSPECTING UTILITIES IN A DAMAGED HOME

• Check for gas leaks--If you smell gas or hear a blowing or hissing noise, open a window and quickly leave the building. Turn off the gas at the outside main valve if you can and
call the gas company from a neighbor's home. If you turn off the gas for any reason, it must be turned back on by a professional.

- Look for electrical system damage--If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.
- Check for sewage and water line damage--If you suspect sewage lines are damaged, avoid using the toilets and call a plumber. Listen for information about public water and sewage systems and follow instructions from the utility. If water pipes are damaged, contact the water utility and avoid the water from the tap – it may be contaminated.

Mitigation

There are things that you can do now which can help you avoid loss of life and property and may reduce your risk of becoming a disaster victim. Those things are called mitigation. There are many low-cost mitigate measures you can take to protect yourself, your home, or your business from losses.

Protection from Wind

- Analyze your home’s or business’s structural strengths and weaknesses.
- Retrofit your existing roof with hurricane straps.
- Retrofit your existing roof with gable end braces.
- If you are building a new home or business, consider a hip roof with a pitch of 30 degrees or less.
- Install or build storm shutters to protect windows.
- Install braces to give additional support to garage doors.
Protection from Flooding

- Buy flood insurance. Contact your local emergency management office to obtain information on how to contact the local National Flood Insurance Program representative, or use the toll free number 1-800-427-4661.
- Move valuables and appliances out of the basement.
- Have the main breaker or fuse box and utility meters elevated.
- Consider elevating your home/business above the 100-year floodplain or estimated surge inundation level.
- Make sure that any flood-proofing efforts are in compliance with minimum NFIP requirements, and with State and local building codes.

S.C. Emergency Alert System Stations

The following radio and television stations are key participants in the Emergency Alert System and the South Carolina Educational Radio Network. They broadcast emergency information throughout the state, as do numerous other radio and television stations.

**Charleston**
- WNKT 107.5 FM
- WEZL 103.5 FM

**Columbia**
- WCOS 97.5 FM
- WTCB 106.7 FM
## Grand Strand
- WKZQ 101.7 FM
- WSYN 106.5 FM

## Florence
- WJMX 103.3 FM
- WYNN 106.3 FM

## Upstate
- WFBC 93.7 FM
- WESC 92.5 FM

## Aiken/Augusta
- WBBQ 104.3 FM
- WZNY 105.7 FM

## York
- WAGI 105.3 FM

## S.C. Educational Radio Network
- WLTR 91.3 FM (Columbia)
- WSCI 89.3 FM (Charleston)
- WRJA 88.1 FM (Sumter/Columbia)
- WNSC 88.9 FM (Rock Hill)
- WJWJ 89.9 FM (Beaufort/Hilton Head)
- WEPR 90.1 FM (Greenville/Spartanburg)
- WHMC 90.1 FM (Conway/Myrtle Beach)
- WLJK 89.1 FM (Aiken)

## Important Phone Numbers

**Public Information Phone System (PIPS)**
1-866-246-0133

**Acercamiento Hispano de Carolina del Sur Hispanic Outreach of South Carolina**
1-803-714-0085

**Dept. of Transportation (Traffic Information)**
1-888-877-9151
Before, During, and After a Hurricane

Before

Be prepared

- Plan an evacuation route.
- Stay tuned to your local television and radio stations for emergency information.
- Learn safe routes inland and the locations of official shelters. Be ready to drive 20 to 50 miles inland to locate a safe place.
- Have disaster supplies on hand; flashlight and extra batteries; portable, battery-operated radio and extra batteries; first aid kit and manual; emergency food and water; nonelectric can opener; essential medicines; cash and credit cards; sturdy shoes.
- Make arrangements for pets. Pets are not allowed in official shelters.
- Fuel up and service family vehicles.
- Teach family members how and when to turn off gas, electricity, and water.
- Teach children how and when to call 9-1-1, police, or fire department and which radio station to tune to for emergency information.
- Protect your home. Cover your windows with permanent shutters, plywood panels or other shielding materials. Inspect and secure mobile home tie downs. Bring in lawn furniture and other loose, lightweight objects, such as garbage cans, garden tools, etc.
- Determine where to move your boat during a storm.
- Develop an emergency communication plan to use in case family members are separated from one another.

During

Protect Yourself

- Stay tuned to your local television and radio stations for emergency information.
- Stay inside a well-constructed building away from windows and doors even if they are covered. Go to an interior first-floor room, basement, or closet, or under the stairs.
- Be alert. Tornadoes are often spawned during hurricanes.
- If the “eye” of the storm passes over your area, be aware that severe conditions will return with winds from the other direction in a very short time.
After Returning Home

- Wait until an area is declared safe before entering. Roads may be closed for your protection. Do not drive in flooded areas.
- Check gas, water, electrical lines and appliances for damage.
- Avoid using candles and other open flames indoors. Use a flashlight to inspect damage.
- Use the telephone to report life-threatening emergencies only.

On the Road, At Home, At the Shelter

On the Road

Rest areas along I-26 will be enhanced with additional facilities to accommodate motorists efficiently. Department of Public Safety weigh stations will also be available as comfort stations. Prepare ahead for the trip. Consider taking the following:

- "2015 South Carolina Hurricane Guide"
- Road maps
- Non-perishable food
- Drinking water (two quarts per person, per day)
- First aid kit
- Medication
- Cash and credit cards
- Flashlight with extra batteries and bulbs
- Battery-operated radio with extra batteries
- Non-electric can opener
- Important documents (insurance policies, family records, photo I.D., important telephone numbers)
- Jumper cables
- Tire repair kit
At Home

Prepare in advance for a hurricane. Consider having the following:

- “2015 South Carolina Hurricane Guide”
- Non-perishable food
- Drinking water (two quarts per person, per day)
- First aid kit
- Medication
- Cash and credit cards
- Flashlight with extra batteries and bulbs
- Battery-operated radio with extra batteries
- Non-electric can opener
- Baby supplies (extra food and diapers)
- Fire extinguisher
- Games and books
- Fill bathtub with water for sanitation use

At the Shelter

American Red Cross provides a safe place to stay when you have no other place to go. Consider first staying with family and friends or leaving the area. Cots and blankets will not be provided. Although food will be provided, specialty items for infants and individuals on restricted diets may not be available. It may take several days until permission is given by local authorities to re-enter an evacuated area. If you are going to a shelter, plan on taking these items with you:

- First aid kit
• Prescription medications
• Flashlights (one per person) and extra batteries, and bulbs
• Battery-powered radio and extra batteries
• Baby food and diapers
• Toiletries
• Cards, games, books
• Identification
• Important documents (insurance policies, family records, photo I.D., important telephone numbers)
• Blankets, sleeping bags, and pillows

Evacuation Routes and Lane Reversals

In order to move evacuees out of coastal regions in a timely manner evacuation routes have been established along the entire coast. Law enforcement personnel will man key intersections on every route and evacuees are asked to follow the evacuation route as designated to either I-20 or I-95 before traveling north or south. Some roads have lane reversal plans, and if necessary motorists will be directed to utilize reversed lanes. Evacuation routes, including specific lane reversal instructions, are as follows.

Grand Strand Area

North Myrtle Beach and northward...

• Use SC 9 to proceed to I-95 and beyond.

Myrtle Beach...

• 10th Avenue North and northward to Briarcliff Acres use SC 22 (Conway Bypass) to US 501. Motorists using SC 31 (Carolina Bays Parkway) or the Grissom Parkway will be directed north to SC 22.
• South of 10th Avenue North southward to the Myrtle Beach Airport use US 501 toward Marion and beyond.
• Myrtle Beach Airport southward through Surfside Beach use SC 544 to US 501
Under certain conditions, US 501 will be converted to four lanes westbound from SC 22 to US 576. Instructions will be given to motorists through signs and highway advisory radio.

Garden City Beach south to Winyah Bay, Georgetown...

- Take US 17 south through Georgetown.
- Then take US 521 to SC 261 to US 378 to Columbia.
- Under certain conditions, a third southbound lane will be formed by reversing flow on the inside northbound lane of US 17 at the Prince George entrance. When this occurs, an additional alternate route from Georgetown will be Black River Road to US 701 to SC 51 to SC 41 to US 378 at Kingsburg. Instructions will be given to motorists through signs and highway advisory radio.

Charleston Area

- Edisto Island, Adams Run...
- Evacuees will take SC 174 to US 17.
- They will then take US 17 south to SC 64. This will take them to Walterboro, and then on to North Augusta.

Yonges Island, Meggett, Hollywood, Ravenel...

- Use SC 165 to US 17, then US 17 south to SC 64.

Johns Island, Kiawah Island and Seabrook...

- Evacuees will use SC 700 to Road S-20 (Bohicket Road) to US 17.
- Evacuees will take US 17 south to SC 64 where they will go to Walterboro, then on to North Augusta.

James Island and Folly Beach...

- Use SC 171 to US 17.
- Evacuees should then travel south on US 17 to I-526 to the reversed lanes of I-26.

City of Charleston...

- The west side of the city (West Ashley) will use SC 61 to US 78, then to Aiken and North Augusta.
- Downtown will use the normal lanes of I-26.

North Charleston...

- Evacuees will take US 52 (Rivers Avenue) to US 78 to US 178 to Orangeburg or continue on US 52 to US 176 or continue north on US 52.
- The right lane of US 52 at Goose Creek will continue on to Moncks Corner. In Moncks Corner, it will be directed onto SC 6, where SC 6 will take evacuees toward Columbia.
- The left lane of US 52 at Goose Creek will go on to US 176 to Columbia.
- Evacuees using SC 642 will travel west toward Summerville and take Road S-22 (Old Orangeburg Road) to US 78 west.
East Cooper...

- Evacuees leaving Mount Pleasant will take I-526 or US 17 south to I-26.
- Those leaving Sullivan’s Island will use SC 703 to I-526 Business to access I-526, then I-26.
- Evacuees from the Isle of Palms will use the Isle of Palms connector (SC 517) to go to US 17, where the right lane will turn north on US 17, then proceed to SC 41, to SC 402, then to US 52 to SC 375, then to US 521, to SC 261 to US 378 to Columbia.
- Evacuees using the left lanes of the Isle of Palms connector will turn left to go to I-526 and then on to I-26.
- Evacuees on I-526 approaching I-26 from East Cooper will be directed to the normal lanes of I-26 if in the right lane of I-526.
- Those in the left lane of I-526 will be directed into the reversed lanes of I-26.

Awendaw and McClellanville...

- Evacuees will take SC 45 to US 52 where they will be directed right onto US 52 to SC 375 to US 521 to SC 261 to US 378 to Columbia

Hilton Head Island and Beaufort Areas

Hilton Head Island...

- Hilton Head Island evacuees will use both the William Hilton Parkway (US 278 Business) and the Cross Island Parkway toll facility (US 278).
- As these two roads merge, a third lane will be formed by reversing flow on the inside eastbound lane of US 278. This lane will carry the traffic from the toll facility.
- When US 278 reaches I-95, lane assignments will be as follows:
  1. The right lane on westbound US 278 will exit to I-95 northbound
  2. The left lane on US 278 westbound will continue on US 278 to Hampton and eventually North Augusta.
  3. The reversed lane will take SC 170 to SC 46 to US 321 then to SC 3 to SC 125 and onto North Augusta.
- Should a third lane not be necessary, then both lanes on US 278 will be routed to I-95 with the right lane to I-95 north, and the left lane continues on US 278.
- Under certain conditions, US 278 will be converted to four lanes westbound from the Cross Island Parkway to SC 170, where one lane will be directed onto SC 170 westbound to Hardeeville. The remaining three lanes on US 278 will continue toward I-95.
- I-95 southbound – Access to I-95 southbound is available, but severe congestion may be encountered.
Beaufort...

- Evacuees will use the two present northbound lanes on US 21. These lanes will be
turned onto US 17 south to I-95 at Exit 33 (Point South) where the left lane will go to I-
95 south and the right lane to I-95 north.
- Under certain conditions, a third northbound lane will be formed by reversing flow on
the inside southbound lane of US 21 at SC 280. This lane will carry the traffic from SC
280. Also, as conditions warrant, US 21 may be converted to four lanes northbound
from SC 280. Both of the above schemes will end at US 17, Gardens Corner. In either
case, motorists will be given instructions through signs and highway advisory radio.
Best Practices for Road Weather Management

South Carolina DOT Hurricane Traffic Evacuation Operations

South Carolina has an extensive network of designated evacuation routes for motorists to use should there be a need to vacate coastal areas for a hurricane. There are twelve major evacuation routes, each approximately 100 miles long. From these twelve, one interstate and three primary routes can be reversed for higher evacuation traffic capacity leading away from the coast. All evacuation routes are “loaded” with vehicles from a designated area of the coast. Traffic is directed by signs and law enforcement to ensure maximum utilization of each route and to avoid over capacity of others. High coastal population numbers will present a capacity challenge to most routes used for evacuation. By aggressively managing traffic flow during evacuation, a higher probability of minimal drive times and reduced frustration for motorists will be realized.

System Components: Intelligent Transportation System (ITS) elements play an integral role in the evacuation operations. All ITS infrastructure including Incident Responders, permanent and portable changeable message signs, traffic cameras, highway advisory radios, congestion sensing devices, and 511 Travel Info have been developed since Hurricane Floyd in 1999. The South Carolina Department of Transportation’s (SCDOT) traffic counters were in place prior to Hurricane Floyd and remain a valuable part of evacuation traffic evaluation today. Traffic camera video, congestion monitoring abilities, and traffic count data are used by the State Emergency Operations Center (SEOC) Emergency Traffic Management Unit to monitor and alter operations on evacuation routes as needed by the South Carolina Highway Patrol (SCHP) and SCDOT. The video viewed at the SEOC is fed through dedicated fiber optic cable from the State Traffic Management Center (STMC). This offers an extra measure of reliability and allows camera control of all SCDOT’s 302 video cameras statewide. A large number of these cameras are on coastal evacuation routes and are used daily to manage high traffic volumes in these areas.

SCDOT’s Incident Responders, known as the State Highway Emergency Program (SHEP), are the other critical element of evacuation operations. During hurricane evacuation operations, they assist in keeping key evacuation routes in Myrtle Beach, Charleston, and Columbia free of incidents that lead to traffic congestion. SHEP units from northern areas of the state assist in covering the entire length of reversed Interstate 26 (I-26) from Charleston to Columbia (100 miles) assisting to clear incidents that may impede traffic flow. Figure SC-1 is an aerial view of the termination of the evacuation reversal of I-26 near Columbia.

System Operations: SCDOT and SCHP have adopted the Incident Command System (ICS) as the operational framework used for coastal evacuation. ICS will be used in all situations where Emergency Traffic Management is necessary throughout the state for adverse weather, man-made disasters, and so forth. ICS organization and concepts have been used successfully by fire services for decades and have proven themselves to be the best framework for all emergency services and disaster relief.

SCDOT and SCHP have jointly developed ICS Incident Action Plans (IAP) to address actions associated with each hurricane reversal route. IAPs have been developed for all evacuation activities along all coastal exit routes. Public response partners such as local law enforcement,
fire services, emergency medical services, the law enforcement branch of the State Natural Resources Division, the State Law Enforcement Division (SLED), civil air patrol, National Guard, and county emergency management entities are incorporated in each IAP. This development effort has taken a substantial amount of detailed work by the parties involved.

The IAP concept has been tested through many Table Top Exercises (TTX) conducted with state and local partners and through a full-scale exercise last year for the simulated reversal of I-26 from Charleston to Columbia. The full-scale exercise entails bringing all assets, those of law enforcement and SCDOT traffic control devices, to each interchange on I-26 from Charleston to Columbia. The Interstate is not actually reversed but everything necessary to do so is at the roadside. The IAP concept is continuously exercised with the state’s annual full-scale simulation of the evacuation operation and the manning of evacuation traffic control points. During the exercise, simulated traffic problems will be presented to field personnel for mitigation by using IAP procedures identified through yearlong training.

Figure SC-1. Aerial view of I-26 near Columbia, SC where 100-mile evacuation reversal is terminated.

All evacuation routes are planned to provide lane continuity. For example, at major intersections or other transition points, two lanes will transition to two lanes and not be reduced to one. However, there are some exceptions as some roads are not wide enough to accommodate such continuity. There is extensive use of static traffic control devices (cones, barricades, etc.) and law enforcement personnel when a lane reversal is employed.

To aid in the goal of lane continuity, SCDOT has employed ITS technology to its maximum advantage along evacuation routes. Further SCDOT has instigated the use of ICS/IAP procedures to maximize operational efficiency and has assured sound, logical communications protocol during hurricane events.

Transportation Outcome(s): The growing number of permanent residents within fifty miles of the coast and the high number of tourists that visit the coast each year during hurricane season motivate SCDOT to provide safe, effective evacuation operations. The coastal access road system has not kept pace with the population growth—only minor traffic capacity improvements have
been made in the last forty-five years. This combination of constrained road system and high population makes it imperative that the maximum traffic capacity is achieved during evacuation events.

The new ICS is paying many dividends in its simplicity, concise instruction and adaptive flexibility. Stakeholders and the public have realized the benefits accruing to them through this cooperative framework and periodic review process. The current initiative represents the state’s best efforts to protect the public when a hurricane threatens the coast. SCDOT is prepared for evacuations but will continue to evaluate yearly and improve as resources permit.

**Implementation Issues:** Two implementation issues of the state’s evacuation plans are availability of evacuation routes and appropriate signage along those routes. The SCDOT and SCHP assess all routes in the field yearly to ensure evacuation signage is in place. Also, evacuation routes are altered if needed during the yearly assessment.

Prior to hurricane season, meetings are held to reexamine emergency traffic flow procedures, confirm or alter staffing at traffic control points along the routes, and verify the ITS components used for hurricane evacuation traffic. These meetings occur in each of the state’s three major coastal evacuation areas with county emergency management officials, local law enforcement, SCDOT, SCHP Troopers, fire services, Emergency Management Services, and the National Guard in attendance.

In 2012 the ICS/IAP concept for evacuation management was presented in the regional meetings with all partners. Additional meetings were held by SCDOT and SCHP to assure a familiarity amongst stakeholders during transition to the ISC approach. It is very important that all involved embrace ISC and understand their role in the IAP.

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**Reference(s):**

- South Carolina Department of Transportation.
- South Carolina Emergency Management Division.
Route information coordinated through SCDPS and SCDOT.