VA POST-KATRINA HEALTH MANUAL:

Information for Health Care Providers and Patients

Version 1 – September 2005

This manual contains documents and information designed to help provide rapid assistance for veterans' health care and other needs as a result of Hurricane Katrina and its aftermath. In the weeks and months during our Nation's recovery from the effects of Hurricane Katrina, veterans who use the health care system of the Department of Veterans Affairs (VA) will need focused VA health care for consequences of the events caused by the hurricane as well as for their own acute and chronic health needs unrelated to the hurricane.

The following documents contained in this manual will assist both veterans who seek VA health care and the providers who deliver that care to rapidly and comprehensively meet their needs. Most of these documents can be printed out and used individually.

CONTENTS

A. Veteran Health Self-Report Form **Page 3**
This document will assist veterans who use VA health care to identify hurricane-related health and housing issues and new acute medical problems, as well as chronic health issues that need attention.

B. Veteran Patient Fact Sheets **Page 9**
These information sheets are for veterans to take away from their visit to assist them maximize their health protection in this post-hurricane recovery period. Topics include:

- Safe Water **Page 10**
- Diarrhea **Page 11**
- Re-Entering and Cleaning Your Home Safely **Page 13**
- Snake Bites **Page 16**
- Reactions to Major Disasters – A Fact Sheet for Survivors and Their Families **Page 17**

C. VA Provider Materials - Patient Health Assessment Form **Page 20**
This form will assist VA care providers in rapidly identifying and focusing on the pressing health needs of veterans exposed to the hurricane and its aftermath.

D. Provider Fact Sheets on Post-Hurricane Health Care **Page 24**
These fact sheets are included to give providers diagnostic and treatment information on specific topics likely to occur subsequent to the hurricane and subsequent events that may have impact on veteran patients. These topics include:

- Subacute Medical Syndromes From Exposure or From Interruptions in Medical Care **Page 25**
- Diarrhea and Cholera **Page 26**
- Oral Rehydration Therapy **Page 28**
- Skin and Soft Tissue Infections From Waterborne Bacteria **Page 30**
- Dermatologic Conditions **Page 33**
- Asthma and Chronic Obstructive Pulmonary Disease (COPD) **Page 36**
- Conditions That May Cause Acute Jaundice **Page 38**
- Insect Stings and Bites, Animal and Snake Bites **Page 39**
- Environmental Health (Chemical and Toxologic) **Page 42**
- Mental Health Reactions After Disaster **Page 43**
- Post-Traumatic Stress Disorder (PTSD) **Page 45**
- Psychosocial Treatment of Disaster-Related Mental Health Problems **Page 47**
- Pharmacological Treatment of Acute Stress Reactions and PTSD **Page 50**
- Assessing and Responding to Suicidal Intent **Page 53**

E. Psychosocial History and Assessment Form **Page 56**
This form will assist VA Social Work staff to rapidly identify veteran's psychosocial needs and plan actions taken to ameliorate problems.

F. Veterans Benefits Administration—Fact Sheet for Employees **Page 60**
This fact sheet provides a call in phone number and pay information for VA employees in hurricane affected areas.

G. Veteran Benefits Administration—Fact Sheet for Veterans from Katrina-Affected Areas on Benefits **Page 61**
This fact sheet provides pension, education, and insurance information for veterans in hurricane affected areas.

H. National Cemetery Administration—Hurricane Katrina Information Relating to NCA Staff and Veterans' Families **Page 62**

I. Acknowledgements, Contacts, Leads for the Development and Revisions of This Manual **Page 63**

This manual and updates as they appear will be posted at the VA Hurricane Katrina Web site http://www1.va.gov/opa/katrina/

A. VETERAN HEALTH SELF-REPORT FORM

POST HURRICANE
VETERAN HEALTH SELF-REPORT FORM

Dear Veteran:

This form is to help us collect information about your medical history and your current problems, and to help us understand your needs. We hope it helps you remember important issues to discuss your VA provider today and in the near future.

What brings you to the VA today (check all that apply)?

□ Fill my VA medications
□ Fill medications that I usually get outside VA
Name of medication_____

□ Ask a doctor about a new health problem
Please describe it:

□ Ask a doctor about an old problem
□ Talk with someone about what has happened to me or that I am feeling sad, depressed, or mad
□ See if housing assistance is available
□ Find out about my VA pension or benefits
□ Other: _____

Basic Information:

1). Full Name: _____

2). Date of Birth: _____ Last four digits of Social Security Number: ___ ___ ___ ___

3). Current address (provide or do the best you can to describe it):

_____

4). Current Phone number: _____ □ I have no phone

5). Person we can contact in an emergency: _____

Phone number for this person: _____

6). VA facility where you normally receive care: _____
What was your provider's name: _____

7). Do you wear or need glasses? YES □ NO □
If YES, do you still have your glasses? YES □ NO □

8). Do you use a hearing aid? YES □ NO □
IF YES, do you still have them YES □ NO □
If YES, do they work ? YES □ NO □
If YES, do you need new batteries? YES □ NO □

9). Do you need to use a cane, wheelchair, or something else to help you move around?
YES □ NO □
IF YES, does it need to be replaced? YES □ NO □

Past Medical Information:

1. Do you have any allergies to medicine, food, or other things?
YES □ NO □
If yes, please tell us what happens

I am allergic to:	The reaction I have is:

2. Are you supposed to be taking any medications? YES □ NO □

If YES, please tell us about them. If you don't know the medication name, write down the shape or color, what it is for, and talk about it with your VA provider.
We have provided two examples.

Name of medication	What do you take it for?	Have you run out? When?
lisinopril	*blood pressure*	*Yes, 4 days ago*
small white tablet	*Diabetes*	*No*

3. Check any conditions that you are seeing a VA or other doctor for:

□ Arthritis	□ High blood pressure
□ Asthma or COPD	□ Liver disease
□ Cancer	□ Kidney disease
□ Depression	□ Mental health issue
□ Diabetes	□ PTSD
□ Hay fever or allergies	□ Seizures
□ Headaches (migraines)	□ Skin problems (psoriasis, eczema)
□ Heart trouble	□ Stomach problems (acid reflux, ulcer)
□ Hepatitis	□ Thyroid problems
□ HIV-AIDS	□ Stroke

□ Other (please list them)

_____

_____

_____

Recent history since the hurricane:

Although you may be doing well today, we want to know what has happened with you since the hurricane. Please review these questions to prepare for your provider visit today.

1). Housing since the hurricane—*if this is difficult to write down, don't worry. One of your VA providers will talk to you about it.*

- What changes have occurred in your housing since the hurricane?
- Were you in a shelter or outside?
- Have you lived in more than one place?
- Were you with many people in the same room
- What were the living conditions like

2). Have you been treated for any medical or mental health conditions since the hurricane?

YES □ NO □

If YES, please answer the following:

a) Where were you treated: _____

b) What was/were the problem(s):

_____

c) Were you given any medications YES □ NO □

If YES, what where they (if you still have them, please show your VA provider) _____

3). Have you had any of these?

Insect bites or stings?	YES □ NO □
Snake or animal bites?	YES □ NO □
New rashes or bruises	YES □ NO □
Diarrhea at any time	YES □ NO □
Any cuts, wounds, or sore, healed or not?	YES □ NO □

4). Where you ever in contact with floodwaters? YES □ NO □

How you are doing today?

1). General Symptoms

Please place a mark next to any of the symptoms listed below that you have had in the past week.

	Abdominal Pain/Swelling		Hand Pain		Wheezing
	Alcohol, Prescription, or Street Drug Use/Abuse		Headache		Wrist Pain
	Ankle Pain		Hip Pain		Women's Symptoms
	Anxiety		Knee Pain		Men's Symptoms
	Back Pain		Joint Pain/swelling		Cramps
	Chest Pain		Nail Problems		Muscle aches/pains
	Constipation		Nausea or Vomiting		Feeling sad or blue
	Cough		Neck Pain		Mental problems
	Depression		Numbness or Tingling		Suicide ideas
	Diarrhea		Rashes		Feeling hopeless
	Dizziness		Rectal Bleeding		Difficulty sleeping
	Drowsiness		Pain or Itching		Feeling agitated/irritable
	Hearing Loss or ringing		Shortness of Breath		
	Eye Problems		Shoulder Pain		
	Feet Pain		Sore Throat		
	Hair Loss		Tooth Pain		

2). How many meals a day are you getting each day?

□ My usual amount
□ 2 meals a day
□ 1 meal a day
□ No meals, just snacks
□ Other

3). Where are you getting your drinking water from?

□ Straight out of the tap "as is"
□ Out of the tap and boiled
□ Out of the tap with a few drops of bleach (chlorine) added
□ Only bottled water
□ I am not sure

4). How much are you drinking

Water, sodas, juice, etc: ____ glasses/bottles a day
Alcohol: ____ drinks a day

5). Are you planning to relocate to another area in the coming weeks?

YES □ NO □
If YES, where: (provide address and phone number, if possible)

_____

_____

5). Would you like to talk to a VA provider about any of these issues today:

□ Prescription drug overuse
□ Street drug use
□ Alcohol use
□ Smoking
□ Depression or sadness
□ Anger
□ Physical or sexual assault
□ Something that happened after the hurricane that I really need to discuss with someone.

We thank you for taking the time to complete this form. Please share this information and any other information with your VA providers.

B. VETERAN PATIENT FACT SHEETS

POST HURRICANE
VETERAN PATIENT INFORMATION

SAFE WATER FACT SHEET

Follow these steps to ensure that your drinking water is safe:

- Use **only bottled, boiled, or treated water** until your supply is tested and found safe.
- **If you use bottled water**, be sure it came from a safe source, and is in sealed containers. If you do not know that the water came from a safe source, you should boil or treat it before you use it.
- **If you boil water**, do the following: bring water to a rolling boil for 1 minute. This will kill most organisms and is the preferred way to kill harmful bacteria and parasites.
- **If you treat water**, do the following: use chlorine tablets, iodine tablets, or unscented household chlorine bleach (5.25% sodium hypochlorite).
    - If you use household chlorine bleach to treat water, add very small amounts. Use1/8 teaspoon (about 0.75 mL) of bleach per gallon of water if the water is clear. For cloudy water, add 1/4 teaspoon (about 1.50 mL) of bleach per gallon. Mix the solution thoroughly and let it stand for about 30 minutes before drinking or otherwise using it.
    - If you use chlorine or iodine tablets, follow package directions.
- **If your well was overflooded during the hurricane, do not use the water.** It may have to be pumped out or otherwise treated.
- Note: It is better to start with tap water and boil it or treat it above if necessary. Do not use water from other sources—especially floodwaters--that may be much more contaminated. Treating water with chlorine tablets, iodine tablets, or liquid bleach will not kill parasitic organisms, nor will they remove chemicals, such as oil. Boiling also does not remove chemicals.

To clean water containers before reusing them, use a bleach solution of 1 cup of bleach to 1 gallon of water—DO NOT DRINK this bleach solution. Be cautious when re-using water storage tanks and other types of containers. For example, fire truck storage tanks and previously used cans or bottles may be contaminated with micro-organisms or chemicals.

If sealed bottles of drinks (oral rehydration solutions, juices, water, etc) have been contaminated by floodwaters, **rinse the outside** of sealed bottles of fluids in a bleach solution (approximately 1 cup bleach to 1 gallon water—DO NOT DRINK this bleach solution). If a drink is no longer sealed and has been opened, discard it.

POST HURRICANE
VETERAN PATIENT INFORMATION

DIARRHEA FACT SHEET

- **Diarrhea may be caused by organisms in dirty food or water,** such as bacteria, viruses, and parasites. It may last for hours or days, or may end after a few liquid bowel movements.
- **Diarrhea with or without vomiting can cause severe loss of body** fluids and interrupt vital body fluid balance. Dehydration is probably the most serious consequence of infectious diarrhea.
- **Diarrhea can be dangerous for anyone, *but most at risk are*:**
  - infants
  - young children
  - elderly
  - people with chronic illnesses like heart or kidney disease or diabetes

  These people need to seek medical attention right away if they have more than one or two episodes of diarrhea in a short period.
- **Healthy adults need to get to medical attention if they have diarrhea lasting more than a few hours,** if they are not able to drink fluids, or if they begin to feel weak, dizzy, or "shaky," or have bloody diarrhea.
- **Treating diarrhea**
  - Infants, young children, the elderly, and persons with chronic illnesses need to get to medical attention right away
  - Healthy teenagers and adults must replace fluids by sipping one of the following drinks:
    - Drinks available from health care providers or drug stores, such as Enfalyte, Pedialyte, Rehydralyte, CeraLyte
    - Sports drinks—like Gatorade and similar drinks
    - Diluted (with bottled, boiled, or treated water) fruit juices or carbonated drinks (sodas, soda pop); mix at least 2 parts water to 1 part juice or soda
    - Powdered mixes for "ORAL REHYDRATION" or powdered sports drinks reconstituted with *bottled, boiled, or treated water* carefully following package instructions (never mix drink powders with less water than listed on package directions when treating diarrhea)
    - A homemade mixture of 1/2 teaspoon salt, 1 teaspoon baking soda, 8 teaspoons sugar, and 8 ounces of orange juice in 1 quart of *bottled, boiled, or treated* water.
  - Adults should drink ½ to 1 quart of one of the drinks above as quickly as they are able to, then continue sipping fluids until feeling better or getting medical advice.

  - Children weighing less than 20 lbs should be given *2 to 4 oz or 1/4 to 1/2 cup* initially and with each episode of diarrhea or vomiting.
  - Children weighing more than 20 lbs should be given *4 to 8 oz or 1/2 to1 cup* initially and with each episode of diarrhea or vomiting.
- **Never just drink large amounts of plain water when having vomiting or diarrhea**. Serious and dangerous body salt imbalances could result.
- **Do not drink alcoholic beverages**.
- If sealed bottles of drinks (oral rehydration solutions, juices, water, etc) have been contaminated by floodwaters, **rinse the outside** of sealed bottles of fluids in a bleach solution (approximately 1 cup bleach to 1 gallon water—DO NOT DRINK this bleach solution). If a bottle is no longer sealed and has been opened, discard it.
- **To clean water containers before reusing them,** use a bleach solution of 1 cup of bleach to 1 gallon of water—DO NOT DRINK this bleach solution. Be cautious when re-using water storage tanks and other types of containers. For example, fire truck storage tanks and previously used cans or bottles may be contaminated with micro-organisms or chemicals.
- **Wash your hands after each episode of diarrhea** (or after helping clean up someone who has had diarrhea). Use soap and water, or if none is available, use alcohol-based waterless hand cleaners. Washing your hands is the best way to keep from spreading germs that cause diarrhea.

POST HURRICANE
VETERAN PATIENT INFORMATION

FACT SHEET ON RE-ENTERING AND CLEANING YOUR HOME SAFELY

Play it safe. The dangers are not over when the water goes down. Your home's foundation may have been weakened, the electrical system may have shorted out, floodwaters may have left behind things that could make you sick, and animals (snakes, alligators) may be hiding.

- When in doubt, throw it out.
- Don't risk injury or infection.
- Don't put your hands or arms in spaces you can't see into or haven't examined carefully
- Headache, unconsciousness and death may result from "confined space" hazards that arise from use of diesel, propane, or gasoline tools (chain saws, generators) indoors, gasses from decomposition, leaking gas and other explosives. If you use one of these gasoline tools, be sure there is good ventilation.
- Consider structural and electrical hazards

Ask for help. Many people can do a lot of the clean up and repairs. But if you have technical questions or do not feel comfortable doing something, get professional help.

Stay out of any building if flood waters remain around the building. Flood waters often undermine foundations, causing sinking, floors can crack or break and buildings can collapse.

Avoid entering ANY building (home, business, or other) before local officials have said it is safe to do so. Buildings may have hidden damage that makes them unsafe. Gas leaks or electric or waterline damage can create additional problems.

When entering buildings

- **Don't smoke inside buildings.** Smoking in confined areas can cause fires.
- **When entering buildings, use extreme caution.** Building damage may have occurred where you least expect it. Watch carefully with every step you take.
- **Wear sturdy shoes.** A common injury following a disaster is cut feet.
- **Use battery-powered lanterns or flashlights when examining buildings.** Battery-powered lighting is the safest and easiest, preventing fire hazard for the user, occupants, and building.
- **Examine walls, floors, doors, staircases, and windows to make sure that the building is not in danger of collapsing.**
- **Inspect foundations for cracks or other damage.** Cracks and damage to a foundation can render a building uninhabitable.
- **Look for fire hazards.** There may be broken or leaking gas lines, flooded electrical circuits, or submerged furnaces or electrical appliances. Flammable or explosive materials may travel from upstream. Fire is the most frequent hazard following floods.

- **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. If you turn off the gas for any reason, it must be turned back on by a professional. Do not extinguish gas fires, to prevent explosions, but call the fire department
- **Look for electrical system damage.** If you see sparks or broken or frayed wires, or if you smell burning 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. Electrical equipment should be checked and dried before being returned to service.
- **Check for sewage and waterline damage.** If you suspect sewage lines are damaged, avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid using water from the tap. You can obtain safe water from undamaged water heaters or by melted ice cubes.
- **Watch out for animals, especially poisonous snakes and alligators, that may have come into buildings with the flood waters. Use a stick to poke through debris.** Flood waters flush snakes and many animals out of their homes.
- **Watch for loose plaster, drywall, and ceilings that could fall.**
- **Take pictures of the damage, both of the building and its contents, for insurance claims.**

After returning home:

- **Throw away food that has come in contact with flood waters.** Some canned foods may be salvageable. If the cans are dented or damaged, throw them away. Food contaminated by flood waters can cause severe infections.
- **If water is of questionable purity, boil or add bleach, and distill drinking water before using.** Wells inundated by flood waters should be pumped out and the water tested for purity before drinking. If in doubt, call your local public health authority. Ill health often occurs when people drink water contaminated with bacteria and germs.
- **Pump out flooded basements gradually (about one-third of the water per day) to avoid structural damage.** If the water is pumped completely in a short period of time, pressure from water-saturated soil on the outside could cause basement walls to collapse.
- **Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible.** Damaged sewage systems are health hazards
- **Water and mold damage**: Moisture and heat generate mold growth. In general, if it smells or looks moldy, it is. Steps to take then include
  1) drying – moving air, hanging up, etc
  2) cleaning – hard surfaces (metal, wood, etc), can be cleaned . If mold is present, use a bleach solution (mix 1 cup bleach with 1 gallon of water. Do not mix in ammonia and do not drink this bleach solution). If mold regrows on wood, use bleach or consider discarding the item. Soft surfaces/clothing, etc: wash. If odor or visible mold recur, discard.
  3) discarding the item if you can't get rid of mold.

- **Chemical hazards:** boiling drinking water with chemicals may concentrate them. Do not drink funny tasting or smelling water. Some chemicals in water may cause skin sensitization or even sun sensitivity: wash with soap and water after working or swimming in water.

POST HURRICANE
VETERAN PATIENT INFORMATION

FACT SHEET ON SNAKE BITES

What to DO if you or someone else is bitten by a snake.

- Try to see and remember the color and shape of the snake, which can help with treatment of the snake bite.
- Keep the bitten person still and calm. This can slow down the spread of venom if the snake is poisonous.
- Seek medical attention as soon as possible.
- Dial 911 or call local Emergency Medical Services (EMS).
- Lay or sit the person down with the bite below the level of the heart.
- Tell him/her to stay calm and still.
- Cover the bite with a clean, dry dressing.

What NOT to do if you or someone else is bitten by a snake.

- Do not pick up the snake or try to trap or kill it (this may put you or someone else at risk for a bite).
- Do not apply a tourniquet.
- Do not slash the wound with a knife.
- Do not suck out the venom.
- Do not apply ice or immerse the wound in water.
- Do not drink alcohol as a pain killer.
- Do not drink caffeinated beverages such as coffee or cola drinks.

POST HURRICANE
VETERAN PATIENT INFORMATION

REACTIONS TO A MAJOR DISASTER:
A FACT SHEET FOR SURVIVORS AND THEIR FAMILIES

Following a disaster, people typically describe a range of emotions including relief to be alive, followed by stress, fear, and anger. Common experiences in a disaster include being injured, threatened, or displaced; life threat; being confined to one's home; not being able to locate or losing a loved one or family member; witnessing injury and death; suffering from financial hardships; and having limited access to resources such as shelter, food, water, and supplies.

WHAT ARE COMMON REACTIONS TO A DISASTER?

Stemming from these events, you may find that you are:

- Feeling hopeless about the future & detached or unconcerned about others
- Having trouble concentrating
- Jumpy & startle easily at sudden noise
- On guard and constantly alert
- Having disturbing dreams/memories

You may also experience more physical reactions such as:

- Stomach upset, trouble eating
- Trouble sleeping & exhaustion
- Pounding heart, rapid breathing
- Severe headache if thinking of the event, sweating
- Failure to engage in exercise, diet, safe sex, regular health care
- Excess smoking, alcohol, drugs, food
- Worsening of chronic medical problems

Or have more emotional troubles such as:

- Feeling nervous, helpless, fearful, sad
- Feeling numb, unable to experience love or joy
- Avoiding people, places, and things related to the event
- Being irritable or outbursts of anger
- Becoming easily upset or agitated

COMMON PROBLEMS THAT CAN OCCUR

Posttraumatic Stress Disorder (PTSD): PTSD is a condition that can develop after someone has experienced a life-threatening situation. People with PTSD often can't stop thinking about what happened to them. They may try to avoid people and places that remind them of the disaster and may work hard to push thoughts of the even out of their head. Feeling numb is another common reaction. Finally, people find that they have trouble relaxing. They startle easily and are often "on guard."

Depression: Depression involves feeling down or sad more days than not, and losing interest in activities that used to be enjoyable or fun. You may feel low in energy and be overly tired. People may feel hopelessness or despair, or feeling that things will never get better. Depression may be especially likely when a person experiences losses such as the death of close friends. This sometimes leads a depressed person to think about hurting or killing him or herself. Because of this, it is important to get help.

Self-blame, guilt and shame: Sometimes in trying to make sense of a disaster, people take too much responsibility for bad things that happened, for what they did or did not do, or for surviving when others didn't. Remember, we all tend to be our own worst critics and that guilt, shame and self-blame are usually unjustified.

Suicidal thoughts: Trauma and personal loss, can lead a depressed person to think about hurting or killing themselves. If you think someone you know may be feeling suicidal, you should directly ask them. You will NOT put the idea in their head. If they have a plan to hurt themselves and the means to do it, and cannot make a contract with you to stay safe, try to get them to a counselor or call 911 immediately. National Suicide Prevention Lifeline http://www.suicidepreventionlifeline.org/ 1-800-273-TALK (8255)

Anger or aggressive behavior: Disasters can be connected with anger in many ways. After a disaster people often feel that the situation was unfair or unjust. They can't comprehend why the event has happened and why it has happened to them. These thoughts can result in intense anger. Although anger is a natural and healthy emotion, intense feelings of anger and aggressive behavior can cause relationship and job problems, and loss of friendships. If people become violent when angry, this can just make the situation worse as people can become injured and there may be legal consequences. If someone you are dealing with seems to be overly angry, do not argue with them, and try to get away for a little while to let them calm down. If you feel like you have too much anger, try to find a place where you can be quite and calm for a while. It can help to talk with a counselor or mental health professional if they are available.

Alcohol/drug abuse: Drinking or "self-medicating" with drugs is a common way many people cope with upsetting events to numb themselves and to try to deal with the difficult thoughts, feelings, and memories related to the disaster. While this may offer a quick solution, it can

actually lead to more problems. If someone close begins to lose control of drinking or drug use, it is important to assist them in getting appropriate care.

RECOVERY

In the immediate aftermath of a disaster, almost everyone will find that they are unable to stop thinking about what happened. Many will also exhibit high levels of arousal, being overexcited. For most, fear, anxiety, remembering, efforts to avoid reminders, and arousal symptoms, if present, will gradually decrease over time. Use your personal support systems, family and friends, when you are ready to talk. Recovery is an ongoing gradual process. It doesn't happen through suddenly being "cured" and it doesn't mean that you will forget what happened. But, most people will recover from trauma naturally over time. If your emotional reactions are getting in the way of your relationships, work, or other important activities you may want to talk to a counselor or your doctor. Good treatments are available.

C. VA PROVIDER MATERIALS – PATIENT HEALTH ASSESSMENT FORM

POST HURRICANE
PROVIDER INFORMATION

PATIENT HEALTH ASSESSMENT FORM

Patient Assessment Summary:

1. What brings you to the clinic/hospital?

2. Brief description of experience during hurricane and aftermath:

   Physical/emotional trauma:

   Exposure to flood waters (biologic and chemical contaminants):

   Health concerns related to hurricane:

   Insect/snake or animal bites:

What are your major health problems, your usual meds/treatments, and when did you last have them?

Major Health Problem	Usual Med/Treatment	Last Dose/Treatment

Do you use alcohol, tobacco, other drugs?

Substance	Last Use	Need for treatment

Do you have any allergies? If yes, then to what and what was the reaction?

Where are you living, getting food, getting medicine?

Physical Exam:

Vitals
Temperature: Blood pressure: Pulse: Respiration: Pain:

Clinical Assessment especially for:

Hydration status

Respiratory status

GI status

Head trauma

Foot trauma

Open wounds

Ecchymoses/bruising

Rashes, skin lesions, bites

Mental Health Assessment especially for ability to cope, excessive anxiety, presence of disordered thought/psychoses

Interventions Checklist

Last tetanus_____ Give today?_____

Vaccinated for Hep A y____ n_____ Give today?_____

Vaccinated for pneumococcal disease_____ Give today?_____

Wound care needed_____
Wound care supplies needed_____

Medications needed_____

Substance use assistance needed_____

Mental Health referral needed _____

Referral to social work for assistance w/ social needs - housing/funds/family member contact_____

Education on (provide fact sheets for patients):

- Safe Water
- Diarrhea
- Re-Entering and Cleaning Your Home Safely
- Snake Bites
- Reactions to a Major Disaster

Disposition/Plan

Medical care

Mental health/substance use care

Social/activities of daily living support – social worker

D. PROVIDER FACT SHEETS ON POST-HURRICANE HEALTH CARE

POST HURRICANE
PROVIDER INFORMATION

SUBACUTE MEDICAL SYNDROMES FROM EXPOSURE OR FROM INTERRUPTIONS IN MEDICAL CARE: A FACT SHEET

The following is a review of medical syndromes likely to emerge among persons exposed in the aftermath of a hurricane or flood as well as those related to inattention to chronic medical needs.

1. Related to hurricane events and flooding
   a. Diarrheal illness related to contamination of water supplies and lack of sanitation
   b. Gastroenteritis related to food spoilage / contamination
   c. Skin, bone and soft tissue infections related to trauma and/or water exposure
   d. Mosquito-borne infections (Dengue, malaria, West Nile Virus)
   e. Chemical or toxin exposure
   f. Trauma of various sorts including animal or snake bites
   g. Airborne infections related to crowding
   h. Viral hepatitis (A and possibly E)

2. Related to chronic diseases and interruptions in treatment / medication
   a. Hypertensive emergencies
   b. Complications of hyperglycemia such as DKA (diabetic ketoacidosis) and HHNK (hyperosmolar nonketotic syndrome)
   c. COPD (chronic obstructive pulmonary disease) and exacerbation of asthma
   d. Acute coronary syndromes and stroke
   e. Venous thromboses
   f. Congestive heart failure
   g. Interruptions in treatment for HIV, tuberculosis, hepatitis B, hepatitis C (flairs and increased transmission risk)
   h. Complications of portal hypertension
   i. Complications of chemotherapy – neutropenia, anemia, infections
   j. Uremia and other complications of end stage renal disease
   k. Acute organ rejection (transplant patients)

3. Related to new or preexisting mental health problems
   a. Acute intoxications and overdoses
   b. Opiate withdrawal
   c. Alcohol withdrawal
   d. Severe mood disorders
   e. Psychosis (due to interruptions in treatment)
   f. Depression, post-traumatic stress disorder (PTSD), suicidal ideations
   g. Withdrawal syndromes associated with abrupt discontinuation of SSRIs (selective serotonin reuptake inhibitors/antidepressants) and some benzodiazepines

POST HURRICANE
PROVIDER INFORMATION

DIARRHEA AND CHOLERA FACT SHEET

Definition and Etiology:
Acute infectious diarrhea usually begins abruptly and can last for several weeks. Viruses (adenovirus, rotavirus, Norwalk virus) are the most common cause of diarrhea in the United States and diarrhea associated with these agents is usually self-limited. Other causes include bacteria, parasites, food poisoning (preformed toxins), medications, inflammatory or ischemic bowel disease, fecal impaction, pelvic inflammation (e.g., rectosigmoid abscess).

Signs, Symptoms, Causes:
High volume, watery diarrhea. Typically this small-intestinal disease. It is usually associated with enteric viruses, enteropathogenic *E coli,* protozoa, and helminths. Dehydration is common.

Small volume, and/or bloody diarrhea. Typically there is colonic involvement. It is usually associated with invasive bacteria.

Toxin ingestion or toxigenic infection. Nausea and vomiting are prominent symptoms beginning abruptly within hours of ingestion along with watery diarrhea. Patients rarely have high fever. Vomiting that begins within several hours of ingesting a food should suggest food poisoning due to preformed toxin. Toxin producing strains of *V. cholera* (serotype 01) similar to those that have led to epidemic outbreaks in Latin America have previously been identified in the Gulf of Mexico. Cholera is characterized by severe watery diarrhea, nausea, vomiting, dehydration, often accompanied by marked leg cramps, caused by electrolyte disturbances.

Parasites. *Giardia lamblia* and *Cryptosporidium* usually cause only mild abdominal discomfort. Giardiasis may be associated with mild steatorrhea, gaseousness, and bloating.

Invasive bacteria. *Campylobacter, Salmonella,* and *Shigella* organisms and enterohemorrhagic *E coli* (serotype O157: H7), cause severe intestinal inflammation, abdominal pain, and often fever; occasionally there are peritoneal signs, which may suggest a surgical abdomen. *Yersinia* often presents with right lower-quadrant pain and tenderness, which is suggestive of acute appendicitis.

Treatment:
Fluid resuscitation: Prompt fluid resuscitation may be life saving for severely dehydrated patients. Oral rehydration solution (ORS) is the treatment of choice when needed.

- For cholera, use World Health Organization ORS packets (WHO-ORS, Jianas Brothers, St. Louis), Ricelyte™ (Mead Johnson), or Rehydralyte® (Ross Laboratories) if available. A recommended homemade mixture of 1/2 tsp salt (3.5 g), 1 tsp baking soda (2.5 g $NaHCO_3$), 8 tsp sugar (40 g), and 8 oz orange juice (1.5 g KCl), diluted to 1 L with water.

Fluids should be given at rates of 50 to 200 ml/kg/24 hr, depending on the hydration status. Intravenous fluids (lactated Ringer's solution or normal saline) are preferred acutely for patients with severe dehydration and in those who cannot tolerate oral fluids.

- For other diarrheal illness, may use oral rehydration therapy (the following list is in order of preference and in consideration of available safe water)
    - use already-reconstituted commercial solutions (e.g. Enfalyte, Pedialyte, Rehydralyte, CeraLyte)
    - use commercial glucose and electrolyte drinks ('sports' drinks--Gatorade and similar)
    - use powdered oral rehydration packets or powdered sports drinks reconstituted with *bottled, boiled, or treated water* carefully following package instructions (never mix ORT or sports drinks to be more concentrated than package directions)
    - Give adults ½ to 1 L as quickly as possible, then continue pushing fluids until the patient is producing urine, skin turgor improves, and the mucous membranes are moist.
    - Give children weighing <u>less</u> than 20 lbs *2 to 4 oz or 1/4 to 1/2 cup* initially and with each episode of diarrhea or vomiting.
    - Give children weighing <u>more</u> than 20 lbs *4 to 8 oz or 1/2 to1 cup* initially and with each episode of diarrhea or vomiting.
    - Never give large amounts of plain water without sources of sodium and other electrolytes (such as in foods). Serious hyponatremia (low serum sodium) may result.
    - If sealed bottles of drinks have been contaminated by floodwaters, rinse the outside of sealed bottles of fluids in a bleach solution (approximately 1 cup bleach to 1 gallon water—NO ONE SHOULD DRINK this bleach solution).

Antimotility agents:

- DO NOT use in patients with febrile diarrheal syndromes.
- For patients with non-febrile diarrhea, the most effective agents are the opioid derivatives—loperamide, diphenoxylate-atropine, and tincture of opium. Loperamide is preferred in most cases because it is nonaddictive and has fewer side effects than the others.

Antibiotic treatment: Quinolones (e.g., ciprofloxacin, 500 mg twice daily for 5 to 7 days) provide good empiric coverage against *Campylobacter, Shigella, Salmonella, Yersinia,* and *Aeromonas* species. Alternatives are trimethoprim/sulfamethoxazole, 160/800 mgs (double strength) twice daily, or erythromycin, 250 to 500 mg 4 times daily. Antibiotics with demonstrated effectiveness against *V. cholerae* include doxycycline, tetracycline, trimethoprim-sulfamethoxazole (TMP-SMX), and erythromycin. Adults may be treated with a single 300-mg dose of doxycycline. Metronidazole, 250 mg 3 times daily for 7 days, is given for suspected giardiasis. In recently hospitalized patients or known prior antimicrobial use, consider *C. difficile* and use Metronidazole 250 to 500 mg 4 times a day for 7 to 10 days.

POST HURRICANE
PROVIDER INFORMATION

ORAL REHYDRATION THERAPY FACT SHEET

Dehydration from lack of available clean drinking water coupled with loss of body fluids from exposure to heat, or from diarrhea or vomiting are serious risks among hurricane survivors and relief workers. Oral rehydration therapy (ORT) is a safe and very effective means of rehydration. Principles of oral rehydration:

1. Assess for dehydration/heat illness/heat stroke. Use ORT for
    - **mild dehydration** (decreased urine output, increased thirst, slightly dry mucous membranes) *or*
    - **moderate dehydration** (abnormal skin turgor, sunken eyes, very dry mucous membranes, depressed anterior fontanel in infants).
2. If possible, use intravenous (IV) rehydration for **severe dehydration or heat illness** (symptoms of mild or moderate dehydration plus rapid, weak pulse, hypotension, cold extremities, oliguria, anuria—low or no urine output, confusion, coma)
3. Choose oral rehydration solution:
    - If food and water are available and the individual is able to eat and drink (i.e. is not having severe vomiting or diarrhea), resuming normal food and fluids will usually result in rehydration
    - If ORT is needed (in order of preference and in consideration of available safe water)
        - use already-reconstituted commercial solutions (e.g. Enfalyte, Pedialyte, Rehydralyte, CeraLyte)
        - use commercial glucose and electrolyte drinks ('sports' drinks--Gatorade and similar)
        - use fruit juices or carbonated drinks (except if having diarrhea)
        - use powdered ORT or powdered sports drinks reconstituted with *bottled, boiled, or treated water* carefully following package instructions (never mix ORT or sports drinks to be more concentrated than package directions)
        - make a homemade mixture of 1/2 tsp salt (3.5 g), 1 tsp baking soda (2.5 g $NaHCO_3$), 8 tsp sugar (40 g), and 8 oz orange juice (1.5 g KCl), diluted to 1 L with *bottled, boiled, or treated* water.
    - Give adults ½ to 1 L as quickly as possible, then continue pushing fluids until the patient is producing urine, skin turgor improves, and the mucous membranes are moist.
    - Give children weighing <u>less</u> than 20 lbs *2 to 4 oz or 1/4 to 1/2 cup* initially and with each episode of diarrhea or vomiting.
    - Give children weighing <u>more</u> than 20 lbs *4 to 8 oz or 1/2 to1 cup* initially and with each episode of diarrhea or vomiting.

4. Never give large amounts of plain water without sources of sodium and other electrolytes (such as in foods). Serious hyponatremia (low serum sodium) may result.
5. If sealed bottles of drinks (ORT, juices, water, etc) have been contaminated by floodwaters, rinse the outside of sealed bottles of fluids in a bleach solution (approximately 1 cup bleach to 1 gallon water—NO ONE SHOULD DRINK this bleach solution).

POST HURRICANE PROVIDER INFORMATION

FACT SHEET ON SKIN AND SOFT TISSUE INFECTIONS FROM WATERBORNE BACTERIA

Skin and soft tissue infections, including contamination of traumatic wounds, due to waterborne bacteria may increase as a result of floodwater exposure following hurricane Katrina. In addition to common pathogens, such and *Staphylococcus* and *Streptococcus* species and traumatic gas-gangrene, Providers may encounter infections caused by *Pseudomonas* species, *Aeromonas* species and non-cholerogenic *Vibrio* species among others. Since effective treatment of these may require antibiotics other than those usually employed for skin and soft tissue infections, clinical awareness should be heightened.

Clinical Suspicion: In most cases, the clinical presentations of skin infections caused by waterborne bacteria do not differ significantly from typical skin and soft tissues infections. Patients with chronic liver disease are at increased risk of infections from *Vibrio* species (which may also cause gastroenteritis and septicemia). A history or skin breaks or trauma with subsequent exposure to flood waters should increase clinical suspicion for unusual pathogens. Clinical signs that may suggest myonecrosis, gas gangrene or necrotizing fasciitis (serious complications that usually require surgical intervention) may include crepitus (due to subcutaneous gas), anesthesia or hypesthesia of the affected area, pain out of proportion to physical findings, compartment syndromes, skin necrosis or rapid disease progression.

Diagnosis: Infection of skin and soft tissues is essentially a clinical one based on local and/or systemic signs of infection. When available, radiographs and/or CT images may help to rule out or define the extent to deep tissue involvement when clinical suspicion warrants concern for fasciitis or myositis. Gram stain and culture of fluid from intact skin bullae may be useful, but superficial wound cultures frequently reveal organisms other than those responsible for the infection. Blood cultures are specific but not highly sensitive for identifying responsible organisms.

A careful physical exam is very important, noting the presence or absence of the following:

- Presence and extent of skin inflammation
- Breaks in the skin integument
- Presence of regional lymphadenopathy (supporting an infectious etiology)
- Presence and nature of exudates or any foul odor (suggesting anaerobic organisms and/or tissue necrosis)
- Crepitus or findings suggesting fasciitis or myonecrosis
- Hemodynamic instability
- Exposed bone (increasing the risk of acute osteomyelitis)

Treatment: Most patients with suspected skin or soft tissue infections should be treated empirically with antibiotics while awaiting culture results (if available). Empiric antibiotics should be selected as follows:

- *Cellulitis without additional risk factors or history of water exposure*: Therapy should be targeted primarily to Gram positive organisms with agents such as first generation cephalosporins, or dicloxacillin or beta lactam-beta lactamase inhibitor combinations such as amoxicillin-clavulonate [Augmentin]. In geographic areas that have experienced problems with the community-acquired MRSA, trimethoprim-sulfamethoxazole or doxycycline are indicated.
- *In diabetics or patients who are immunosuppressed*, target empiric therapy to mixed Gram positive / Gram negative infections possibly with anaerobes as well, using agents such as amoxicillin-clavulanate [Augmentin] or fluoroquinolone (e.g.: ciprofloxacin) plus clindamycin.
- *For infections with findings suggestive of gas gangrene, myositis, or necrotizing fasciitis* empiric therapy should include broad spectrum antibiotic coverage including clindamycin plus agents active against gram-negative bacteria (e.g., ciprofloxacin, third generation cephalosporins or piperacillin/tazobactam) and rapid surgical evaluation.
- *Patients with history of wounds exposed to flood waters* should have additional empiric coverage for water-borne organisms (Pseudomonas, Aeromonas, Vibrio) with ciprofloxacin and doxycycline.

Most of the empiric antibiotic regimens recommended above are well absorbed orally. Intravenous therapy is preferred for patients who are severely dehydrated or in hypovolemic shock, for those with suspicion of deeper structure involvement, and those who are immunosuppressed.

Surgical debridement and careful wound care are important adjuncts for infected open wounds with devitalized tissue present. Surgical debridement and/or amputation may be life saving in patients with necrotizing fasciitis.

Tetanus-diphtheria boosters should be given to all patients with traumatic injuries and others without boosters in the past 10 years.

Patient education: Patients need to be educated about wound care, the importance of taking all antibiotics as prescribed and possible side effects as well as signs and symptoms of treatment failure. Since clindamycin and amoxicillin-clavulanate, in particular, may produce diarrhea, patients should be advised about the importance of access to suitable sanitary facilities. Doxycycline may produce photosensitivity and patients should be advised to avoid or minimize sun exposure. All patients with open skin wounds should be advised to avoid all contact with floodwaters.

Typical doses of some oral antibiotics that may be useful for skin and soft tissue infections:

Cephalexin 250-500 mg q 6hours

Dicloxacillin 250-500 mg q 6 hours

Amoxicillin-clavulanate (Augmentin) 500 mg q 8 hours or 875 mg bid

Doxycycline 100 mg bid

Clindamycin 300 - 600 mg q 6 hours

Ciprofloxacin 500 mg bid

POST HURRICANE
PROVIDER INFORMATION

DERMATOLOGIC CONDITIONS FACT SHEET

Introduction:

Flood water is likely to be contaminated with sewage, agricultural and industrial byproducts, household waste (flammable, toxic, or corrosive), debris, and contain infectious bacteria and viruses from human waste and corpses. Reports have shown that after flooding, dermatitis was the most common presenting complaint requiring medical attention. The etiology of nonspecific dermatitis under these conditions is often not clear.

In addition, excess moisture and standing water contribute to the growth of mold in homes and other buildings. People with immune suppression (such as people with HIV infection, cancer patients taking chemotherapy, and people who have received an organ transplant) are more susceptible to mold infections. *Stachybotrys* (black mold), *Aspergillus*, and *Penicillium* species are three of the most dangerous and commonly found indoor toxic molds. Many of these fungi produce mycotoxins, which are cytotoxic and can lead to more significant systemic manifestations after contact.

Symptoms/Signs:

Contact with contaminated water may lead to development of **hypersensitivity reactions** that include: hives, rashes, dermatitis, rhinitis, dandruff, and generalized itching (of the nose, mouth, eyes, throat, skin or any other area). **Cutaneous fungal dermatoses** in groin areas, hands and feet may also be seen. This is usually manifested by slightly raised erythematous, itchy and scaly skin. Nail infections may develop subsequently.

Patients may also present with **chemical or sunburned skin**, manifested as acute erythroderma, or peeling, blistering, and ulceration of skin and mucous membranes.

In addition, **mycotoxin induced illness** can result in various dermatologic and pulmonary complaints, central nervous system problems, eye and vision problems, sleep disorders, and fatigue.

People with **existing skin conditions** such as atopic dermatitis, psoriasis, cutaneous fungal dermatoses, or those who are elderly with frail skin or poor skin turgor are at greater risk for exacerbations and skin and soft tissue infections.

If people have had close contacts with others for prolonged periods of time, **head lice and scabies** may also occur. Earliest symptoms of head lice include itching, particularly in the area behind ears and at the nape of the neck. Eggs (nits) may be visually seen attached to hair or

scalp. Persistent scratching can lead to secondary infections. Scabies infestation is most often found in the spaces between the fingers, elbows, armpits, breasts, groin, along the belt line and on the back or buttocks causing intense itching, especially at night. It is usually manifested as small papules and tracks due to burrowing can also be seen.

Treatment/Recommendations:

The most important advice for skin associated conditions is personal decontamination, treatment of the acute condition and the use of personal protective equipment to protect from re-exposure. If there is any kind of cut, burn or infection on the hands, use plastic or rubber gloves if re-contact with floodwater is necessary. If open sores become exposed to contaminated water, disinfect the area(s) with soap and bottled, boiled, or treated water or alcohol-based hand cleaners to control infection. If a wound develops redness, swelling or drainage, infection may also be present. Persons sustaining a puncture wound or who have a wound that becomes contaminated with feces, soil or saliva should receive a tetanus booster. If at all possible avoid re-exposure as hypersensitivity reactions can worsen after rechallenge.

General recommendations include:

- Avoid direct contact with sediment, sludge and debris.
- Wear waterproof protective gloves and sturdy footwear.
- Cover all cuts and existing wounds, however small, with a sterile waterproof dressing. Any new injuries or cuts should be washed in bottled, boiled, or treated water immediately and the wound covered with a sterile waterproof dressing.
- Cover long hair to avoid contact with contaminated sediment.
- Avoid touching the face unless hands and face are washed thoroughly with soap and bottled, boiled, or treated water. Dry with a clean towel if possible.
- Wash all gloves, tools and clothing with clean water thoroughly after use.
- Wash contaminated skin thoroughly with warm soapy water for a minimum of 10 minutes. If dermatitis is present, avoid frequent use of soaps, hot water, and other cleansing procedures that tend to remove natural oil from the skin. Bathe once daily. Washcloths and brushes should not be used while bathing. Recommended soaps include Dove, Eucerin, Aveeno, Basis, Alpha Keri, and Purpose, and recommended cleansers include Cetaphil or Aquanil. Avoid rough, scratchy, tight clothing and woolens.
- After bathing, pat (don't rub) the skin dry and then immediately (before it dries completely) cover it with a thin film of moisturizer cream (e.g. Aquaphor, Eucerin, Dermasil, Vaseline).

Specific medical treatments include:

- Topical steroids may be prescribed to reduce skin inflammation with nonspecific dermatitis or during an eczema flare-up. Steroids are classified by potency of anti-inflammatory action.

  - **Very potent:** Betamethasone dipropionate (Diprolene), Clobetasol 17-Propionate 0.05%* (Dermovate), Halobetasolpropionate (Ultravate), Halcinonide 0.1% (Halog)
  - **Potent:** Amcinonide 0.1% (Cyclocort), Betamethasone dipropionate 0.5 mg (Diprolene, generics), Betamethasone valerate 0.05% (Betaderm, Celestoderm,Prevex), Desoximetasone 0.25% (Desoxi,Topicort), Diflucortolone valerate 0.1% (Nerisone), Fluocinolone acetonide 0.25%* (Derma, Fluoderm, Synalar), Fluocinonide 0.05%* (Lidemol, Lidex,Tyderm, Tiamol, Topsyn), Halcinonide (Halog), Mometasone furoate 0.1% (Elocom)
  - **Moderately potent:** Betamethasone valerate (Betnovate), Betamethasone valerate (Celestoderm), Clobetasone 17-Butyrate 0.05% (Eumovate), Desonide 0.05% (Desocort), Hydrocortisone acetate 1.0%* (Cortef, Hyderm), Hydrocortisone valerate 0.2% (Westcort, Hydroval), Prednicarbate 0.1% (Dermatop), Triamcinolone Acetonide 0.1%* (Kenalog, Traiderm)
  - **Mild:** Desonide (Desocort), Hydrocortisone 0.5%* (Cortate, Cortoderm), Hydrocortisone Acetate 0.5%* (Cortef, Hyderm)
- Oral corticosteroids (prednisone, Medrol dose pack) or IM triamcinalone (Kenalog) can be prescribed in severe cases.
- Antihistamines, such as diphenhydramine (Benadryl), hydroxyzine (Atarax, Vistaril) and doxepin (Adapin, Sinequan, Zonalon), may be prescribed to control itching, and antibiotics may be given if there is sign of bacterial infection (See soft tissue fact sheet).
- Scabies treatment includes washing all clothes in hot water, or if not feasible, treating patients with a scabicide (permethrin 5%) and furnishing new clean clothes. Apply permethrin from head to toe. Leave on for 10-14 hours and then wash off in the shower. Best to apply at bedtime and then wash off in the morning. Antihistamines may be required to control itching. A second treatment with the same lotion may be necessary 7-10 days later. Severe scabies may also be treated with oral ivermectin (one dose followed by another dose 2 weeks later, 200 mcg/kg, or [3] 6mg tablets).
- Treatment of lice infestations requires a pediculicide such as permethrin 1% lotion. The pediculicides usually do not kill nits (lice eggs) completely. It is recommended that infested patients be treated twice. The interval between treatments should be approximately the incubation period for the nits (seven to 10 days). Shampoo hair with regular shampoo first. Allow hair to dry and apply permethrin to hair and neck area. Allow to stand for at least 10 minutes and then rinse off.
- Bed linens and clothing need to be washed to avoid reinfestation with scabies and lice.

*on VA National Formulary

POST HURRICANE

PROVIDER INFORMATION

ASTHMA AND CHRONIC OBSTRUCTIVE PULMONARY DISEASE FACT SHEET

Increased incidence of acute asthma (new and known cases) and exacerbations of reactive airway disease and COPD are documented after floods and hurricanes.

Symptoms of asthma and chronic obstructive pulmonary disease (COPD) include: cough, wheezing, shortness of breath

Chronic Management of Asthma in Adults

Mild-intermittent asthma
(FEV1or PEF ≥ 80%, FEV1 or PEF variability < 20%, daytime symptoms ≤ 2 times/week, nighttime symptoms ≤ 2 nights/month)

Albuterol 1-2 puffs as needed for symptoms (not to exceed 12 doses in a day)

Mild persistent
(FEV1or PEF ≥ 80%, FEV1 or PEF variability 20-30%, daytime symptoms > 2 times/week but < 1 time/day, nighttime symptoms > 2 nights/month)

Albuterol 1-2 puffs as needed for symptoms (not to exceed 12 doses in a day) **AND** antiinflammatory medication with 1 of the following:
- Low dose inhaled corticosteroid
- Cromolyn 2-4 puffs TID-QID or nedocromil 2-4 puffs BID-QID
- Leukotriene modifiers (Montelukast 10mg once daily, zafirlukast 20mg BID)

Moderate persistent
(FEV1or PEF > 60-79%, FEV1 or PEF variability > 30%, daily symptoms, nighttime symptoms > 1 night/week)

Albuterol 1-2 puffs as needed for symptoms (not to exceed 12 doses in a day) **AND** 1 of the following:
- low-medium dose inhaled corticosteroid + long-acting beta- agonist (formoterol 12mcg BID or salmeterol 50mcg BID)
- medium dose inhaled corticosteroid
- low-medium dose inhaled corticosteroid + leukotriene modifier (Montelukast 10mg once daily, zafirlukast 20mg BID)

Severe persistent
(FEV1or PEF ≤ 60%, FEV1 or PEF variability > 30%, continual daytime symptoms, frequent nighttime symptoms)

Albuterol 1-2 puffs as needed for symptoms (not to exceed 12 doses in a day) **AND** high-dose inhaled corticosteroids + long-acting beta- agonist (formoterol 12mcg BID or salmeterol 50mcg BID)

Oral corticosteroids (prednisone 2mg/kg/day not to exceed 60mcg daily) may be needed in some cases

Doses of Inhaled Corticosteroids

	Low daily dose	Medium daily dose	High daily dose
Beclomethasone HFA 40 or 80mcg/puff	80-240mcg (divided into 2 daily dose)	240-480mcg (divided into 2 daily dose)	> 480mcg
Budesonide 200mcg DPI 200mcg/inhalation	200-600mcg (divided into 2 daily dose)	600-1200mcg (divided into 2 daily dose)	> 1200mcg
Flunisolide 250mcg/puff	500-1000mcg (divided into 2 daily dose)	1000-2000mcg (divided into 2 daily dose)	> 2000mcg
Fluticasone HFA 44, 110, or 220mcg/puff	88-264mcg (divided into 2 daily dose)	264-660mcg (divided into 2 daily dose)	>660mcg
Mometasone DPI 200mcg/inhalation	200mcg (once daily in the evening)	200-400mcg (once daily in the evening or divided as 200mcg BID)	>400mcg
Triamcinolone 100mcg/puff	400-1000mcg (divided into 2 -4daily dose)	1000-2000mcg(divided into 2-4 daily dose)	>2000mcg

Information from NAEPP Expert Panel Report Guidelines for the Diagnosis and Management of Asthma- Update on selected topics 2002

Emergency Management of acute asthma exacerbation in adults

Bronchodilators
Albuterol metered dose inhaler with spacer 4–8 puffs every 20 minutes up to 4 hours, then every 1–4 hours as needed
or via hand-held nebulizer 2.5–5 mg every 20 minutes for 3 doses, then 2.5–10 mg every 1–4 hours as needed, or 10–15mg/hour continuously

Ipratropium may be added:
metered dose inhaler 4-8 puffs as needed
or via hand-held nebulizer 0.5 mg every 30 minutes for 3 doses then every 2–4 hours as needed

Combination albuterol/ipratropium product is available:
metered dose inhaler 4-8 puffs as needed
or via hand-held nebulizer 3 mL (Each 3 mL vial contains 0.5 mg ipratropium bromide and 2.5 mg albuterol) every 30 minutes for 3 doses, then every 2–4 hours as needed

Systemic corticosteroids
Prednisone 120–180 mg/day in 3 or 4 divided doses for 48 hours, then 60–80 mg/day until PEF reaches 70% of predicted or personal best

Antibiotics
Antibiotics are not recommended for the treatment of acute asthma exacerbations except as needed for comorbid conditions—e.g., for those patients with fever and purulent sputum, evidence of pneumonia, or suspected bacterial sinusitis

Information from NAEPP Expert Panel Report Guidelines for the Diagnosis and Management of Asthma- Update on selected topics 2002

Chronic Management of COPD

Intermittent symptoms (cough, wheeze, dyspnea)
Albuterol 1-2 puffs as needed for symptoms (not to exceed 12 doses in a day)

Persistent symptoms
Albuterol 1-2 puffs as needed for symptoms (not to exceed 12 doses in a day) plus ipratropium 2 puffs QID or Combivent 2 puffs QID

If continued symptoms, consider one of the following:
Ipratropium 2puffs QID + long-acting beta agonist (formoterol 12mcg BID or salmeterol 50mcg BID). Continue as needed albuterol
Tiotropium 18mcg once daily. Continue as needed albuterol

Addition of inhaled corticosteroids to bronchodilator therapy is usually reserved for patients with severe COPD (FEV1 < 50% predicted) and frequent exacerbations

Outpatient Management of acute COPD exacerbation

Bronchodilators
Albuterol metered dose inhaler with spacer or hand-held nebulizer as needed. Ipratropium metered dose inhaler with spacer or hand-held nebulizer as needed may be added.

Systemic corticosteroids
Prednisone 30-40mg daily for 10 days

Antibiotics
Assess patients with asthma or COPD exacerbations for fever and purulent sputum production. Common bacterial respiratory pathogens include: S Pnuemo, H. influenzae, M. catarrhalis. Other bacterial processes such as atypical organisms (mycoplasma, chlamydia) or other enteric bacteria or pseudomonal species may be present depending on prior history (previous antimicrobial treatment or chronic prophylaxis, chronic tracheotomies, etc). Antimicrobials such as, doxycycline, macrolides, or aminopenicillins can be used to treat most of the organisms causing secondary bacterial infections. For patients failing prior antibiotic therapy consider a amoxicillin/clavulanate or a respiratory fluoroquinolone (gatifloxacin, moxifloxacin, levofloxacin)
Doxycycline 100mg BID for 7 days
Azithromycin 500mg xs1, then 250 mg a day for 4 days
clarithromycin 500mg BID for 7 days
gatifloxacin 400mg QD for 7 days

POST HURRICANE
PROVIDER INFORMATION

FACT SHEET ON CONDITIONS THAT MAY CAUSE ACUTE JAUNDICE

Patients with exposure to flood waters or with a possible history of drinking untreated water or use of untreated water for cooking or washing food may present with acute jaundice caused by organisms prevalent in water that has been contaminated by sewage or run-off.

1. Leptospirosis

Cause: a bacterial infection usually contracted from contact between abraded skin or mucous membranes and water contaminated with rodent urine.

Incubation period: 1 to 2 weeks usually

Presenting symptoms and signs: range from asymptomatic to flu-like to aseptic meningitis, jaundice, renal dysfunction including acute renal failure, and hemorrhagic diathesis

Diagnosis: In contrast to viral hepatitis, leptospirosis typically present with elevated serum levels of bilirubin and alkaline phosphatase, as well as some mild increases of aminotransferases. Definitive diagnosis is based on either isolation of the organism from the patient or seroconversion/rise in antibody titer.

Treatment: Penicillins (like Pen G 1.5 million units IV qid) or erythromycin (500 mg IV qid), or doxycycline (100 mg orally bid) for 2 weeks.

2. Hepatitis A

Cause: a viral infection contracted through ingestion of food or water contaminated with human waste (fecal-oral transmission)

Incubation period: about one month

Presenting symptoms and signs: jaundice, nausea, vomiting, enlarged and tender liver

Diagnosis: elevated AST and ALT levels; diagnosis confirmed by serology

POST HURRICANE PROVIDER INFORMATION

FACT SHEET ON INSECT STINGS AND BITES, SNAKE AND ANIMAL BITES

Bees, wasps, hornets, yellow jackets, fire ants, most spiders, ticks, biting flies

Exposures to insects of all kinds increase when people live out of doors, insects move into damaged homes and buildings, and insects leave normal habitats because of flood waters. Fire ants may float on floodwaters in "rafts' and sting viciously on contact.

Mild Reactions—

- scrape off any stingers with a dull straight edge—credit card or back of knife blade
- swab with disinfectant, apply ice or cold pack, apply ½% or 1% hydrocortisone cream, calamine lotion, or baking soda + water paste to lessen pain
- may give antihistamines containing diphenhydramine (Benadryl) or chlorpheniramine maleate to diminish skin reactions

Severe Reactions—

- anaphylaxis--treat with airway management, epinephrine, corticosteroids (note that anaphylaxis can occur *minutes to hours* after insect bites/stings)
- generalized urticaria or multiple stings—treat with antihistamines and topical corticosteroids *or* systemic steroids (prednisone 20 mg po qd x 5 days) as warranted and in consideration of patient's medical history

Mosquito transmission of West Nile Virus

- human cases have been reported in Gulf region this season
- those at greatest risk for severe illness are immunosuppressed persons, pregnant women, elderly
- signs/symptoms include fever, headache back pain, myalgias, anorexia, sore throat, nausea/vomiting, abdominal pain, diarrhea, muscle weakness, stiff neck, confusion, loss of consciousness, rash present in 20 to 50% of cases
- diagnosis is by serology
- treatment is symptomatic, supportive
- prevention includes avoiding mosquito bites by applying repellants, wearing long sleeves and pants, using screens and netting

Venomous Spiders

- **Brown Recluse** spider bite—major concern is development of a necrotic lesion
  - Depending on the time interval from the bite, may have a bull's eye appearance, show blistering, or have a necrotic center. The patient may complain of severe pain or itching at the bite site, nausea/vomiting, have fever or myalgias.
  - No antivenom is available in the U.S. Treat pain, give antihistamines to relieve itching, give antibiotics for secondary infection, and observe daily for first 96 hours for extent of necrosis and need for surgical care.
  - Give tetanus immunization if none within five years
- **Black Widow** spider bite—major concern is systemic effects of neurotoxin
  - Children, elderly, and persons with cardiovascular disease at greatest risk
  - Signs and symptoms are severe muscle pain in region of bite, generalized muscle contractions and cramping, salivation, lacrimation, diaphoresis, tremors, tachycardia, bradycardia,
  - Treat with narcotic pain relievers (meperidine), muscle relaxants, and intravenous calcium gluconate (1-2 mL/kg of 10% solution slow IV not to exceed 10 mL/dose)
  - Antivenin (*Latrodectus* antivenin) made using horse serum is available; use in severe cases only because of risk of hypersensitivity (emergency treatment for anaphylaxis must be available).
  - Give tetanus immunization if none within 5 years

Snake Bites

- Venomous snakes of the Gulf region are: copperhead, cotton mouth water moccasin, eastern coral snake, eastern diamondback rattlesnake, timber rattlesnake, pigmy rattlesnake. (See next page for photos of these snakes.)
  - Treat venomous snake bites with symptomatic treatment: respiratory support, treatment of shock; secure appropriate antivenin or prepare victim for transport to facility with antivenin; examine and clean bite wound; give tetanus immunization if none within 5 years
- Treat nonvenomous snake bites with local wound care, examine or image wound to assess for retained fangs, caution patient to observe for infection
  - Give tetanus immunization if none within five years

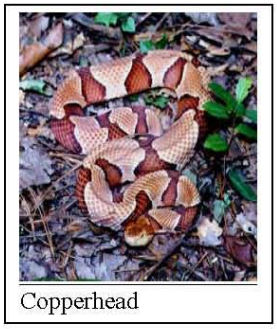
Animal Bites

- Disoriented, lost, or abandoned pets and wild animals pose a risk.
- Management: local wound care, assessment for broken teeth in wound (especially from cat bites), assessment for nerve and blood vessel damage from crush injury, debridement when necessary. May consider primary closure for clean wounds, facial wounds. Use delayed closure or no closure for extremity wounds or wounds with significant tissue damage. Consider prophylactic antibiotics (amoxicillin/clavulanate; amoxicillin + cephalexin; erythromycin; trimethoprim-sulfamethoxazole; azithromycin) for deep puncture wounds, wounds that necessitated debridement, wounds in the elderly or persons with chronic medical illnesses (diabetes).

- Rabies prophylaxis—consider in every animal bite case, especially for all wild animal bites; unprovoked domesticated animal bites.
- Give tetanus immunization if none within 5 years.

Venomous snakes of the Gulf region

Photos are from East Baton Rouge Animal Control Center Web site at
http://www.brgov.com/dept/animal/venomous.htm


Copperhead


Cottonmouth


Eastern coral snake


Eastern diamondback rattlesnake


Pigmy rattlesnake


Timber rattlesnake

POST HURRICANE
PROVIDER INFORMATION

FACT SHEET ON ENVIRONMENTAL HEALTH (CHEMICAL AND TOXOLOGIC)

Health risks from potential drinking water contamination by **gasoline, fuel oils, or other hazardous materials** as a result of extensive flooding caused by Hurricane Katrina is a concern among people living and working in affected areas.

Hazardous materials from waste sites located in the Gulf Coast region, including heavy metals, petroleum products and wood preservatives, may have been moved by the flooding. In general, materials moved or carried by flood waters from hazardous waste sites, including toxic chemicals such as lead, other heavy metals, wood preservatives or petroleum products will be very diluted, and will probably be more of a health concern during cleanup operations in the future.

Contamination from gasoline and fuel oil storage tanks is also a concern. Consuming very small amounts of gasoline or fuel oil in drinking water over a short period is unlikely to cause significant health problems. However, these materials are known to be hazardous at larger or longer exposure levels.

Boiling will not remove hazardous chemicals from drinking water. However, a simple shower with soap and tepid water will remove most contaminants from the body.

Gasoline for automobiles is a complex mixture manufactured from petroleum. Fuel oils are similar but less volatile petroleum products used in engines, furnaces, and stoves, and include kerosene, diesel, and home heating oil. Both can contaminate air, soil and groundwater even though they have low water solubility.

People can be exposed when they drink swim, bathe or shower with contaminated water. Vapors from gasoline and fuel oils can also move through soil and into basements of homes or buildings near areas where leaks have occurred. Children may also be exposed by playing in soil contaminated with fuel oils. Laboratory tests can measure exposure to gasoline and fuel oils, but such tests are not routinely available.

Breathing high levels of gasoline can cause lung irritation and harmful effects to the nervous system including dizziness, headaches, and even coma and inability to breathe. Drinking large amounts of kerosene may cause vomiting, diarrhea, swelling of the stomach, stomach cramps, coughing, drowsiness, restlessness, irritability, and unconsciousness. Contact with gasoline or fuel oil can cause skin irritation. Breathing fuel oil vapor for periods as short as 1 hour may cause nausea, and eye irritation. Headache, light-headedness, loss of appetite, poor coordination, and difficulty concentrating have also been reported. These effects become more serious with larger exposures. Although gasoline and fuel oils at are animal carcinogens, it is not clear that they will cause cancer in humans, and there is not enough information to determine if they cause birth defects or affects reproduction.

POST HURRICANE
PROVIDER INFORMATION

FACT SHEET ON MENTAL HEALTH REACTIONS AFTER DISASTER

In the immediate aftermath of a disaster, almost everyone will find themselves unable to stop thinking about what happened. These are called intrusion or re-experiencing symptoms. They will also exhibit high levels of arousal. For most, fear, anxiety, re-experiencing, efforts to avoid reminders, and arousal symptoms, if present, will gradually decrease over time. The expected psychological outcome is recovery, not psychopathology.

WHAT ARE COMMON STRESS REACTIONS IN THE WAKE OF DISASTER?

Practitioners should remember that most disaster survivors (including children and disaster rescue or relief workers) experience common stress reactions after a traumatic event. These reactions may last for several days or even a few weeks and may include:

Common Reactions After Disaster:
• **Emotional reactions**: shock; fear; grief; anger; guilt; shame; feeling helpless; feeling numb, sadness • **Cognitive reactions**: confusion, indecisiveness, worry, shortened attention span, trouble concentrating • **Physical reactions**: tension, fatigue, edginess, insomnia, bodily aches or pain, startling easily, racing heartbeat, nausea, change in appetite, change in sex drive • **Interpersonal reactions**: distrust, conflict, withdrawal, work or school problems, irritability, loss of intimacy, feeling rejected or abandoned

WHAT ARE SOME MORE SEVERE REACTIONS TO A DISASTER?

Because stress reactions are so pervasive after a major disaster, it can be difficult to know when a stress reaction is more severe and may require clinical intervention. The following are severe stress symptoms that indicate increased risk for acute stress disorder or posttraumatic stress disorder (PTSD). Even more important than the symptoms listed below is the individual's functional capacity. Symptomatic individuals who can continue to function affectively at work or at home are at much lower risk for developing psychiatric problems that those who are functionally incapacitated.

Severe Reactions After Disaster:
• **Intrusive re-experiencing**: terrifying memories, nightmares, or flashbacks • **Extreme emotional numbing**: completely unable to feel emotion, as if empty • **Extreme attempts to avoid disturbing memories**: such as through substance use • **Hyper-arousal:** panic attacks, rage, extreme irritability, intense agitation, violence • **Severe anxiety:** debilitating worry, extreme helplessness, compulsions or obsessions • **Severe depression**: loss of the ability to feel hope, pleasure, or interest; feeling worthless, suicidal ideation or intent. • **Dissociation:** fragmented thoughts, spaced put, unaware of surroundings, amnesia

WHICH INDIVIDUALS ARE AT RISK FOR SEVERE STRESS RESPONSES?

Some individuals have a higher than typical risk for severe stress symptoms and lasting PTSD, including those with a history of:

Risk Factors for Severe Reactions:
• **Trauma and Stress**: Severe exposure to the disaster, especially injury, threat to life, and extreme loss. Living in a highly disrupted or traumatized community. High secondary stress. • **Survivor characteristics**: Female gender, if an adult survivor being ages 40-60, being an ethnic minority, low socioeconomic status, and predisaster psychiatric history. • **Family context**: In an adult survivor, having children in the home. If female, the presence of a spouse. If a child, the presence of parental distress. A significantly distressed family member, interpersonal conflict or lack of support in the home • **Resource Context**: Lacking belief in one's ability to cope, few, weak, or deteriorating social resources.

TREATMENT

For information on treatments for disaster-related problems see the Provider fact sheets on: Psychosocial Treatment of Disaster Related Mental Health Problems and Pharmacological Treatment of Disaster Related Mental Health Problems.

POST HURRICANE INFORMATION

FACT SHEET ON MENTAL HEALTH REACTIONS AFTER DISASTER: POSTTRAUMATIC STRESS DISORDER

Posttraumatic Stress Disorder, or PTSD, is a psychiatric disorder that can occur following the experience or witnessing of life-threatening events such as hurricane Katrina, as well as combat, terrorist incidents, serious accidents, or violent personal assaults like rape. People who suffer from PTSD often relive the experience through nightmares and flashbacks, have difficulty sleeping, and feel detached or estranged, and these symptoms can be severe enough and last long enough to significantly impair the person's daily life.

Diagnostic Criteria

A. Exposure to a traumatic event in which the person:

1. Experienced, witnessed, or was confronted by a death or serious injury to self or others **AND**
2. Responded with intense fear, helplessness, or horror. **NOTE:** In children, this may be expressed instead by disorganized or agitated behavior**.**

Symptoms

B. Re-experiencing: (Need at least one of the following for diagnosis)

- Intrusive recollections of the traumatic event
- Nightmares
- Flashbacks
- Emotional upset to reminders
- Physiological reactivity to reminders

C. Avoidance/numbing: (Need three of the following for diagnosis)

- Efforts to avoid thoughts, feelings and conversations associated with the trauma
- Efforts to avoid activities, people, and places associated with the trauma
- Trouble recalling important parts of the trauma
- Diminished interest in activities
- Feeling detached and estranged from others
- Unable to feel emotion, as if empty
- Feeling that life might be cut short

D. Hyperarousal: (Need at least two of the following for diagnosis)

- Difficulty sleeping
- Irritability or anger
- Difficulty concentrating
- Hypervigilance – always on guard when there is no real reason to be easily startled

Diagnostic Considerations
For most people, these symptoms usually become less severe and gradually disappear over time. In a proportion of people, however, the symptoms can persist. Occasionally, they may appear some time, even years, post-trauma. To meet the diagnosis of PTSD the duration of symptoms last more than a 1 month and the symptoms must causes clinically significant distress or impairment in functioning.

Treatment Recommendations
Generally, PTSD-specific treatment is begun only after the survivor has been safely removed from a crisis situation. If a survivor is still being exposed to trauma (such as issues integral to aftermath of hurricane Katrina, including homelessness, community violence, illness), is severely depressed or suicidal, is experiencing extreme panic or disorganized thinking, or is in need of drug or alcohol detoxification, it is important to address these crisis problems as a part of the first phase of treatment. Key components of PTSD treatment: • Education about normal stress reactions vs. PTSD • Education about PTSD - What is it? How can it be treated? • Coping with memories of the trauma, helping survivors to confront what has happened. • Drug treatments For more information on specific treatments of PTSD, see Provider fact sheets on Psychosocial Treatment of Disaster Related Mental Health Problems, Pharmacological Treatment of Acute Stress Reactions, and PTSD.

POST HURRICANE
PROVIDER INFORMATION

FACT SHEET ON PSYCHOSOCIAL TREATMENT OF DISASTER-RELATED MENTAL HEALTH PROBLEMS

Practitioners should remember that in the immediate aftermath of a major disaster, most disaster survivors (including children and disaster rescue or relief workers) experience common stress reactions after a traumatic event. For most, fear, anxiety, re-experiencing, efforts to avoid reminders, and arousal symptoms, if present, will gradually decrease over time. The expected psychological outcome is recovery, not psychopathology.

RECOMMENDED INTERVENTIONS FOR INDIVIDUALS EXPERIENCING NORMAL STRESS REACTIONS

Early intervention for common disaster related stress involves normalizing the survivors' reactions through education and social support. Learning that these problems are shared by hundreds of thousands of survivors of trauma can help people with PTSD recognize that they're not alone, weak, or "crazy." In many cases survivors can be given written material (see Reactions to a Major Disaster: A Fact Sheet for Survivors and Their Families). In other cases you may want to have an informal discussion with the survivor about common reactions.

A second approach is to encourage survivors to use natural supports and talk with friends, family, and coworkers. When survivors are able to talk about their problems with others, something helpful often results. Through the process of seeking support from other trauma survivors, the survivor may come to feel less alone, feel supported or understood, or he or she may receive concrete help with a problem situation.

A final approach is to try and increase their coping in the immediate aftermath. It can be helpful to review both positive and maladaptive coping strategies with survivors. Below is a list of coping strategies.

Positive coping actions: are those which help to reduce anxiety, lessen other distressing reactions, and improve the situation, in ways that do not harm the survivor further and that improve the situation. Some positive coping actions include:

- Relaxation methods (muscular relaxation, deep breathing, meditation)
- Exercise in moderation.
- Talking to another person for support
- Getting adequate rest
- Positive distracting activities
- Trying to maintain a normal schedule (if appropriate)
- Scheduling pleasant activities
- Eating healthy meals
- Taking breaks
- Spending time with others
- Keeping a journal
- Participate in support group or counseling

Maladaptive coping actions help to perpetuate problems. They may reduce anxiety immediately, but "short-circuit" more permanent change. Actions that may be immediately effective but cause later problems can become difficult to change. Some negative coping actions include:
• Use of alcohol or drugs to cope • Social isolation and withdrawal • Extreme avoidance of thinking or talking about the event • "Workaholism" • Anger or violence

RECOMMENDED INTERVENTIONS FOR INDIVIDUALS EXPERIENCING SEVERE STRESS REACTIONS

Although most individuals with stress reactions will improve without treatment, others will develop psychiatric disorders. By far the most common new onset disorders are acute stress reactions and posttraumatic stress disorder. The second most common disorder is depression followed by anxiety disorders in general (For a list of risk factors see: Mental Health Reactions After Disaster: A Fact Sheet for Providers).

Cognitive-Behavioral Therapy (CBT) has been shown to be the most effective treatment for PTSD. There are several types of CBT:

Cognitive Behavioral Therapy
• Exposure therapy uses careful, repeated, detailed imagining of the trauma (exposure) in a safe, controlled environment, to help the survivor face and gain control of the fear and distress that was overwhelming in the trauma. • Cognitive Restructuring is an approach in which the survivors identify and examine upsetting thoughts about the trauma, challenge those thoughts, and replace them with more balance and accurate ones. • Stress Inoculation Training reduces symptoms through anxiety reduction techniques, teaches coping skills, and attempts to correct inaccurate thoughts related to the trauma.

Medication can reduce PTSD symptoms as well as the anxiety, depression, and insomnia you often experience with PTSD. Several kinds of medication have been tested and shown to cause improvement in symptoms, and some others have shown promise. Medication can help relieve distressing symptoms and make it possible for survivors to participate in other types of talk therapy that have been shown to be effective. For more information on pharmacotherapy see the Provider fact sheets on Pharmacological Treatment of Acute Stress Reactions and on PTSD.

POST HURRICANE PROVIDER INFORMATION

FACT SHEET ON PHARMACOLOGICAL TREATMENT OF ACUTE STRESS REACTIONS AND PTSD

Although most disaster survivors will experience common stress reactions after a traumatic event, a minority will develop psychiatric conditions, most notably posttraumatic stress disorder (PTSD) and depression. In these cases both psychosocial and pharmacological treatment may be warranted. This fact sheet addresses pharmacological treatment, see Psychosocial Treatment of Disaster Related Mental Health Problems: A Fact Sheet for Providers for more on psychosocial interventions.

WHO SHOULD RECEIVE PHARMACOLOGICAL TREATMENT?

Pharmacological treatment for acute traumatic stress reactions (within one month of the trauma) is generally reserved for individuals who already have received a brief individual or group intervention. If these approaches are ineffective, Providers should consider pharmacotherapy. To date there have been very few controlled pharmacological treatment trials for acute stress reactions. Consequently, the present recommendations are based on research and anecdotal reports concerning postdisaster insomnia, anxiety, and depression, as well as anecdotal evidence. Furthermore, there are no FDA approved medications for acute stress reactions and the only FDA approved medications for PTSD are sertraline and paroxetine.

Prior to receiving medication, the trauma survivor should have a thorough psychiatric and medical examination. Ongoing medical conditions, psychiatric diagnoses, current medications, and possible drug allergies should be assessed. In addition, clinicians should ask questions regarding alcohol, marijuana, and other drugs since these substances may interact with prescribed medications and may complicate an individual's psychological and physiological response to the trauma. For individuals with medical and/or surgical concerns, a clinician may need to take special precautions when prescribing psychotropic medications. It is also extremely important to consider possible drug interactions for individuals who are taking other prescribed or over-the-counter medications.

WHEN SHOULD PHARMACOLOGICAL TREATMENT BEGIN?

In some cases, a clinician may need to prescribe psychotropic medications even before he or she has completed the medical and psychiatric evaluation. The acute use of medications may be necessary when the survivor is dangerous, extremely agitated, or psychotic. In such circumstances, the individual should be taken to an emergency room. In the emergency room, short-acting benzodiazepines (e.g. lorazepam) or high potency neuroleptics (e.g. haldol) with minimal sedative, anticholinergic, and orthostatic side

effects may prove effective. Atypical neuroleptics (e.g. risperidone), at relatively low doses, may also be useful in treating impulsive aggression.

The acute use of medications may be necessary when the survivor is dangerous, extremely agitated, or psychotic.

After a disaster, some survivors experience extreme and persistent arousal in the form of anxiety, panic, hyper-vigilance, irritability, and insomnia. Empirical research has shown that hyper-arousal during the first few weeks following trauma is a risk factor for the development of PTSD. Techniques to reduce arousal include relaxation and breathing exercises, utilizing social supports, psychotherapy, and pharmacotherapy. Pharmacological agents for the treatment of trauma-related arousal include antiadrenergic agents such as clonidine, prazosin, and propranolol. Brief (but not sustained treatment with benzodiazepines may be helpful.

WHAT PHARMACOLOGICAL AGENTS SHOULD CLINICIANS PRESCRIBE?

The adrenergic antagonist, propranolol has shown promise, in a randomized clinical trial, as treatment for acute stress reactions and to prevent the later development of PTSD.

The adrenergic antagonist, propranolol has shown promise, in a randomized clinical trial, as treatment for acute stress reactions and to prevent the later development of PTSD.

Propranolol, prazosin, and clonidine have been useful for some patients in controlling hyper-arousal, irritable aggression, intrusive memories, and insomnia in several open trials. They also modulate physical and cognitive manifestations of stress. However, clinicians should prescribe clonidine, prazosin and propranolol judiciously for survivors with cardiovascular disease. This is because these medications may reduce blood pressure. In addition, clonidine may induce rebound hypertension if the client's blood levels fall due to infrequent dosing or a sudden discontinuation. Furthermore, these agents should not be prescribed to persons with diabetes as they may interfere with counter-regulatory hormone responses to hypoglycemia.

Propranolol, prazosin, and clonidine have been useful for some patients in controlling hyper-arousal, irritable aggression, intrusive memories, and insomnia in several open trials.

Benzodiazepines are useful because they are effective and fast acting. In recent-trauma survivors, benzodiazepines can reduce anxiety and arousal and improve sleep. However, prolonged use may not be effective. In a study of trauma survivors with acute stress disorders (i.e., occurring 1-3 months after the trauma), the short-term use of benzodiazepines for sleep was associated with an acute reduction in posttraumatic stress symptoms (Mellman et al., 1998). However, another study found that the early and more prolonged use of benzodiazepines was actually associated with a higher rate of

subsequent PTSD (Gelpin et al., 1996). It is recommended that benzodiazepines be used to treat extreme arousal, insomnia, and anxiety, but their use should be time limited. Other pharmacological agents may also be helpful in treating insomnia in persons suffering from acute traumatic stress. Low doses of trazodone, nefazodone, and amitriptyline are possible choices.

POST HURRICANE
PROVIDER INFORMATION

FACT SHEET ON ASSESSING AND RESPONDING TO SUICIDAL INTENT

In the aftermath of Hurricane Katrina some survivors may begin to feel hopeless. Exposure to neglect, violence, homelessness, abuse or poverty may make people who are already susceptible to depression all the more vulnerable to the illness. The loss, stress, displacement, and instability experienced as a result of hurricane Katrina could worsen or trigger suicidal ideation and depressive symptoms in survivors. During this critical time, it is important to assess survivors for suicidal ideation and intent.

ASSESSMENT

It is important to assess:
• Suicidal (or homicidal) ideation • The lethality of any plan for how they would harm themselves or others • Any history of previous attempts • Medical/psychiatric co-morbidities.

Assessment of dangerousness can include questions such as:
• Have you had any concerns about possibly harming yourself because life doesn't seem worth living right now? • Have you ever thought about acting on these feelings? • Are there times when you are afraid that you will act on these feelings? • Have you ever tried to act on feelings like this in the past? • Do you have a plan for how you would harm yourself or someone? • Do you have access to weapons?

WHAT CAN YOU DO?

Provide assurance that such feelings are not uncommon when individuals feel overwhelmed with the loss that may follow a natural disaster. Provide people with some hope or assurance that things are gradually going to get better each day and that it is very common to be distressed and feel hopeless after a disaster of this magnitude. You may want to give clients the fact sheet called Reactions to a Major Disaster: A Fact Sheet for Survivors and Their Families.

It is important that people have a reason to live. Try to help the patient identify reasons for living, such as a family member who they are still trying to find or worried about, family or friends who love or rely on them, a religious belief that it is a sin to harm oneself, or even a simple thing. It is better if this is identified by the patient.
If a person acknowledges suicidal ideation and a plan, it will be important to reassure him or her that you want to work with them to help keep them safe. If they have a plan that involves a weapon, ask him or her if there is someone who they can give the weapon to until they feel safe.

If the person will contract to stay safe:
• Identify 2 or 3 individuals that the person has daily contact with who can help provide them support and help keep them safe. • Have the client verbally contract that they will contact this person if he or she has suicidal thoughts and feels in danger of acting on them. Advise them to try to contact you or another provider if possible. • If mental health services are available, please try to refer the patient immediately.

If the person will not contact to stay safe:
• Under normal circumstances, if a client has a plan AND a means to carry out that plan AND they will not contract for safety they are usually seen at an emergency room and may be hospitalized. This can be accomplished by having someone take the person to an emergency room or by calling 911. • If no medical help is available you may want to have the person remain with you wherever you have been evaluating them. • If no emergency room is available and you do not have the ability to keep the person safe with you, you may have to release the person to a friend or family member who will need to watch them

RESOURCES

If you think someone you know may be feeling suicidal, you should directly ask them. You will NOT be putting the idea in their head. If anyone you know has a plan to hurt themselves and the means to do it, and cannot make a contract with you to stay safe, try to get them to a counselor or call 911 immediately.

For more information contact the National Suicide Prevention Lifeline at 1-800-273-TALK (8255) or http://www.suicidepreventionlifeline.org/

E. PSYCHOSOCIAL HISTORY AND ASSESSMENT FORM FOR SOCIAL WORKERS

POST HURRICANE
PROVIDER INFORMATION

PSYCHOSOCIAL HISTORY AND ASSESSMENT FORM FOR SOCIAL WORKERS

Date of Note: Entry Date:

Author: Exp Cosigner:

Urgency: Status:

Patient:

Presenting Medical/Psychiatric Problem:

Information Obtained From:

History of Hospitalizations (Medical/Psychiatric):

Family/Collateral Information:

Name:
Address:

Telephone:

Relationship:

Patient's Presenting Complaint:

Depression Screening:

Current Living Arrangements/Level of Functioning:

Coping History and Adaptation:

Community Support:

Transportation Needs:

Question:-Are there any issues that you desire further help with?:

Question:-are you currently involved in any physical or sexual abuse as the victim Or perpetrator?:

Education/Training:

Military History And Stressors:

Military Service: T

Branch of Service:

Period of Service:

Service Entry Date:

Service Separation Date:

Combat Service:

Prisoner of War Status/Dates of Captivity:

Military Sexual Trauma:

If Yes, Explain:

Occupation:

Marital Status:

Children:

Income/Insurance Information:
- VA Pension:
- Social Security:
- Military Retirement:
- VA Disability:
- Aid & Attendance:
- Supplemental Security:
- Household Benefits:
- Other Retirement:

Rated Disability:

Impaired Hearing

Guardian/Payee/Fiduciary:
- Name:
- Company/Agency
- Address:
- City/State/Zip:
- Telephone:

Religion/Spiritual/Cultural:

Alcohol/Drug Usage/Treatment:

Special Needs:

Assessment Of Needs:

Intervention, Discharge and Follow Up Plans:

Actual Interview Time:

Patient Address:

Patient Phone Number:

Claim Number:

Veterans Benefits Administration

U.S. Department of Veterans Affairs

Reviewed/Updated: September 4, 2005

F. VBA Fact Sheet for Our Employees in the Affected Area:

Contact us:

If you are an employee of the VA Regional Office in New Orleans, LA, please call the Central Area Office at **1-866-435-3782** to let us know you are okay, and to provide a telephone number and email address where we can reach you. We also want you to know you are all in our thoughts during this extremely difficult time.

Your Paycheck:

All Regional Office employees will be paid as scheduled on September 9, 2005. Your pay will be based on the amount you received for the last pay period. We will account for leave, overtime, and any other items at a future date. You will continue to be paid as we develop a plan to get through this disaster. Our primary concern is that each of you takes care of yourself and your family. If you are normally paid with a paper check, your check will be sent to the Agent Cashier, Financial Services Center, Austin, Texas. Affected employees should contact the Agent Cashier at **512-460-5235**. Any employee who does not receive a salary check or electronic funds transfer payment should contact the Nationwide Payroll Office at the same number.

Information about the New Orleans Regional Office:

We are making arrangements to survey the Regional Office, and will ensure service to our veterans is restored as soon as possible. We are working on contingency plans, and will likely make arrangements to send veterans' claims to other regional offices for the next several months until the office can be restored.

Future Updates:

We will continue to provide updates via VA and VBA Internet sites <http://www.va.gov>and <http://www.vba.va.gov>, local television and radio stations, and the aforementioned telephone number, which has been set up as a resource for you: **1-866-435-3782**.

Reviewed/Updated: September 4, 2005

G. Fact Sheet for Veterans Residing in Areas Affected by Hurricane Katrina

Compensation and Pension Payments:

If you currently receive monthly disability compensation or pension from the Department of Veterans Affairs via electronic funds transfer (electronic deposit), payment will be made to your financial institution as usual. If you normally receive a paper check and cannot get your mail, or if you do not have access to your financial institution, you can have a replacement check sent to your temporary mailing address or obtain a paper convenience check by calling **1-800-827-1000**, or by visiting any VA Regional Office in the country.

Benefits Claims for Louisiana Residents

New benefit claims or information in support of existing claims should be sent to the Muskogee Regional Office at the following address:

VA Regional Office
P.O. Box 8321
Muskogee, OK 74402-8321

Vocational Rehabilitation and Employment:

If you are a current participant in VA's Vocational Rehabilitation and Employment program and have questions regarding your benefits, please contact the VA Regional Office in Little Rock at **1-866-426-6638** or **(501) 370-3780**.

Education:

If your school was closed due to the hurricane, VA will consider your attendance as continuous. If you receive active-duty or reserve VA education benefits, you should verify your enrollment until further notice as if your school did not close, and your payment will not be affected. Your can verify enrollment on-line at <https://www.gibill.va.gov/wave/default.cfm> or by calling **1-877-823-2378**. If you receive education benefits as a veteran's dependent and were due a payment on 9/1/2005, the payment was issued as scheduled. If you are unable to access your funds for any reason, please call **1-888-442-4551** for information and assistance. For more information about VA Education benefits, please visit <http://www.gibill.va.gov.

Loan Guaranty:

If you currently have a VA home loan and your home has been damaged by the hurricane, you should contact your insurance company as soon as possible to file a loss claim. If you expect to encounter difficulty making the payments on your mortgage, you should contact your lender/or loan service agent as soon as possible for guidance and possible assistance. For more detailed information please visit <http://www.homeloans.va.gov.

Insurance:

Expedited insurance policy loan requests will be processed and audited on the same day they are received. Expedited, same day processing and approval of withdrawals from dividend credit and deposit accounts will be processed and audited on the same day they are received. For VA Insurance policy holders concerned that their insurance may lapse due to nonpayment of premiums, a 90 day premium payment grace period will be offered For policy holders concerned that their insurance may lapse and did not receive a premium notice (non-deliverable mail), a 90-day extension of the reinstatement deadline will be offered

For information regarding your insurance policy please call **1 800-669-8477**

Hurricane Katrina
VA National Cemeteries
September 6, 2005

H. HURRICANE KATRINA INFORMATION RELATING TO NCA STAFF AND VETERANS FAMILIES

All National Cemetery Administration National Cemeteries are operational and conducting burials, including the Biloxi, Mississippi, National Cemetery. No casketed remains were unearthed as a result of the storm at any of our cemeteries, though clean up continues at all sites.

All NCA employees are now accounted for in our national cemeteries. Long distance phone lines remain down in the Biloxi area and at several other national cemetery sites. Information Technology (IT) communications remains down at the affected cemeteries, except Natchez National Cemetery, which now has all IT communications operating. For those sites without IT connections, headstones and markers will be ordered through operational national cemeteries, and burials will continue at all locations.

For payroll issues NCA will follow the lead of VHA facilities that act as national cemetery servicing sites for personnel and payroll purposes. Pay will be based on the amount of funds received in the last payroll period. If there are questions, employees and veterans families may contact the NCA Memorial Service Network office in Atlanta, at 404-929-5899.

I. ACKNOWLEDGEMENTS

VA OFFICES CONTRIBUTING TO THIS MANUAL

Veterans Health Administration (VHA)
Office of Public Health and Environmental Hazards
    Public Health Strategic Healthcare Group
    Occupational and Environmental Strategic Healthcare Group
Office of Patient Care Services
    Pharmacy Benefits Management
    Mental Health Strategic Healthcare Group
    VA Social Work
National Center for Post Traumatic Stress Disorder http://www.ncptsd.va.gov/
Office of Readjustment Counseling
Veterans Benefits Administration
National Cemetery Administration

CONTACTS

Pharmacy Benefits Management (PBM) Strategic Health Care Group:

For questions about drug supply issues/logistics, general clinical guidance, or emergency cache questions- Joseph Canzolino, Associate Chief, PBM- (708) 786-7886

For CMOP questions- Tim Stroup, National Director, CMOP, (913)727-4839

For questions about PBM policy issues- Virginia S. Torrise, PharmD, Deputy Chief Consultant, PBM, (202) 273-8427.

Mental Health and Substance Use Disorder Treatment issues:

For information about management of acute stress disorders, PTSD, or psychological reactions to natural disaster, resources include- Dr. Harold Kudler, Director, VISN 6 Mental Illness Research, Education and Clinical Center (MIRECC), (919) 286-0411 ext. 7021 or National Center for PTSD Information line: 802-296-6300, or Dr. Laurent Lehmann, Coordinator for Mental Health Disaster Response, (202) 273-6900.

For questions about substance use disorder management issues- Dr. Richard Suchinsky, Associate Chief for Addictive Disorders, (202) 273-8437.

For additional information about the Health Care for Homeless Veterans program and resources- Roger Casey, (202) 273-8446.

Exposures to Specific Environmental Hazards:
Please call Dr. Mark Brown, Director of the VA Environmental Agents Service at (202) 273-8579.

Public Health issues:
Victoria Davey, RN, MPH (victoria.davey@va.gov (202) 273-8590))
Dr. Mark Holodniy (mark.holodniy@va.gov (650) 499-5000 x 63408))
Dr. Lawrence Deyton (dr.bopper.deyton@va.gov (202) 273-8567))

Occupational Health Issues:
Dr. Michael Hodgson (michael.hodgson@hq.med.gov)

National VA Recovery Efforts:

A patient assistance toll free number (800-507-4571) is staffed 24/7 by clinicians at Little Rock

An employee toll free hotline (1-888-766-2474) is staffed between 6AM to 10PM.

Call-in numbers have also been established for redirection of VA employee checks (512-460-5235) and verification of employment and benefits.

Veterans and VA Employees relocated due to the Hurricane to the States of Alabama, Georgia and South Carolina should call **1-800-956-0787** to find out information about area support and medical care. This phone line is open 24 hours per day, 7 days per week.

VBA Regional Office and Out-based Facilities status:

Facility	Status	Note
Regional Offices		
Montgomery, AL	Open	
Jackson, MS	Open	
New Orleans	Closed	Closed, indefinitely

For information about VA benefits, call 1-800-827-1000 or visit any VA regional office in the country.

VA National Cemeteries:

All National Cemetery Administration National Cemeteries are operational and conducting burials, including Biloxi, Mississippi, National Cemetery. All NCA employees are now accounted for in our national cemeteries. For payroll issues NCA will follow the lead of VHA facilities that act as national cemetery servicing sites for personnel and payroll purposes. Pay will be based on the amount of funds received in the last payroll period. If there are questions, employees and veterans families may contact the NCA Memorial Service Network office in Atlanta, at 404-929-5899.

This manual and updates as they appear will be posted at the VA Hurricane Katrina Web site http://www1.va.gov/opa/katrina/

Leads for the development and revisions of this manual:

Victoria Davey, RN, MPH (victoria.davey@va.gov (202) 273-8590))
Connie Raab (connie.raab@va.gov (202) 273-6368)
Office of Public Health and Environmental Hazards
Veterans Health Administration