

# Communications: Beyond Cell Phones and Walkie-Talkies

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**Consortium for  
Risk and Crisis  
Communication**

# World Trade Center Bombing

February 26, 1993

A car bomb was detonated in the underground parking garage below Tower One. It killed six, injured over 1,000 and presaged the September 11, 2001 attacks on the same buildings.

# Enterprise-Wide Communications

- Milieu
- Messenger
- Message
- Means
- Measures

# MILIEU

- High concern shifts in perceptions, trust, and communications
- Communications-Operations Dynamic (Risk analysis as weak link)
- Unstable information environment

# MESSENGER

- Communications Capital
- Trust Determination
- Skill-Sets
- Challenges/Traps/Pitfalls

# MESSAGE

- O / I / C Questions
- Message Mapping
- Tailored Messaging

# MEANS

- Information gathering habits
- Technologies and redundancies
- Virtual communities

# MEASURES

- 4 Ms
- Methods and metrics
- Real-time feedback

# Enterprise-Wide Communications

- Milieu
- Messenger
- Message
- Means
- Measures

Message Maps  
Hurricane Katrina  
Mississippi Department of Health

MDH Roles and Responsibilities

- Map 1: Overarching Message
- Map 2: What type of experience does Mississippi Department of Health have with large-scale disasters?
- Map 3: What is the Mississippi Department of Health doing now?
- Map 4: What are the major health concerns now?
- Map 5: Who is MDH working with in this effort?
- Map 6: What will the Department of Health be doing (future activities)?
- Map 7: Is there going to be mass casualties from dysentery and other communicable diseases and what kind of diseases should we expect?
- Map 8: Are we looking at a public health disaster?
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- Map 11: Were you caught off guard?
- Map 12: When the disease outbreaks appear is MDH prepared to handle?
- Map 13: What would you like to tell us about moving individuals to shelters?

Vibrio bacterium

- Map 14: What should the public know about Vibrio vulnificus?
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Aerial Spraying

- Map 20: Why is the MDH doing Aerial Spraying (AS) in MS?
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Message Maps  
Hurricane Katrina  
Mississippi Department of Health

Rabies

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- Map 29: Should I be concerned if my child went to school or went camping with the person who died of rabies?

**OVERARCHING MESSAGE - CCO TEMPLATE**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Our hearts and prayers are with MS victims and our neighbors.	We are responding to those in need and we will then begin to rebuild.	We will come out of this experience as a stronger Mississippi.
↓	↓	↓
<b>Support Point 1.1</b> As a public health official and as a fellow Mississippian, my first priority is to protect public health and prevent disease outbreaks.	<b>Support Point 2.1</b> We have experts trained to respond to large-scale emergencies.	<b>Support Point 3.1</b> We are taking lessons learned from these events to improve our preparedness programs.
<b>Support Point 1.2</b> We are committed to providing medical supplies and resources to residents of the Gulf Coast.	<b>Support Point 2.2</b> We have wide experience dealing with public health emergencies and threats.	<b>Support Point 3.2</b> We are working closely with mental health experts to provide needed consultation services.
<b>Support Point 1.3</b> We are coordinating our relief efforts with a large number of public and private sector organizations.	<b>Support Point 2.3</b> We are working closely with our state and federal partners.	<b>Support Point 3.3</b> We encourage Mississippians to visit our Web site, call this toll free number (?), and listen for media announcements for additional recommendations.

**QUESTION: WHAT TYPE OF EXPERIENCE DOES MISSISSIPPI DEPARTMENT OF HEALTH HAVE WITH LARGE-SCALE DISASTERS?**

**RESPONSE: ALTHOUGH HURRICANE KATRINA IS BEYOND ANYTHING OUR STATE OR COUNTRY HAS DEALT WITH BEFORE...**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
We have experts trained to respond to large-scale emergencies.	We have wide experience dealing with public health emergencies and threats.	We are working closely with our state and federal partners.
↓	↓	↓
Support Point 1.1	Support Point 2.1	Support Point 3.1
Doctors and nurses were on alert and ready when Katrina hit.	We have a public health Command Center that operates 24 hours a day, seven days a week.	We are closely coordinating our response efforts with the Mississippi Emergency Management Agency, the federal CDC, and other agencies.
Support Point 1.2	Support Point 2.2	Support Point 3.2
Medical and other experts from neighboring states and the Federal government have arrived to assist us.	We have responded effectively to other threats to public health, including measles, Hepatitis, and other diseases.	We are coordinating public health activities at all levels local, state and federal levels.
Support Point 1.3	Support Point 2.3	Support Point 3.3
Our state laboratories are conducting studies for early identification of new threats.	One of first actions was to post on our website the Mississippi Hurricane Emergency Guide.	Additional information about our activities can be found on our web site.

**QUESTION: WHAT IS THE MISSISSIPPI DEPARTMENT OF HEALTH DOING NOW?**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
We are working closely with emergency and medical personnel across the state.	Medical and other supplies are en route to the disaster sites.	We will continue to focus our efforts on preventing disease outbreaks.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Personnel from around the Gulf Coast arrived before Katrina hit.	CDC has sent supplemental medical and other supplies to our State.	Food safety is critical to preventing disease outbreaks.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Our disease experts are monitoring closely for any evidence of a disease outbreak.	First aid supplies and tetanus shots are being sent to coast communities.	People are advised to be careful to avoid injury during clean-up activities.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
We are in constant contact with the 9 Gulf Coast hospitals.	Other agencies are providing resources to victims.	People can take various steps to avoid being bit by mosquitoes, including wearing insect repellent and wearing protective clothing at dusk and dawn.

**QUESTION: WHAT ARE THE MAJOR HEALTH CONCERNS NOW?**

**RESPONSE: WE ARE FOCUSED ON THREE MAJOR TYPES OF HEALTH CONCERNS...**

\* THIS IS CONSISTENT WITH LA AND CDC RECOMMENDATIONS FOR 1 MINUTE BOIL. LA IS ALSO ADVISING ON WATER DISINFECTANT.

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
The first health concern is contamination of food and water.	The second health concern is, injuries sustained during clean-up activities.	The third health concern is mosquitoes and other insects that may carry disease or cause harm.
↓	↓	↓
<b>Support Point 1.1</b> Among the most important things to do, is to drink bottled water or bring water to a rolling boil water for at least 1 minute*.	<b>Support Point 2.1</b> Be careful when using equipment, like generators, that can produce high levels of carbon monoxide in unventilated spaces.	<b>Support Point 3.1</b> Remove standing water where mosquitoes might breed.
<b>Support Point 1.2</b> Do not eat food you suspect has been contaminated.	<b>Support Point 2.2</b> Wear protective clothing, gloves and eye gear when engaged in clean-up activities where injuries might be sustained.	<b>Support Point 3.2</b> Wear protective clothing and use insect repellent containing DEET, particularly at dusk and dawn.
<b>Support Point 1.3</b> Wash your hands regularly and those of your children.	<b>Support Point 2.3</b> Contact the local utility before working near downed power lines.	<b>Support Point 3.3</b> Be careful not to disturb insects during clean-up that may be aggressive.

**QUESTION: WHO IS MDH WORKING WITH IN THIS EFFORT?**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
We are closely coordinating our response efforts with the Mississippi Emergency Management Agency, the federal CDC and other agencies.	We are working with non-governmental agencies such as Red Cross and Salvation Army.	We are working with experts from many organizations including hospitals, universities and medical laboratories.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
We are working with these agencies to direct people to shelters or other appropriate locations.	The Red Cross is providing shelter, food and other assistance to Mississippians.	We are actively recruiting emergency and health professionals who want to volunteer.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
We are working with these agencies to supplement our existing medical supplies.	The Salvation Army is providing food, water and clean-up supplies.	We are working closely with these organizations to monitor for outbreaks of disease.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
We are working with government agencies to coordinate receipt and distribution of donated resources.	We encourage Mississippians to donate through The Red Cross or The Salvation Army.	As part of our hospital coordination, we have sent medical supplies to the 9 Gulf Coast hospitals.

**QUESTION: WHAT WILL THE DEPARTMENT OF HEALTH BE DOING (FUTURE ACTIVITIES)?**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Our primary activity is to protect public health and prevent any disease outbreaks.	We are committed to a full recovery from these tragic events.	We are working hard to get all public health programs fully functional.
↓	↓	↓
<b>Support Point 1.1</b> The first health concern now is contamination of food and water.	<b>Support Point 2.1</b> We are taking lessons learned from these events to improve our preparedness programs.	<b>Support Point 3.1</b> Our first step is to address the immediate public health and medical needs of Mississippians.
<b>Support Point 1.2</b> The second health concern is, injuries sustained during clean-up activities.	<b>Support Point 2.2</b> We are working closely with mental health experts to provide needed consultation services.	<b>Support Point 3.2</b> We have issued a number of advisories and recommendations, including a boil water advisory.
<b>Support Point 1.3</b> The third health concern is mosquitoes and other insects that may carry disease or cause harm.	<b>Support Point 2.3</b> We encourage Mississippians to visit our Web site, call this toll free number (?), and listen for media announcements for additional recommendations.	<b>Support Point 3.3</b> We are focusing many of our resources on continuing to prevent disease outbreaks.

**QUESTION: IS THERE GOING TO BE MASS CASUALTIES FROM DYSENTERY AND OTHER COMMUNICABLE DISEASES AND WHAT KIND OF DISEASES SHOULD WE EXPECT?**

(Messages adapted from CDC: “After a Hurricane: Key Facts About Infectious Disease”)

KEY MESSAGE 1	KEY MESSAGE 2	KEY MESSAGE 3
Although infectious diseases are frightening, widespread outbreaks of infectious disease after hurricanes are uncommon.	We have responded effectively in the past to a wide variety of disease outbreaks including measles and Hepatitis.	People can assist us in controlling disease by being attentive to food, water, injuries, and insect bites.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
No disease outbreaks have been reported as of September 3, 2005 in areas affected by Hurricane Katrina.	Medical and other experts from neighboring states and the Federal government have arrived to assist us.	We’re working with our partners to provide clean water and safe food.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Communicable disease outbreaks of diarrhea and respiratory illness can occur when water and sewage systems are not working and personal hygiene is hard to maintain as a result of this disaster.	We and our partners have set-up tracking systems that monitor illnesses in hurricane-affected areas.	We’re providing acute emergency care for the injured.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
Rare and exotic diseases such as cholera and typhoid are not commonly found in the U.S. Gulf States area.	Our state laboratories are conducting studies for early identification of new threats.	People can take various steps to avoid being bit by mosquitoes, including wearing insect repellent and wearing insect repellent and wearing protective clothing at dusk and dawn.

**QUESTION: ARE WE LOOKING AT A PUBLIC HEALTH DISASTER?**

**RESPONSE: WE CAN PREVENT FURTHER DISASTER BY FOCUSING ON THE THREE MAJOR TYPES OF HEALTH CONCERNS WE'RE ALREADY WORKING ON... (ADAPTED FROM MAP #4)**

\* This is consistent with LA and CDC recommendations for 1 minute boil. LA is also advising on water disinfectant.

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
The first health concern is contamination of food and water.	The second health concern is, injuries sustained during clean-up activities.	The third health concern is mosquitoes and other insects that may carry disease or cause harm.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Among the most important things to do, is to drink bottled water or bring water to a rolling boil water for at least 1 minute*.	Be careful when using equipment, like generators, that can produce high levels of carbon monoxide in unventilated spaces.	Remove standing water where mosquitoes might breed.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Do not eat food you suspect has been contaminated.	Wear protective clothing, gloves and eye gear when engaged in clean-up activities where injuries might be sustained.	Wear protective clothing and use insect repellent containing DEET, particularly at dusk and dawn.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
Wash your hands regularly and those of your children.	Contact the local utility before working near downed power lines.	Be careful not to disturb insects during clean-up that may be aggressive.

**QUESTION: ARE THE FEDS HELPING ENOUGH? (ADAPTED FROM MAP #5)**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
We are closely coordinating our response efforts with the federal CDC, FEMA, and other federal agencies.	We are working with non-governmental agencies such as Red Cross and Salvation Army.	We are working with experts from many organizations in our State including agencies, hospitals, universities and medical laboratories.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
We are working with these agencies to direct people to shelters or other appropriate locations.	The Red Cross is providing shelter, food and other assistance to Mississippians.	We are actively recruiting emergency and health professionals who want to volunteer.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
We are working with these agencies to supplement our existing medical supplies.	The Salvation Army is providing food, water and clean-up supplies.	We are working closely with these organizations to monitor for outbreaks of disease.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
We are working with government agencies to coordinate receipt and distribution of donated resources.	We encourage Mississippians to donate through The Red Cross or The Salvation Army.	As part of our hospital coordination, we have sent medical supplies to the 9 Gulf Coast hospitals.

**QUESTION: WHY DON'T YOU HAVE MORE PEOPLE OUT THERE (STAFF)?**

**RESPONSE: ALTHOUGH HURRICANE KATRINA IS BEYOND ANYTHING OUR STATE OR COUNTRY HAS DEALT WITH BEFORE... (ADAPTED FROM MAP #2)**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
We believe we have a sufficient number of experts that have been trained to respond to large-scale emergencies.	These experts are applying their wide experience in dealing with the public health threats from H. Katrina.	We are supplementing our resources with state and federal partners.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Doctors and nurses were on alert and ready when Katrina hit.	We have a public health Command Center that operates 24 hours a day, seven days a week.	We are closely coordinating our response efforts with the Mississippi Emergency Management Agency, the federal CDC, and other agencies.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Medical and other experts from neighboring states and the Federal government have arrived to assist us.	We have responded effectively to other threats to public health, including measles, Hepatitis, and other diseases.	We are coordinating public health activities at all levels local, state and federal levels.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
Our state laboratories are conducting studies for early identification of new threats.	One of first actions was to post on our website the Mississippi Hurricane Emergency Guide.	Additional information about our activities can be found on our web site.

**QUESTION: WERE YOU CAUGHT OFF GUARD?**

**RESPONSE: ALTHOUGH HURRICANE KATRINA IS BEYOND ANYTHING OUR STATE OR COUNTRY HAS DEALT WITH BEFORE... (ADAPTED FROM MAP #2)**

KEY MESSAGE 1	KEY MESSAGE 2	KEY MESSAGE 3
We believe we prepared effectively by having experts trained to respond to large-scale emergencies.	These experts are applying their wide experience in dealing with the public health threats from H. Katrina.	We are supplementing our resources with state and federal partners.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Doctors and nurses were on alert and ready when Katrina hit.	We have a public health Command Center that operates 24 hours a day, seven days a week.	We are closely coordinating our response efforts with the Mississippi Emergency Management Agency, the federal CDC, and other agencies.
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<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
Our state laboratories are conducting studies for early identification of new threats.	One of first actions was to post on our website the Mississippi Hurricane Emergency Guide.	Additional information about our activities can be found on our web site.

**QUESTION: WHEN THE DISEASE OUTBREAKS APPEAR IS MDH PREPARED TO HANDLE?**

**RESPONSE: ALTHOUGH HURRICANE KATRINA IS BEYOND ANYTHING OUR STATE OR COUNTRY HAS DEALT WITH BEFORE... (ADAPTED FROM MAP #2)**

KEY MESSAGE 1	KEY MESSAGE 2	KEY MESSAGE 3
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Our state laboratories are conducting studies for early identification of new threats.	One of first actions was to post on our website the Mississippi Hurricane Emergency Guide.	Additional information about our activities can be found on our web site.

**QUESTION: WHAT WOULD YOU LIKE TO TELL US ABOUT MOVING INDIVIDUALS TO SHELTERS?**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Our goal is to ensure that patients are brought to the facility that best meets their needs..	We aim to keep people within the state of Mississippi.	Families may stay together and travel to the same destination in the State.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
We assessed the number of patients in hospitals and special need shelters in the affected area.	It may be that the most appropriate facility for their need will be out of state.	To accommodate family members, general population shelters will be available in the same general vicinity as the special need shelter.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
We determined that additional beds need to be made available in these hospitals and special need shelters.	We are coordinating these efforts with our federal and state partners.	Transportation services will be made available between general population shelters and the special need shelters..
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
To make this additional space available, we are moving individuals to appropriate alternative care facilities.		While space at the special needs shelter is limited, provision has been made for a care giver to remain with the special needs patient.

**QUESTION: WHAT SHOULD THE PUBLIC KNOW ABOUT VIBRIO VULNIFICUS?**

(MESSAGES ADAPTED FROM CDC: "DISASTER SAFETY - VIBRIO VULNIFICUS FACT SHEET")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Vibrio vulnificus is a naturally-occurring bacterium in coastal waters.	The bacterium is a serious health threat to persons who are ill or have weakened immune systems.	People should take precautions and be alert for symptoms.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
The bacterium is found in higher concentrations as water becomes warmer.	Among those at highest risk are those with liver disease or diabetes or any other condition, including age that may weaken the immune system.	People should fully cook all seafood.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Infection occurs as a result eating raw or under-cooked shellfish, or contact between seawater and wounds, sores, or burns	Illness typically begins within 1 - 3 days of exposure but can appear as late as 7 days after exposure	Wounds exposed to seawater should be washed with soap and water as soon as possible..
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
There is no evidence of person-to-person infection.	Symptoms may include fever, swelling or redness of skin or increased pain and swelling at a wound or nausea, vomiting and abdominal pain for those who may have ingested the seawater or brackish water.	Prompt medical evaluation is important.

**QUESTION: WHAT SHOULD I DO OR NOT DO TO PROTECT MYSELF FROM VIBRIO VULNIFICUS?**

(MESSAGES ADAPTED FROM CDC: "DISASTER SAFETY - VIBRIO VULNIFICUS FACT SHEET")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
People should take precautions.	People who are ill or have weakened immune systems should take special precautions.	People should be alert for symptoms.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
People should fully cook all seafood.	Among those at highest risk are those with liver disease or diabetes.	Symptoms may include fever, swelling or redness of skin or increased pain and swelling at a wound.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Wounds, cuts, and burns exposed to seawater should be washed with soap and water as soon as possible.	Untreated infections in high-risk individuals have as high as a 50 percent fatality rate.	Illness typically begins within 1 - 3 days of exposure but can appear as late as 7 days after exposure
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
For those at risk, exposed to seawater or brackish water should wash their skin with soap and water as soon as possible.		Early medical intervention is essential for optimum outcomes.

**QUESTION: WHAT SHOULD THE PUBLIC KNOW ABOUT VIBRIO VULNIFICUS?**

(MESSAGES ADAPTED FROM CDC: "DISASTER SAFETY - VIBRIO VULNIFICUS FACT SHEET")

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There is no evidence of person-to-person infection.	Symptoms may include fever, swelling or redness of skin or increased pain and swelling at a wound or nausea, vomiting and abdominal pain for those who may have ingested the seawater or brackish water.	Prompt medical evaluation is important.

**QUESTION: WHAT SHOULD I DO OR NOT DO TO PROTECT MYSELF FROM VIBRIO VULNIFICUS?**  
 (MESSAGES ADAPTED FROM CDC: "DISASTER SAFETY - VIBRIO VULNIFICUS FACT SHEET")

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<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
For those at risk, exposed to seawater or brackish water should wash their skin with soap and water as soon as possible.		Early medical intervention is essential for optimum outcomes.

**QUESTION: I HEAR THERE ARE THREE TYPES OF VIBRIOS, CAN YOU TELL ME MORE ABOUT THEM?**

(MESSAGES ADAPTED FROM CDC: "DISASTER SAFETY - VIBRIO VULNIFICUS FACT SHEET" AND "DISASTER SAFETY - VIBRIO CHOLERAE FACT SHEET")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
The three types of Vibrio bacterium are: Vibrio vulnificus, Vibrio parahaemolyticus and Vibrio cholerae	Infection by each type of Vibrio can lead to different symptoms and illness	Vibrio bacterium is most commonly acquired by eating raw or undercooked shellfish or by exposing a wound to contaminated water
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
All three types of Vibrio bacterium naturally occur in coastal sea water	Symptoms for V. vulnificus include fever, swelling and redness of skin, and shock	Avoid eating raw or undercooked shellfish
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Infection from all three types of bacterium can occur when eating raw or undercooked shellfish	Symptoms for V. cholerae and V. parahaemolyticus include serious watery diarrhea, vomiting, cramps, and fever	Immediately wash with soap and water any wound exposed to contaminated water
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
V. vulnificus or V. parahaemolyticus can also be contracted if a wound is exposed to bacteria contaminated water	People most at risk are those with weakened immune systems and those with chronic liver disease or diabetes	Infection cannot spread from person to person

**QUESTION: ARE THESE CASES OF VIBRIO VULNIFICUS HURRICANE-RELATED?**

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
The <i>V. vulnificus</i> bacterium is naturally occurring in Gulf Coast waters	Our first priority is to protect public health and prevent and monitor disease threats	One case of <i>V. vulnificus</i> was reported prior to the onset of Hurricane Katrina
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Hurricane Katrina is the cause for the wide spread exposure to salty or brackish water	Our state laboratories have been conducting studies for early identification of new threats such as <i>Vibrio</i> bacterium	<b>NEED A CASE SPECIFIC FACT HERE</b>
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
In normal circumstances, people would not be exposed to these waters	We have responded effectively to other threats to public health that are similar to <i>V. vulnificus</i>	Since this, <b>eight (NEED TO VERIFY)</b> additional cases of <i>V. vulnificus</i> has been reported
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
If exposed, the people most at-risk of developing severe disease are those with diabetes, liver disease, etc.	Our disease experts are monitoring closely for any evidence of an outbreak	People with the infection are receiving treatment

**QUESTION: WHY IS THE MDH DOING AERIAL SPRAYING (AS) IN MS?**

(MESSAGES ADAPTED FROM MDH NEWS RELEASE “AERIAL SPRAYING NECESSARY TO CONTROL MOSQUITOES” AND AERIAL SPRAYING TALKING POINTS FROM DR. GODDARD)

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
We are doing aerial spraying because of an increase in mosquitoes following Hurricane Katrina.	The decision is based on recommendations from national health experts and on our own threat analysis.	Our goal is to reduce the mosquito population in the Gulf Coast counties
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Aerial spraying will help protect hurricane victims and emergency responders from disease.	Our tracking system has shown an increase in the mosquito population in the last week.	Spraying will begin in Hancock, Harrison and Jackson counties starting on ...
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Aerial spraying is also being done in Louisiana and Alabama.	We will assess the effectiveness of the spraying program on a continuous basis.	AS will be done primarily at night
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
Aerial spraying will only be done when and where it is needed.	Spraying is an essential part of our efforts to prevent disease outbreaks.	More than one spraying may be necessary to control the mosquito population.

**QUESTION: IS AERIAL SPRAYING AND THE INSECTICIDES THAT ARE USED SAFE?**

(MESSAGES ADAPTED FROM MDH NEWS RELEASE “AERIAL SPRAYING NECESSARY TO CONTROL MOSQUITOES” AND AERIAL SPRAYING TALKING POINTS FROM DR. GODDARD)

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Research has shown that spraying for mosquitoes is generally safe to people and animals.	We will use only insecticides approved and registered with the US Environmental Protection Agency.	People concerned about exposure to even low levels of insecticides can take several precautionary actions.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Insecticides, when used properly, help protect people from diseases carried by insects.	Insecticides go through years of testing and evaluation before being registered by the EPA.	They can obtain information about where and when spraying will be done by calling ....
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
The ingredients of the spray are similar to those found in many household insecticides.	When used properly, insecticides are effective in reducing mosquito populations.	They can stay indoors during spraying.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
People in the affected areas will be exposed to extremely small amounts of insecticide.	The benefits of aerial spraying far outweigh the very small chance of any health risk.	They can obtain additional information about the spraying program by...

**Question: What is rabies?**

(Messages adapted from CDC: “About Rabies” and “Questions and Answers about Rabies”)

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Rabies is a preventable viral disease that infects the central nervous system.	The majority of reported rabies cases occur in wild animals.	People usually get rabies from the bite of an animal with rabies.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Early symptoms in humans include fever, headache and sickness	These animals include raccoons, skunks, bats, and foxes.	If exposed to rabies, rabies treatment should be administered as soon as possible after infection.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Human to human spread is very rare and has only occurred in organ or cornea transplants.	Pets and farm animals can be infected when they are bitten by rabid wild animals.	Rabies treatment consists of one dose of immune globulin and five doses of rabies vaccine given over a 28-day period
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
If bitten by an animal, you should see a health care provider.	Pets and farm animals account for less than 10% of the reported rabies cases.	Vaccines are available for both humans and pets.

**Question: Should I be concerned?**

(Messages adapted from CDC: "About Rabies" and "Questions and Answers about Rabies")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
There is one reported case of death by human rabies.	Rabies is most commonly found in wild animals.	The Department of Health is investigating the source of the infection.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
	These animals include raccoons, skunks, bats and foxes.	Officials will monitor possible rabies cases.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
	Mississippi law states that all dogs and cats over the age of three months must be vaccinated.	Animals suspected of carrying the rabies infection will be isolated to prevent the spread of the disease.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
Anyone who feels they may have been exposed should see a health care provider.	Pets and farm animals account for less than 10% of the reported rabies cases.	We will report any findings as they are known.

**Question: Is this Hurricane Katrina Related?**

(Messages adapted from CDC: "About Rabies" and "Questions and Answers about Rabies")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Rabies is a preventable viral disease that infects the central nervous system.	There is one reported case of death by human rabies.	Our first priority is to prevent and monitor health threats from rabies.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Early symptoms in humans include fever, headache and general sickness.	We are working with partner agencies to investigate this case.	Our disease experts are monitoring closely for any evidence of an outbreak.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Human to human spread is very rare and has only occurred in organ or cornea transplants.	We are consulting with local departments of health and the Centers for Disease Control and Prevention.	If exposed to rabies, rabies treatment should be received as soon as possible after infection.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
If bitten by an animal, you should see a health care provider	We will report any findings as they are known.	The MDH recommends anyone who has been bitten by an animal to see a health care provider.

**Question: What is the Department of Health’s role in this situation?**

(Messages adapted from CDC: “About Rabies” and “Questions and Answers about Rabies”)

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Our first priority is to prevent and monitor health threats from rabies.	The Department of Health is investigating the source of the infection.	For further information, contact the MDH
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Our disease experts are monitoring closely for any evidence of an outbreak.	We are working with partner agencies in this investigation.	Please call...(NUMBER)
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
If exposed to rabies, rabies treatment should be received as soon as possible after infection.	We are consulting with local departments of health and the Centers for Disease Control and Prevention.	Visit <a href="http://www.healthmys.com">www.healthmys.com</a>
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
The MDH encourages anyone who has been bitten by an animal to see a health care provider	We will provide updates when further information is known.	We will provide an update at (TIME)

**QUESTION: WHY DID YOU WAIT TO TELL THE PUBLIC ABOUT THE HUMAN CASE OF RABIES?**

(MESSAGES ADAPTED FROM CDC: "ABOUT RABIES" AND "QUESTIONS AND ANSWERS ABOUT RABIES")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
There is one reported case of human death by rabies.	At this time, our health experts do not feel this case poses a public health threat.	Our first priority is to protect public health.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
The victim was a child.	Human to human transmission of rabies is rare.	We are consulting with local departments of health and the Centers for Disease Control and Prevention.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
The child had recently returned from an out of state camping trip.	Casual contact, such as touching, does not spread rabies.	We are working with partner agencies.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
We are currently investigating the source of the exposure.	The only cases of human to human spread occurred in organ transplants.	We will provide updates when further information is known.

**QUESTION: DID YOU PUT THE PUBLIC IN DANGER?**

(MESSAGES ADAPTED FROM CDC: "ABOUT RABIES" AND "QUESTIONS AND ANSWERS ABOUT RABIES")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Our health experts do not feel this case poses a public health threat.	Rabies cases in Mississippi are very rare.	The Department of Health is currently monitoring any evidence of rabies.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
Human to human transmission of rabies is rare.	The last human case of rabies in Mississippi was in 1956.	We are consulting with local departments of health and the Centers for Disease Control and Prevention.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Casual contact, such as touching, does not spread rabies.	The last animal case of rabies was in 1963.	We are working with partner agencies.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
The only cases of human to human spread occurred in organ transplants.	The Department of Health works with partner agencies and local health departments in monitoring possible rabies cases.	We will provide updates when further information is known.

**QUESTION: SHOULD WE BE WORRIED ABOUT RABIES IN MISSISSIPPI?**

(MESSAGES ADAPTED FROM CDC: "ABOUT RABIES" AND "QUESTIONS AND ANSWERS ABOUT RABIES")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Rabies cases in Mississippi are very rare.	Rabies is most commonly found in wild animals.	Treatment is available for those who have been exposed to rabies.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
The last human case of rabies in Mississippi was in 1956.	These animals include raccoons, skunks, bats and foxes.	If exposed to rabies, rabies treatment should be provided as soon as possible after infection.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
The last animal case of rabies, found in a dog, was in 1963.	Pets and farm animals account for less than 10% of the reported rabies cases.	Treatment includes giving a mixture of medicine and vaccine over 28-days.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
The Department of Health works with partner agencies and local health departments in monitoring possible rabies cases.	Mississippi law states that all dogs and cats over the age of three months must be vaccinated.	Anyone who feels they may have been exposed should see a health care provider.

**QUESTION: SHOULD I BE CONCERNED IF MY CHILD WENT TO SCHOOL OR WENT CAMPING WITH THE PERSON WHO DIED OF RABIES?**  
 (MESSAGES ADAPTED FROM CDC: "ABOUT RABIES" AND "QUESTIONS AND ANSWERS ABOUT RABIES")

KEY MESSAGE 1 →	KEY MESSAGE 2 →	KEY MESSAGE 3
Human to human spread is very rare.	People usually get rabies from the bite of an animal with rabies.	Rabies is a preventable viral disease that infects the central nervous system.
↓	↓	↓
<b>Support Point 1.1</b>	<b>Support Point 2.1</b>	<b>Support Point 3.1</b>
It has only occurred in cases of organ transplants.	These animals include raccoons, skunks, bats, and foxes.	Early symptoms in humans include fever, headache and sickness.
<b>Support Point 1.2</b>	<b>Support Point 2.2</b>	<b>Support Point 3.2</b>
Non-bite exposure to rabies is rare.	Pets and farm animals account for less than 10% of the reported rabies cases.	Treatment includes giving a mixture of medicine and vaccine over 28-days.
<b>Support Point 1.3</b>	<b>Support Point 2.3</b>	<b>Support Point 3.3</b>
Casual contact, such as touching, does not spread rabies.	If bitten by an animal, you should see a health care provider.	If exposed to rabies, rabies treatment should be provided as soon as possible after infection.