

Chemical Biological
Radiological
Nuclear Explosives
Fusion

Awareness + Collaboration + Response

CBRNE
Fusion
HANDBOOK

GOVERNOR'S OFFICE



HOMELAND SECURITY &
EMERGENCY PREPAREDNESS



CBRNE/Fusion Handbook

Contacts

RESPONSE AGENCY	CONTACT NUMBER
Louisiana State Police Hazardous Materials Hotline	877-925-6595
Louisiana Department of Health and Hospitals – Office of Public Health (DHH-OPH) Lab Main Office	504-219-4664
DHH-OPH Public Health 24 Hour Cell	504-458-9537
DHH-OPH Infectious Disease Epidemiology	800-256-2748
Louisiana State Analytical and Fusion Exchange (LA-SAFE)	225-925-4192
Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)	225-925-7500
Suspicious Activity Reporting (SAR) Hotline	800-434-8007
United States Postal Inspection Service (USPIS) Hotline	877-876-2455
Louisiana State Fire Marshal (LSFM)	866-946-1097
Louisiana Department of Environmental Quality (DEQ)	225-219-5337 or 888-763-5424
United States Coast Guard (USCG) National Response Center	800-424-8802
Louisiana National Guard (LANG) 62 nd Civil Support Team - Weapons of Mass Destruction (CST-WMD)	225-319-4779
LANG Chemical Enhanced Response Force Package (CERFP)	225-319-4601

PURPOSE: This book is intended as a **resource** for first responders, homeland security, emergency medical personnel and others who have participated in the GOHSEP Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) and Fusion workshop. It is designed to provide resources to law enforcement, fire, healthcare, Fusion Center Liaison Officers and other professionals in order to **improve** and **enhance** multi-agency **identification, detection, investigation** and **response** to CBRNE threats.

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ACRONYMS

BOLO – Be on the lookout

BSI – Body substance isolation

CBRNE – Chemical, Biological, Radiological, Nuclear and Explosives

CERFP – Chemical Enhanced Response Force Package

CST-WMD – Civil Service Team - Weapons of Mass Destruction

CI/KR – Critical Infrastructure/Key Resources

DECON – Decontamination

DEQ – Louisiana Department of Environmental Quality

DHH – Department of Health and Hospitals

EMT – Emergency Medical Treatment

EPA – U.S. Environmental Protection Agency

EPZ – Emergency planning zone

ERG – Emergency Response Guide

FBI – Federal Bureau of Investigation

FNF – Fixed Nuclear Facility

GOHSEP – Governor's Office of Homeland Security and Emergency Preparedness

HazMat – Hazardous materials

HEPA – High-efficiency particulate air

IED – Improvised explosive device

JTTF – Joint Terrorism Task Force

LA-CBRNE-WG – Louisiana Chemical, Biological, Radiological, Nuclear and Explosives Working Group

LANG – Louisiana National Guard

LA-SAFE – Louisiana State Analytical and Fusion Exchange

LBTWG – Louisiana Biological Threats Working Group

LE – Law enforcement

LSFM – Louisiana State Fire Marshal

LSP – Louisiana State Police

MOPP – Mission-oriented protective posture

MSDS – Material Safety Data Sheets

NCIC – National Criminal Information Center

OSHA – Occupational Safety and Health Administration

OHSEP – Parish Office of Homeland Security and Emergency Preparedness

OPH – Office of Public Health

PPE – Personal protective equipment

SAR – Suspicious Activity Report

SOP – Standard operating procedure

USCG – U.S. Coast Guard

USPIS – U.S. Postal Inspection Service

WIPP – Waste Isolation Pilot Plant

WMD – Weapons of Mass Destruction

WMDD – Weapons of Mass Destruction Directorate

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Introduction

LOUISIANA CBRNE WORKING GROUP (LA-CBRNE-WG) PARTNERS

- **Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)**
- **New Orleans Federal Bureau of Investigation (FBI) Joint Terrorism Task Force (JTTF)**
- **FBI Weapons of Mass Destruction Directorate (WMDD)**
- **Louisiana State Analytical and Fusion Exchange (LA-SAFE)**
- **Louisiana Department of Health and Hospitals (DHH) with the Office of Public Health (OPH)**
- **U.S. Postal Inspection Service (USPIS)**
- **Louisiana State Police (LSP)**
- **62nd Civil Support Team-Weapons of Mass Destruction (CST-WMD) of the Louisiana National Guard (LANG)**
- **U.S. Coast Guard (USCG)**
- **Louisiana State Fire Marshal (LSFM)**
- **LANG Chemical Enhanced Response Force Package (CERFP)**
- **Louisiana Department of Environmental Quality (DEQ)**

HISTORY

In 2009, the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), along with eight (8) other partners, organized the **Louisiana Biological Threats Working Group** (LBTWG). The LBTWG narrowed the standard operating procedure (SOP) for responding to possible biological threats and organized a training class for **first responders** and **investigators**.

Adding partners in 2011, the LBTWG morphed into the **Louisiana Chemical, Biological, Radiological, Nuclear and Explosives Working Group** (LA-CBRNE-WG).

VISION

It is the LA-CBRNE-WG's vision to improve multi-agency WMD or chemical, biological, radiological, nuclear and explosives (CBRNE) **terrorism identification**, joint law enforcement (LE) and public health epidemiological **investigative protocols**.

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Introduction

THE WORK

The efforts of LA-CBRNE-WG include **establishing improved notification** and **assessments** of potential CBRNE threats and **coordination** of information on potential victims and suspects in the event of potential bioterrorism incidents. The focus of the Working Group is to **provide knowledge** to identify and **prevent** potential terrorist threats. Intelligence gathered through the fusion of public health and others may uncover information arising from the theft/loss/misuse of select biological agents and suspicious activities. Most importantly, the initiatives of the terrorism Working Group are intended to **enhance** all investigations, including public health and intelligence, as well as national and international investigations.

WHAT IS CBRNE?

CBRNE represents **threats** from accidental or intentional release of hazardous materials (HazMat) or the detonation of explosives.

- **Chemical**
- **Biological**
- **Radiological**
- **Nuclear**
- **Explosives**
(high yield)



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CBRNE PROTOCOLS

The **Louisiana State Police (LSP)** is the **primary response** agency for HazMat incidents. To report a HazMat incident:

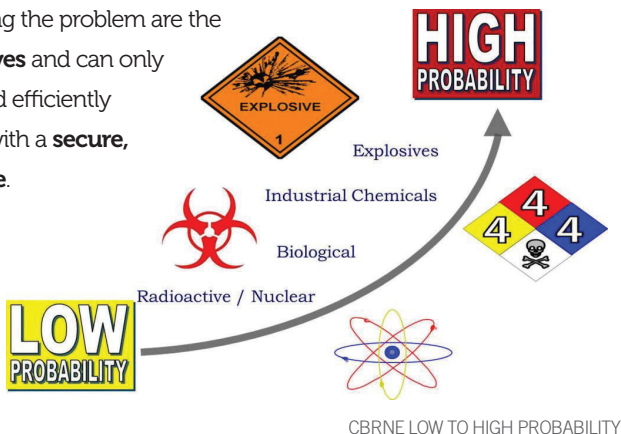
- ✓ **Notify** the proper authority – initiated through a **911** call.
- ✓ **Call the LSP HazMat Hotline at (877) 925-6595.**
- ✓ Establish **incident command**.
- ✓ Conduct a **threat assessment**.
- ✓ **Screen evidence** for the presence of chemicals + radiological material.
- ✓ **Triple bag + properly DECON** the sample container, **NOT the sample itself.**

INCIDENT RESPONSE

"The **first step** in any emergency situation is to secure the scene."

Firefighters, LE and industrial hazardous material workers understand the importance of **securing the scene**. A secure scene allows for **control** – everybody **gets out** or is accounted for; nobody **gets in** unless approved.

Safety and solving the problem are the **mission objectives** and can only be effectively and efficiently **accomplished** with a **secure, controlled scene**.



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Decontamination (DECON)

DECON

Decontamination (DECON) is the process of **removing** or **neutralizing** contaminants that have accumulated on personnel, property and equipment. DECON operations are classified as “*technical*” – DECON personnel that are in Level A, B or C **personal protective equipment (PPE)** and their equipment; or “*casualty*” – DECON persons that were not in PPE while in a “**hot zone**” and thereby exposed or possibly exposed to a **hazardous material (HazMat)**.

Technical or *casualty* DECON operations can be adjectively classified as *hasty*, *gross* or *deliberate* and the operations can vary depending on the hazard or agent type:

CHEMICAL or **UNKNOWN** – *Full* DECON.

BIOLOGICAL – No immediate signs or symptoms.

- Proper DECON can be *delayed* until agent is identified.

RADIOLOGICAL/NUCLEAR – Requires **detection equipment**.

- Proper DECON may address *only* the “dirty” areas of the person.
- Nasal swabs are done prior to full DECON so that **assessment** of inhalation amounts can be determined.

DECON PLAN

REMEMBER: “There are only two (2) types of plans: one that works and one that does not.”





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DECON

IMPORTANT POINTS

- All personnel who have been **in the hot zone** are "**dirty**" and **require** either *technical* or *casualty* DECON.
 - **85-90%** of all contaminants are on clothing. **Removal of clothing** is imperative **before** washing skin.
- **DECON** for a casualty, when **drugs** are *not available*, is the **first treatment** delivered.
 - All persons except for *technical* DECON are casualties until DECON is complete, at which time the casualty becomes a **patient**.
 - **There is NO such thing as a dirty patient.**
- **Gross DECON** is a *technical* DECON term and includes **washing** off of Level A and/or B PPE, bunker gear, **mission-oriented protective posture** (MOPP) suits, etc.
 - It does **NOT apply** to clothing.
- The **most important** and effective DECON is that which is done within the **first minute** or **two (2)** after exposure.

DECON STEPS

Casualty from the puddle (emergency medical treatment (EMT)) 
 Puddle from the casualty  EMT  Hospital 

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CONTAMINATED WATER RUNOFF

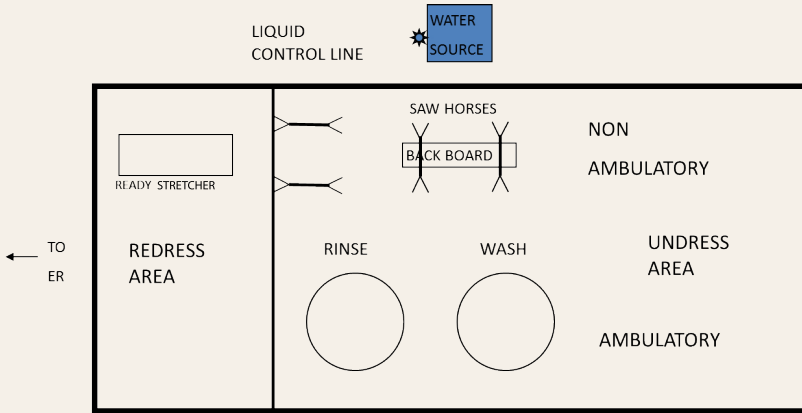
- **Solution to pollution is dilution.**
- **Occupational Safety and Health Administration (OSHA)/U.S. Environmental Protection Agency (EPA) regulations state that treatment is NEVER delayed in order to arrange for collection of runoff.**

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DECON

ENT

TRIAGE
AREA



TYPICAL LAYOUT OF DECONTAMINATION LINE

RESPONDER CONTAMINATION PREVENTION

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- ✓ Ensure there are **no cuts** or **punctures**.
- ✓ **Close** all **flaps** + **zippers** + **buttons** + **ties**.
- ✓ **Tape** openings of **gloves** + **boots** + **jackets**.
- ✓ Dress **prior** to entering the work zone (DECON line).



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RULES TO LIVE BY

Rule # 1: PROTECT YOURSELF

"The answer, my friend, is blowing in the wind."

Rule # 2: RESCUE FROM CONTAMINATION

"Get the casualty out of the puddle."

Rule # 3: READ THE SIGNS AND SYMPTOMS

"Fonetics don't werk hear."

Rule # 4: TRIAGE IF REQUIRED

"Who's on first?"

Rule # 5: ANTIDOTE THERAPY

"When you are in need, the correct drug is a friend indeed."

Rule # 6: PERFORM FIRST AID QUICKLY

"If a person is not breathing before DECON, they could die without help. Try to avoid DECONing dead people."

Rule # 7: DECONTAMINATE AS REQUIRED

"Get the puddle off of the casualty."

Rule # 8: TRANSPORT

"Casualties may be moved but Patients are transported."

Rule # 9: HOT LINE

"Play zone defense and always know the line's location."

Rule # 10: PPPE

"No it is not a typo; this means Proper Personal Protective Equipment."

DECON



Chemical

PRIMARY RESPONSE AGENCIES:

Louisiana State Police (LSP)

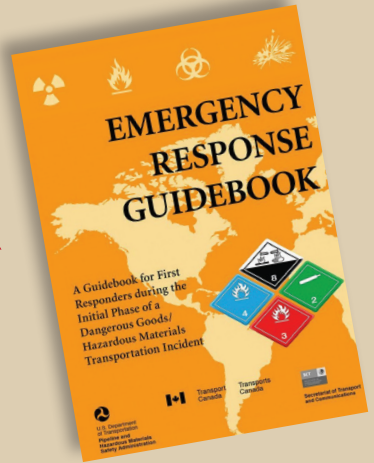
**62nd Civil Support Team – Weapons of
Mass Destruction (CST – WMD)**

**Louisiana Department of Environmental
Quality (DEQ)**

Chemical

BECOME FAMILIAR WITH THE EMERGENCY RESPONSE GUIDEBOOK (ERG) SAFETY PRECAUTIONS NOW!

ERG FREE DOWNLOAD - FIRECHIEF.COM/MOBILE-APPS/DOT-LAUNCHES-FREE-EMERGENCY-RESPONSE-GUIDEBOOK-APP



HOW TO USE THE ERG

- 1) Identify the hazardous material (HazMat), using any of the following:
 - Identification number (4-digit number after UN/NA).
 - Name of the material from a shipping document or package.
- 2) Identify three- (3-) digit guide number, using:
 - ID number index in **yellow-bordered pages**, OR...
 - Name of material index in **blue-bordered pages**.
- 3) Turn to the numbered guide – **orange-bordered pages** – and read carefully.
- 4) If a placard is the only source of information:
 - Turn to **pages 6-7** and use the three- (3-) **digit guide** next to the placard.
 - Then proceed to numbered guide in **orange-bordered pages**.
- 5) **As a last resort:** If only the container can be identified, consult the table of rail car and road trailer identification chart (pages 8-9).
 - Information associated with these containers is for **worst-case scenarios**.



EXAMPLES OF YELLOW, BLUE AND ORANGE BORDERED PAGES

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DOCUMENTATION

Shipping documents (papers) are synonymous and can be found as follows:

- **Road** – kept in the **cab** of a motor vehicle.
- **Rail** – kept in possession of a **crew member**.
- **Aviation** – kept in possession of the aircraft **pilot**.
- **Marine** – kept in a holder on the **bridge** of a vessel.

Shipping documents (papers) provide **vital information** regarding the HazMat/dangerous goods, **to initiate protective actions** when needed. Documents include:

- Four- **(4-) digit number**, UN or NA (go to ERG **yellow-bordered pages**).
- Proper **shipping name** (go to ERG **blue-bordered pages**).
- Hazard **class** or **division** number of material.
- **Packing group**.
- Emergency response **telephone number**.
- Information **describing** the hazards of the material (entered on or attached to shipping document).

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CALL THE EMERGENCY RESPONSE TELEPHONE NUMBER

- **Immediately call** 911 and the **LSP HazMat hotline 877-925-6595**.
- Listed on the **shipping paper**, if available, is the owner of the container and/or product.
- Provide as **much information as possible**, such as the name of the **carrier** (trucking company or railroad) and vehicle number.

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SAFETY PRECAUTIONS

RESIST RUSHING IN!

APPROACH CAUTIOUSLY FROM UPWIND + UPHILL + UPSTREAM

- **Stay clear** of vapor + fumes + smoke + spills.
- Keep vehicle at a **safe distance** from the scene.

SECURE THE SCENE

- **Isolate** the area + protect yourself + others.

IDENTIFY HAZARDS USING:

- **Placards**
- **Container labels**
- **Shipping documents**
- **Rail car + road trailer identification chart**
- **Material Safety Data Sheets (MSDS)**
- **Knowledge of persons on scene OR**
- **Applicable ERG pages**

ASSESS THE SITUATION

- ✓ Is there a **fire, spill** or **leak**?
- ✓ What are the **weather conditions**?
- ✓ What is the **terrain** like?
- ✓ Who/what is at **risk** – **people, property** or the **environment**?
- ✓ What **actions** should be taken – evacuation, shelter in-place or dike?
- ✓ What **resources** (human + equipment) are required?
- ✓ What can be done **immediately**?

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OBTAIN HELP

- Advise your headquarters to notify **responsible agencies** + **call for assistance** from qualified personnel.

RESPOND

- Enter only when wearing appropriate **protective gear**.
- **Rescue** attempts + protecting **property** must be weighed against you becoming part of the problem.
- Establish a **command post** + lines of **communication**.
- Continually **reassess** the situation; **modify** response accordingly.
- Consider safety of people in the **immediate area** first, including your own.

ABOVE ALL

Do **NOT** assume that gases or vapors are harmless because of lack of smell — odorless gases or vapors may be harmful.

Use **CAUTION** when handling empty containers because they may still present hazards until they are cleaned and purged of all residues.



ANHYDROUS AMMONIA PLACARD

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Chemical

IMPORTANT NOTE

In Louisiana, two (2) of the **most abundant chemicals** that may be encountered due to an intentional or accidental release are Chlorines and Ammonias. Included is an excerpt from the ERG's **orange-bordered pages**.

CHLORINE

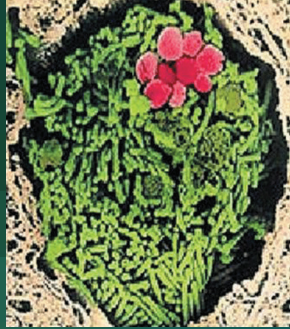
Name of Material	Guide No.	ID No.
Chlorine	124	1017
Chlorine dioxide, hydrate, frozen	143	9191
Chlorine pentafluoride	124	2548
Chlorine trifluoride	124	1749

GUIDE 124	GASES - TOXIC AND/OR CORROSIVE - OXIDIZING	ERG2012	ERG2012	GASES - TOXIC AND/OR CORROSIVE - OXIDIZING	GUIDE 124
POTENTIAL HAZARDS			EMERGENCY RESPONSE		
HEALTH <ul style="list-style-type: none"> • TOXIC; may be fatal if inhaled or absorbed through skin. • Fire will produce irritating, corrosive and/or toxic gases. • Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite. • Runoff from fire control may cause pollution. 			First Aid Small Fire CAUTION: These materials do not burn but will support combustion. Some will react violently with water. <ul style="list-style-type: none"> • Contains the acid chlorine. If the material is highly water sensitive or highly reactive, water spray or fog is recommended. • Water only, no dry chemical, CO₂ or Halon. • Do not get water inside containers. • Move containers from fire area if you can do so without risk. 		
PROTECTIVE CLOTHING <ul style="list-style-type: none"> • Wear positive pressure and combination breathing apparatus (SCBA). • Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide fire and/or thermal protection. • Structural firefighters' protective clothing provides limited protection in fire situations ONLY. It is not effective in high temperature areas where direct contact with the substance is possible. 			EMERGENCY RESPONSE <ul style="list-style-type: none"> • Do not direct water at spill or source of leak. • If possible, turn leaking containers so that gas escapes rather than liquid. • Prevent entry into sewers, basements or confined areas. • Isolate area until gas has dissipated. • Ventilate the area. 		
EVACUATION Spill <ul style="list-style-type: none"> • See Table 1 - Initial Isolation and Protective Action Distances. Fire <ul style="list-style-type: none"> • If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. 			FIRST AID <ul style="list-style-type: none"> • Move victim to fresh air. • Call 911 or emergency medical services. • Give artificial respiration if victim is not breathing. • Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. • Administer oxygen if breathing is affected. • Clothing frozen to the skin should be removed before being removed. • Remove and isolate contaminated clothing and shoes. • In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. • Keep victim warm and quiet. • Keep victim under observation. • Effects of contact or reaction may be delayed. • Insure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. 		

HEALTH

- **TOXIC**; may be fatal if inhaled or absorbed through skin.
- Fire will produce irritating, corrosive and/or toxic gases.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Runoff from fire control may cause pollution.

Biological



THE VIEW OF ANTHRAX AND BOTULISM THROUGH A MICROSCOPE

There is only one biocontagion – or a bioagent – that is contagious, which is smallpox.

Pneumonic plague can be “transmissible” by cough or sneeze spray.

The deadliest neurotoxin is produced by clostridium botulinum. Botulism is the **most lethal** compound per weight – 15,000 times more toxic than the nerve agent VX.

Biological warfare is the oldest of the triad of agents and has been used for over 2,000 years.

- Sieges of Middle Ages.
- Smallpox blankets given to Native Americans.
- Germany in World War I.
- Japan in World War II.
- Iraq in Gulf War.

Biological

ANTHRAX

- **One (1) to six- (6-) day incubation** period followed by fever + myalgias + cough + fatigue.
- Initial improvement followed by abrupt onset of respiratory distress + shock + death in **24 to 36 hours**.
- Physical findings are nonspecific; pneumonia is rare.
- **50 percent of cases** have associated hemorrhagic meningitis.
- No documented cases of person-to-person transmission of inhalational anthrax.
- Cutaneous transmissions are possible. There are no documented cases.
- Body substance isolation (BSI) precautions required.

RICIN

Ricin is created by processed castor beans. The poison can be dispersed as an **aerosol** or **infecting food** or water. Ricin is effective by inhalation + ingestion + wound absorption + injection.

- It is **not absorbed** through intact skin.
-

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Biological

PROTECTIVE EQUIPMENT

For identified or suspected biological agents, **personal protective equipment (PPE) should be used**. Protection **should include** medical high-efficiency particulate air (HEPA) **masks** and **gloves**.



HIGH-EFFICIENCY PARTICULATE AIR (HEPA) MASK AND GLOVES

IMPORTANT POINTS

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All biological agents have a **prolapse** or **dromal** period, which means an **incubation period before signs and symptoms appear**.

- This is usually days, but **Ricin** is the **exception** with **two (2) to four (4) hours**.

Patient **triage** is always performed based on conventional injuries.

DECON is **delayed** if possible until the agent is identified; OR the same procedure as **chemical DECON**.

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TYPES OF ANTHRAX

Biological

	Cutaneous (skin)	Inhalation (in the lungs through breathing)	Gastrointestinal (in the stomach or intestines)
How Anthrax infects the body	<ul style="list-style-type: none"> Bacteria enter a cut or abrasion on the skin. 	<ul style="list-style-type: none"> Bacteria are inhaled into the lungs through breathing. 	<ul style="list-style-type: none"> Meat that is contaminated with the bacteria is eaten.
Case fatality	<ul style="list-style-type: none"> 20 percent of cases are fatal if untreated. Less than one (1) percent are fatal if treated. 	<ul style="list-style-type: none"> About 75 percent of cases are fatal, even when treated. 	<ul style="list-style-type: none"> 25-60 percent are fatal. It is unknown if treatment decreases fatalities.
Early symptoms	<ul style="list-style-type: none"> A raised itchy bump that looks like an insect bite appears within one (1) to two (2) days. This small sore then develops into a blister. 	<ul style="list-style-type: none"> Cold or flu-like symptoms such as sore throat, mild fever, muscle aches, malaise/body discomfort, chills, nonproductive cough, chest pains, headache. 	<ul style="list-style-type: none"> Nausea, loss of appetite, vomiting, fever, throat lesions, sore throat, swelling of the lymph nodes.
Communicability	<ul style="list-style-type: none"> No person-to-person transmission. It is not contagious. 	<ul style="list-style-type: none"> No person-to-person transmission. It is not contagious. 	<ul style="list-style-type: none"> No person-to-person transmission.

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Biological

TYPES OF RICIN

	Inhalation	Ingestion
Initial symptoms	<ul style="list-style-type: none"> Onset by four (4) to eight (8) hours, as late at 24 hours. 	<ul style="list-style-type: none"> Less than 10 hours.
Symptoms	<ul style="list-style-type: none"> Respiratory distress, fever, cough, nausea, tightness in chest. Heavy sweating with fluid buildup in the lungs. 	<ul style="list-style-type: none"> Vomiting, diarrhea that may become bloody. Severe dehydration. Seizures, blood in the urine, multi system organ failure.
Communicability	<ul style="list-style-type: none"> No person-to-person transmission. It is not contagious. 	<ul style="list-style-type: none"> No person-to-person transmission. It is not contagious.



EXAMPLES OF
CASTOR BEANS

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Biological

POSSIBLE INDICATORS OF A BIOLOGICAL ATTACK

- **Threats** or **claims** by those responsible for the attack.
- Presence of device or **delivery vehicle** at the scene.
- Large **epidemic** with high illness and death rate.
- Respiratory **symptoms** predominate.
- Multiple, simultaneous **outbreaks**.
- Sick or dead **animals**.



DEAD ANIMAL



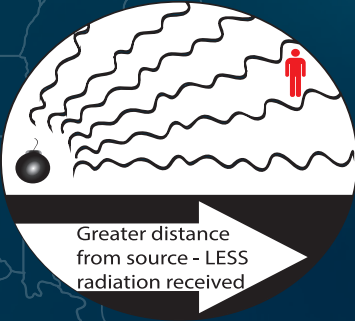
ANTHRAX LETTERS

Radioological

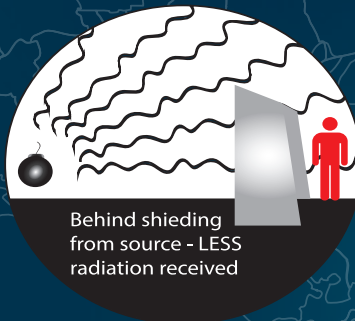
TIME



DISTANCE



SHIELDING



Radiological

RADIOLOGICAL DECON

- ✓ **DECON as soon as possible.**
- ✓ **DECON only what is necessary.**
- ✓ **DECON as far forward as possible.**
- ✓ **DECON by priority:**
 - Areas to be cleaned are determined by using radiation detector **before + during + after** cleaning.
 - A detector count of **less than one (1) millirem per hour** beta and less than **1,000 disintegrations per minute** alpha are **safe decontamination end points**.
 - Skin can be effectively decontaminated by simply **washing** the area with soap + water.
 - If necessary, a soft brush or sponge with **heavy lather** can be used, but care must be taken to **ensure the skin is not scratched or eroded**.
 - Cotton-tipped **swabs** can be used to cleanse inside of nasal passage + in the ears + in skinfolds, such as around the ear.
 - Save the nasal swabs for testing.
 - **Brush + wash** hair and hairy areas.
 - **Clean** underneath **nails**.
 - Wounds should be **covered** during decontamination.



RADIOACTIVE PLACARD

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Radiological

- Although casualties are inevitable in a radioactive disaster, the hazards to a contaminated patient + attending medical personnel are **minimal**.
- There is **no record** of a single U.S. healthcare worker suffering radiation injury from rendering emergency medical care to a contaminated patient.
- The highest recorded radiation dose to a U.S. emergency care provider is **14 mrad** – a measuring rate for exposure – roughly equivalent to a *chest X-ray*.
- Medical or surgical treatment should **not** be delayed because of possible contamination.
- **Personnel decontamination** + dose estimation of exposure procedures are **always second priority** to **emergency medical treatment (EMT)**.
- **If possible, remove an injured person from a contaminated area before rendering care.**

In order of decreasing frequency, contaminants enter the body by four (4) principal intake routes:

- **Inhalation**
 - Skin swipes + nasal swipes are used to estimate the extent and type of internalized contamination.
- **Ingestion**
- **Wound contamination**
- **Absorption**



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Radiological



DOSIMETER

Detectors, not **dosimeters**, are **required** to identify the presence of radiation.

GOHSEP **maintains** and **distributes** radiation dosimeters and detectors for the State of Louisiana. **If you need either, contact your Parish Office of Homeland Security and Emergency Preparedness (OHSEP).** Contact information can be found at www.gohsep.la.gov/parishoepnumbers.aspx

RADIATION DETECTOR, COMMONLY KNOWN AS A GEIGER-MÜLLER COUNTER.



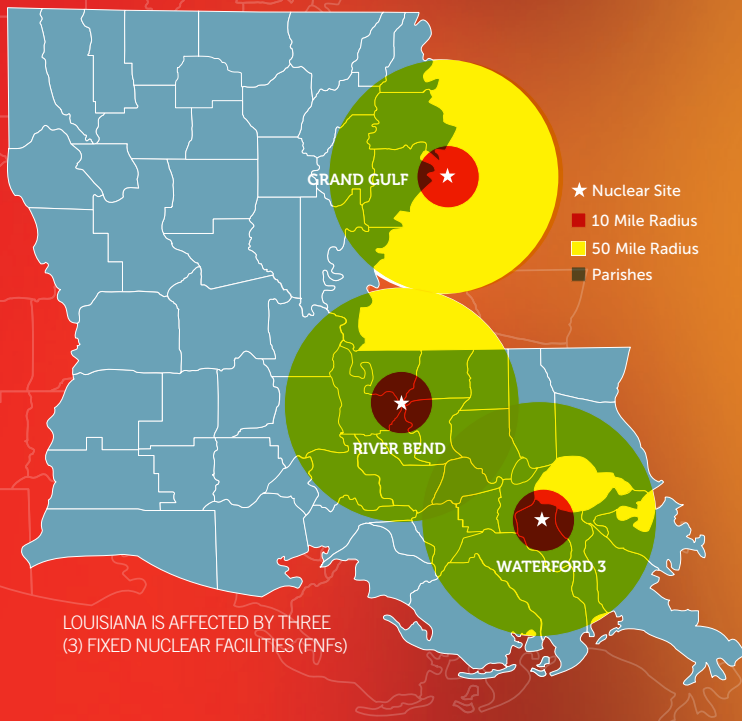
Nuclear

The state of Louisiana is affected by three (3) Fixed Nuclear Facilities (FNFs):

- River Bend in East Feliciana
- Waterford 3 in St. Charles Parish
- Grand Gulf in Port Gibson, Mississippi

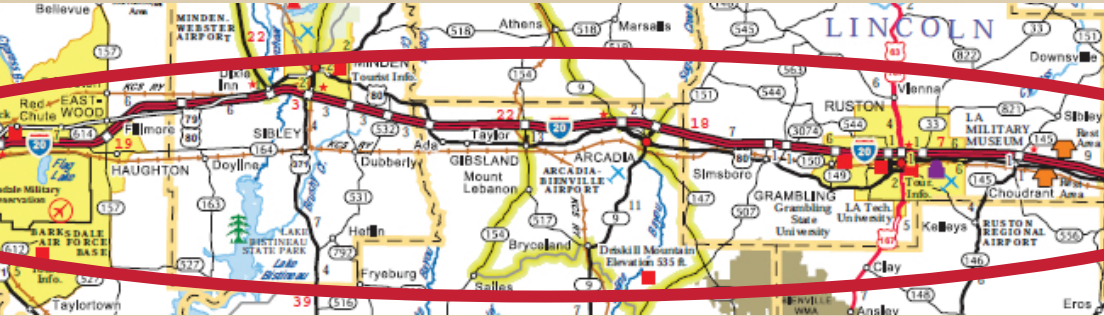
There are two (2) emergency planning zones (EPZs) around each nuclear power plant:

- **Plume Exposure Pathway EPZ**
 - Approximately 10 miles from the reactor site.
 - Reduces dose from potential exposure.
- **Ingestion Exposure Pathway EPZ**
 - Approximately 50 miles from the reactor site.
 - Reduces dose from potential ingestion.



Nuclear

WASTE ISOLATION PILOT PLANT (WIPP) ROUTE



LOUISIANA I-20 CORRIDOR

The Waste Isolation Pilot Plant (WIPP) route includes the following Parishes along the I-20 corridor: **Bienville, Caddo-Bossier, East Carroll, Lincoln, Ouachita, Richland, Tensas, Webster** and **West Carroll**.

The WIPP route provides **ground transportation**, where **nuclear waste** from East Coast plants is **transported** to the WIPP site in **Carlsbad, New Mexico**. Above is a map of the Louisiana I-20 corridor.



WASTE ISOLATION PILOT PLANT (WIPP) TRUCKS

Awareness + Collaboration + Response

Explosives









An improvised explosive device (IED) is a device placed and/or fabricated in an improvised manner incorporating **destructive, lethal, noxious, pyrotechnic** or **incendiary** chemicals and designed to **destroy, incapacitate, harass** or **distract**.



PLACARDS FROM ERG

Explosives

BOMB THREAT STANDOFF CHART

Threat Description Improvised Explosive Device (IED)		Explosives Capacity ¹ (TNT Equivalent)	Building Evacuation Distance ²	Outdoor Evacuation Distance ³
	Pipe Bomb	5 LBS	70 FT	1200 FT
	Suicide Bomber	20 LBS	110 FT	1700 FT
	Briefcase/Suitcase	50 LBS	150 FT	1850 FT
	Car	500 LBS	320 FT	1500 FT
	SUV/Van	1,000 LBS	400 FT	2400 FT
	Small Moving Van/ Delivery Truck	4,000 LBS	640 FT	3800 FT
	Moving Van/ Water Truck	10,000 LBS	860 FT	5100 FT
	Semi-Trailer	60,000 LBS	1570 FT	9300 FT

PREFERRED EVACUATION DISTANCE

CAUTION!

- Do not touch suspicious item.
- Notify proper authorities – call 911.
- Ensure all witnesses are available to brief first responders.
- Recommend standoff data be used in conjunction with your emergency evacuation plan.



Fusion



Louisiana State Analytical and Fusion Exchange (LA-SAFE) was created as a **central point** within the state to **identify threats, prevent** acts of terrorism and **promote** efforts of deterrence. This centralized and unified intelligence repository used to **gather, maintain and analyze** intelligence information is commonly referred to as the **State Fusion Center**. The fusion exchange promotes **interoperability**, creates a framework for **situational awareness**, and assists with an exchange and dissemination of **information** required to make informed decisions.

Fusion

TWO (2) WAYS TO REPORT SUSPICIOUS OR CRIMINAL ACTIVITY

There are **two (2) ways** to report **suspicious** or **criminal activity**:

- Contact Louisiana State Police (LSP) Suspicious Activity Hotline: **1-800-434-8007** or visit lsp.org/help.html.
- Use the **See Send app**.
 - *See Something Send Something: My Mobile Witness* is the provider of *See Something Send Something* technology. Go to www.mymobilewitness.com/consumer-services.php



SEE SOMETHING, SEND SOMETHING APP

Please remember, in case of an emergency, **always dial 9-1-1**.

PRODUCTS OF LA-SAFE

- Subject profiles
- Alert bulletins + reports
- Threat + vulnerability assessments
- Graphics – maps, charts, timelines, etc.
- Daily reports

Specific law enforcement (LE) requests that LA-SAFE can produce are:

- **Lineups**
- **Be on the lookouts (BOLOs)**
- **National Criminal Information Center (NCIC)**

Awareness + Collaboration + Response

CBRNE/Fusion Handbook

SUSPICIOUS ACTIVITY REPORT (SAR) CRITERIA GUIDANCE

Fusion

All created bulletins are: LE sensitive, open source and special bulletins.

Suspicious Activity Report (SAR) analysis focuses on: Hate groups, homeland security, extremists, gangs/narcotics, violent/high-profile activities, Critical Infrastructure/Key Resources (CI/KR), cyber, missing children and technical teams.

Defined criminal activity + potential terrorist nexus activity	Potential criminal or non-criminal activity requiring additional factual information during investigation	LE reporting SAR should remember
<ul style="list-style-type: none"> • Breach/attempted intrusion • Misrepresentation • Theft + loss + diversion • Sabotage + tampering + vandalism • Cyber attack • Expressed or implied threat • Aviation 	<ul style="list-style-type: none"> • Eliciting information • Testing or probing of security • Recruiting • Photography • Observation + surveillance • Material acquisition + storage • Acquisition of expertise • Weapons discovery • Sector-specific incident 	<ul style="list-style-type: none"> • Information must be: <ul style="list-style-type: none"> – Legally obtained – Relevant to subject ID or criminal activity • Info cannot be based solely on political, religious, social views, associations or activities of a group

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For more information **visit** or **contact**:

- www.la-safe.org
- lafusion.center@dps.la.gov
- Homeland Security **Hotline**:
 - **1-800-434-8007**
- LA-SAFE :
 - **1-225-925-4192**

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Fusion

CYBER

GOHSEP's Cyber Security Team is an **integral part** of the State's Fusion Center (LA-SAFE) Cyber Fusion Unit. The unit was originally stood up in 2009 and was the **first** Fusion Center in the **nation** to have cyber capabilities.

The Louisiana Database Security Breach Notification Law (LA-R.S. 51:3071 et seq.)

Any person that conducts business in the State shall, following **discovery** of a breach in the security of the system containing such data, **notify** any resident of the State whose personal information was, or is reasonably believed to have been, acquired by an **unauthorized** person.

One of **several** tools the State Fusion Center maintains is the IP Block list which **identifies** IP addresses and domain names associated with malicious code incidents and unauthorized access attempts within the last 90 days. The *Cyber Security Block List* exceeds:

- **1,622 domain names**
- **5,096 IP addresses**

The hacker group Anonymous has **compromised 72 U.S. LE networks**, **exposing** the information of **over 7,000 LE officials** including:

- Social Security numbers (SSNs)
- Addresses
- Phone numbers
- Usernames/ passwords
- Other personal information

CBRNE/Fusion Handbook

PHISHING

Phishing is the activity of **defrauding** an online account holder of financial information by **posing** as a legitimate company.

Phishing often uses a **mix of emails** and **websites** that mimic well-known and trusted brands. Examples include:

- Banks
- Government agencies
- Shipping companies

It can take advantage of current events. For example:

- Kenyan mall shooting
- Natural disasters
- Super Bowl
- Obamacare

Do NOT trust unsolicited email.

Do NOT click links or attachments in unsolicited emails.

Do NOT provide personal information or information about your organization.

Do NOT respond to phishing emails.

Chemical Biological Radiological Nuclear Explosives Fusion

