CHEMICAL:

A South Carolinian's guide to chemical terrorism and other chemical emergencies.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

TACTICS AGAINST TERRORISM: CHEMICAL

South Carolina Department of Health and Environmental Control
Office of Public Health Preparedness

What is chemical terrorism?

Chemical terrorism is the use of any chemical agent as a weapon. Chemical agents are poisonous vapors, aerosols, liquids or solids that have dangerous effects on people, animals or plants. Chemicals used as weapons usually attack the organs of the body. Some are odorless and tasteless and they can be released by bombs, sprayed from aircraft, boats or other vehicles, or used to create a hazard to people and the environment.

Terrorists may use a chemical attack to create panic and fear, disrupt the economy, or to get a response from the government.

How are chemical agents used?

Chemical agents come in many forms. There are poisonous gases, liquids or solids. They can injure or kill people who come in direct contact with the chemical. If a chemical gets on your skin, clothes or hair, you might spread it to other people.

How will I know if there is a chemical attack?

Terrorists use poisonous chemicals because they can hurt people quickly before people know they are under attack. It is important to be aware of things going on around you and to watch for people doing things that are suspicious or seem unusual.

Here are some warning signs of a possible chemical attack:

- A strong, unusual smell
- People with watery eyes, twitching or jerking movements, choking, having trouble breathing or stumbling
- Many sick or dead birds, fish, small animals or plants

General symptoms of chemical poisoning

If you have swallowed, touched or breathed in a poisonous chemical, you might have these symptoms:

- Difficulty breathing
- Headache or blurred vision
- Irritated eyes, skin or throat
- Trouble standing or walking
- Stomach cramps or diarrhea
- Sweating
- Nausea and vomiting
- Change in skin color

Some chemical weapons take effect over a long period of time and do not create symptoms immediately.

BE SAFE. BE SMART: MAKE A PLAN

If there is a chemical emergency, you might not have much time to act. Having a plan now will help you be prepared. It will help you stay calm. It could also save lives. Remember to go over your plans with your family and co-workers regularly so everyone knows what to do to be safe.

Your local fire department and county emergency management office has information about the chemicals being used in your community. If you live or work near an industrial facility, contact its office for information on the chemicals used there.

A plan for home

Start by making a plan for home. Decide what each family member should do during a chemical emergency. Make sure you make a disaster supply kit (see section called "Make a Kit"). Make sure everyone knows where the kit is kept. Remember to include your pets in your home plan.

A plan for away from home

You should also plan what to do if there is a chemical emergency when you and your family members are away from home. Decide how you will let each other know where you are and what you are doing if there is a chemical emergency. Many families will ask an out-of-town relative or friend to be their emergency contact person. This is because it is sometimes easier to make a long-distance phone call than a local phone call during an emergency. Make sure each family member knows who the emergency contact person is and has that phone number. Finally, decide where everyone will meet when the emergency is over.

A plan for work

You should also plan what to do if a chemical emergency happens when you are at work. It is best to follow your company's emergency plan. If possible, keep a disaster supply kit where you work (see section called "Make a Kit"). If you own a business or are in charge of other people, make sure they know what to do in case of a chemical emergency.

A plan for children and elderly relatives

If you have children in school or daycare, or a relative who lives in a nursing home, find out what plans each place has for keeping people safe during an emergency.

Talk about these plans with your children. Make sure they understand what to do. Make sure they know to listen to their teachers and do what they are told.

You should also talk to your elderly relatives about what to do during an emergency. Tell them to listen to and trust their caregivers.

Keep in mind that teachers and nursing home caregivers are trained to handle emergencies. They will do their best to make sure your family members are safe.

Unless you are told to do so, do not try to pick up your children or elderly relatives from school or a nursing home during an emergency. It could put you and others in danger. Contact them through your family contact person and assure them that you will be reunited very soon.

A plan for pets and farm animals

You should have a plan for your animals, too. In a chemical emergency, you may have to leave your home. It may be difficult, or impossible, to find a safe place for your animals to stay. American Red Cross shelters and most other shelters cannot accept pets because of state health and safety rules. There are some exceptions. Service animals like guide dogs that help people with disabilities are the only animals allowed in shelters.

Try to find other places outside of your area for your pet to stay. You may be able to stay in a hotel with your pet. You can ask family or friends to keep your pets or find a shelter, kennel or veterinarian that will take care of your animals in an emergency. Keep phone numbers for all of these places. When you make your disaster supply kit, remember to include food for your animals.

It is more difficult to find shelter for larger animals like cows or horses. This is especially true during emergencies. You may have to leave larger animals behind. You should choose whether to shelter them in a barn or leave them outside. It may be necessary to place them on stored food and water.

Be safe. Be smart. The best way to protect yourself and your family in a chemical emergency is to make and practice a family response plan.

BE SAFE. BE SMART: MAKE A KIT

If there is a chemical disaster, you may need to stay inside your home for a few hours or a few days. This practice is known as "sheltering in place." You will not be able to leave to go to the store, a restaurant, church or other destination. You must stay inside. This is why you need to keep certain things needed for everyday life like clean water, food and clothing. If you make a disaster supply kit ahead of time, you will have what you need to be as safe as possible. Make sure everyone in your family knows where the disaster supply kit is kept.

Keep the items you would most likely need in an easy-to-carry container, such as a backpack, duffel bag or plastic trash container with a lid. If you have to evacuate, you can take the kit with you.

Contents of your kit

Water. Store water in plastic containers such as soft drink bottles. Avoid using containers that will break or allow the contents to spoil. You will need to replace the water every three months.

- Store at least one gallon of water for each person for each day, plus water for pets. Plan for at least three days.
- Keep containers in a cool, dark place with the date labeled on the container.

Food. Store at least a three-day supply of nonperishable food. This means foods that do not need to be refrigerated, prepared, or can be cooked with little or no water. Choose foods items that do not weigh much. You will need to replace the food every six months.

Include these foods:

- Ready-to-eat meats, fruits and vegetables in cans or pouches
- Canned or boxed juices
- Staples such as sugar, salt and pepper
- High-energy foods like peanut butter and jelly, granola bars and trail mix
- Vitamins
- Foods for babies and elderly adults
- Comfort/stress foods like coffee, cookies and sweetened cereals
- Pet food

First aid kit
Make a first aid kit for your home and one for each family car.

Each first aid kit should contain:

- Prescription medicines
- Antiseptic
- Gauze pads
- Medical tape
- Latex gloves
- Moistened towelettes
- Needle and thread
- Triangular bandages
- Sterile adhesive bandages in different sizes
- Sterile roller bandages
- Safety pins
- Soap
- Sunscreen
- Thermometer
- Tube of petroleum jelly or baby oil
- Tweezers
- Non-prescription medications (aspirin and non-aspirin pain medications, cough syrup, anti-diarrhea medication, antacids, Syrup of Ipecac and laxatives). Consider children's strength medicines
- Insect repellant
- Scissors

Clothes and bedding. Include at least one complete change of clothes and shoes for each family member. If possible, consider including:

- Bath towels
- Blankets or sleeping bags
- Hats and gloves
- Raincoats

- Sunglasses
- Thermal underwear
- Boots with protective soles

Tools and emergency supplies. Keep the following items handy:

- Batteries of all sizes
  (Replace regularly so flashlights work when you need them)
- Battery operated radio and television
- Cash and/or an emergency credit card
- Duct tape
- Emergency phone numbers
- Flashlights
- Non-electric can opener
- Paper cups and plates, and plastic utensils
- Plastic sheeting and garbage bags
- Sanitation supplies like liquid detergent, a plastic bucket with lid, disinfectant and household chlorine bleach
- Scissors
- Toiletries like soap, deodorant, toothpaste and feminine hygiene supplies
- Toilet tissue

Other items you might want:

- Compass
- Small ABC fire extinguisher
- Paper and pencil
- Plastic storage containers
- Signal flares
- Tools such as a utility knife, pliers and a shut-off wrench for utilities
- Waterproof matches
- Whistle

Special items. These items are for babies, elderly adults or family members with special needs and diets.

Babies

- Formula
- Diapers
- Moist towelettes
- Powdered milk

Elderly adults

- Medications
- Prescriptions
- Denture needs
- Eyeglasses
- Contact lenses
- Hearing aids

Entertainment

- Books
- Games
- Quiet toys for children

Important family documents

Copies of important documents such as birth and marriage certificates, powers of attorney, insurance policies, wills, passports and social security cards should also be kept in a safe location outside your home in a safe deposit box or at the house of a friend or family member out of town. Also include copies in a waterproof bag or container in the disaster supplies kit.

BE SAFE. BE SMART: STAY INFORMED

What is your risk?

It is not difficult for a terrorist to commit a large-scale chemical attack. Some chemicals are easy to get because they are used by businesses and found in household products that anyone can buy. Other chemicals are transported on trains, trucks or boats that travel through towns, cities and ports. Here is how to assess your risk to a chemical

attack or emergency:

- Find out what chemicals are being stored in buildings near your home at factories or military bases.
- Find out what chemicals are carried by train, truck, or boat near where you live and work.
- Be aware of your surroundings in buildings, subways, sports arenas, concert halls and auditoriums. Chemical attacks kill more people in indoor spaces or crowded areas.
- You can also contact your local fire department of office of emergency management to learn more about the chemical hazards in your area. The U.S. Environmental Protection Agency lists more information on its website. (See "For more information")

Be careful with chemicals

Chemicals are everywhere. They are an important part of life and business. Factories use them to make products we use every day. They also are found in your kitchen, medicine cabinet, basement, backyard or garage. The most common chemical accidents happen in our own homes and can be prevented.

- The best ways to avoid chemical accidents are to read and follow the directions on product labels. They tell you how to use, store and dispose of the product.
- Don't mix products that contain chemicals, especially household cleaning products. They can create poisonous gases.
- Store household chemicals away from food and in the containers they came in, so you always know what they are and how to use them safely.
- Keep all medicine, makeup, cleaning products and other household chemicals out of sight and out of reach of children.
- If a family member swallows a household chemical, bring the chemical's container to the phone and call the Poison Control Center, Emergency Medical Services (EMS) or 9-1-1 right away. Do not let the person swallow anything else until they get medical help.

How you may be told of a chemical emergency

Public officials will alert you to a chemical emergency as quickly as possible. Here is how you likely will be alerted:

- You might hear a siren.
- You might be called by telephone.
- Emergency workers might drive by your home and give instructions over a loudspeaker.
- Emergency workers might come to your door and warn you.
- You might be alerted by the Emergency Alert System on television or radio.
- Listen carefully and do exactly what emergency workers tell you to do. They are trained to help and protect you. You should trust them.

What to do in a chemical emergency

A chemical emergency or attack is very serious. People can be seriously hurt or die. Here are things you should do if there is a chemical emergency:

- If a chemical is released outdoors, get fresh air right away. Most chemical gases are heavier than air and hover close to the ground. Move to higher ground away from where the chemical was released.
- If a chemical is released in the air inside a building, get outside or to an open window as quickly as possible.
- Listen to your emergency broadcast stations on the radio and television.
- Listen carefully to the advice and instructions of the authorities and do as they say.
- Don't use your phone unless it is a life-threatening emergency.
- If you have watery eyes, stinging skin and trouble breathing, those may be signs you have been exposed to a chemical. Here's what you should do:
    - Get medical help by calling the Poison Control Center, Emergency Medical Services (EMS), 9-1-1 or the operator right away.
    - Next, remove your clothes and seal them in a plastic bag.
    - Rinse your body with soap and water. Use diluted household bleach, if available. Mix one capful of bleach for one gallon of water. Do not scrub the affected areas, just rinse.
    - Rinse your eyes with plain water.
    - Don't try to vomit or drink anything.

Your clothes

It is important to avoid contact with chemicals. If there is a chemical attack and medical help isn't available right away, here are things you should do:

- Remove your clothes, starting from the top and working your way down to your socks.
- Try not to let contaminated clothes touch your bare skin. Any clothes that have to be pulled over your head should be cut off instead. Chemicals on the clothing could cause harm.
- Put the clothes in a plastic bag. Avoid touching contaminated areas of the clothes. Use tongs or a similar object if you need to. Anything that touches the clothes should be put in the bag with them.
- Seal the bag, then seal that bag inside another plastic bag.
- Help family members and children remove their clothing. Avoid touching the contaminated clothes with your bare hands. Try not to let the contaminated clothes touch the skin of others.
- Ask police before throwing away removed clothing. Removed clothing may be needed as evidence.

Caring for your body after chemical exposure

It is important to avoid contact with chemicals. If there is a chemical attack and medical help isn't available right away, here are things you should do:

- Look for a hose, fountain or any water source and wash the chemical from your skin.
- Use soap or diluted household bleach, if you have it. Try not to scrub the chemical into your skin.
- If you have burning eyes or blurry vision, rinse your eyes with plain water for 10 to 15 minutes. Make sure the water runs away from your nose.
- If you wear contact lenses, take them out and put them with your contaminated clothes. Do not put them back in your eyes. If you wear eyeglasses, wash them with soap and water. You can put them back on after you wash them.
- Put on clean clothes.
- Get medical help as soon as possible and dial 9-1-1.

Helping others

If you find someone who has been overcome by chemical vapors, the first thing you should do is make sure you don't become a victim, too. If you stay in a dangerous area and get injured or pass out, you cannot help yourself or anyone else.

Call you local Emergency Medical Services or 9-1-1 right away. Tell the operator where you are and the phone number you are calling from. Describe what has happened. Listen to the operator and do what you are instructed. Stay on the phone until the operator tells you to hang up.

If you are trained in CPR or first aid and are sure you are safe, take care of the victims' life-threatening injuries first. Then try to treat their chemical injuries.

TYPES OF CHEMICAL AGENTS

Blister

These chemicals can cause blisters on your skin that look like a burn and damage your eyes, nose, mouth, throat and lungs as you breathe. They can be liquid or gas and are usually released by spraying them in the air. Blister agents are more likely to cause injury than death.

Here are some types to remember:

Mustard

Mustard was first used as a weapon in 1917 during World War I.

Color and smell

Mustard is usually in the form of an oily liquid or a vapor that is heavier than air. It might smell like garlic, onions or mustard, with a clear or yellowish-brown color.

How it can hurt you

There are no immediate physical signs of being exposed to mustard. It typically takes several hours before serious effects are noticed.

Mustard gas damages your skin, eyes, nose, mouth, throat and lungs as you breathe. The effects are worse on hot, humid days or in tropical weather. If you breathe in mustard gas, it can cause coughing, bronchitis and long-term breathing problems.

Exposure to small amounts of mustard gas causes serious skin burns and blisters.

Exposure to a large amount can result in overwhelming infections that can lead to death.

Symptoms:

- Skin burns and blisters (might be yellowish-brown)
- Burning, swelling eyelids
- Temporary blindness
- Coughing

Long-term effects
Exposure to mustard gas increases your chances for cancer. Exposure to large amounts can cause breathing problems later in life or permanent blindness.

Treatment
There is no cure or medicine to treat exposure to mustard gas.

Lewisite

Lewisite was made in 1918 to be used as a weapon in World War I. It has no other use.

Color and smell
Lewisite is an oily liquid that can be clear to dark brown. It smells like flowers. It will hover near the ground like smoke.

How it can hurt you
Lewisite acts fast. It causes damage to skin, eyes, nose, mouth, throat and lungs when it is released in the air. Exposure to large amounts of Lewisite may cause death.

Symptoms

- Skin pain, irritation and redness that turns to blisters and then discolored skin
- Watery, irritated eyes with pain or swelling
- Runny nose, sneezing, bloody nose or sinus pain
- Shortness of breath and coughing
- Diarrhea, nausea and vomiting

Long-term effects
Large amounts or long exposure to Lewisite can cause skin burning, breathing problems or permanent blindness.

Treatment
There is a medicine that should be taken right away after exposure to Lewisite.

Blood
These chemicals can stop blood from carrying oxygen to your body. Without oxygen, you could die. Here are some types to remember:

Cyanide
Cyanide is found naturally in some plants and food. It is used to make products like paper and plastics and to develop photographs. It is also used to kill bugs and rats.

Color and smell
As a gas, cyanide has no color but usually smells like almonds or peach pits. It is lighter than air and will rise. Cyanide can also be in a white solid form that looks like salt.

How it can hurt you
Cyanide acts fast. Breathing in or eating cyanide causes the most harm. It is most dangerous in enclosed spaces because it is trapped inside the space. It goes away quickly outdoors. Cyanide stops your body from getting the oxygen it needs. Large amounts can damage your lungs, cause you to stop breathing, and lead to death.

Symptoms
Small amounts of cyanide can cause:

- Trouble breathing
- Dizziness and headache
- Weakness
- Passing out

Large amounts of cyanide can cause:

- Convulsions
- Low blood pressure
- Slow heart beat
- Passing out
- Breathing to stop

Long-term effects
The body has the ability to destroy small amounts of cyanide over time. Large amounts can damage your heart and brain, and they can be deadly.

Treatment
Move the exposed person away from the source of cyanide. Medicines are very effective if given to the patient soon after exposure.

Arsine

Arsine is the most toxic form of arsenic. It was considered as a weapon during World War II, but was never used on the battlefield. It is currently used in manufacturing.

Color and smell
As a gas, arsine has no color. A large amount might smell like mild garlic. It will hover near the ground.

How it can hurt you
If you breathe in arsine, it gets in your bloodstream and damages red blood cells.

Symptoms
Small amounts of arsine can cause:

- Weakness or sleepiness
- Confusion
- Headache
- Difficulty breathing
- Nausea, vomiting or stomach pain
- Red or dark urine
- Yellow skin and eyes
- Muscle cramps

Large amounts of arsine can cause:

- Passing out
- Convulsions
- Paralysis
- Breathing to stop

Long-term effects
People who are exposed to a large amount of arsine are not likely to survive. Those who do live will suffer from kidney damage, numbness, pain in their hands and feet, memory loss or confusion.

Treatment
There is no medicine to treat arsine exposure.

Choking
These chemicals can make it difficult for you to breathe. Choking agents can damage your lungs and cause them to fill with liquid. Most come in liquid form and are used by industrial companies. There is no cure or medicine to treat exposure to these kinds of chemicals. Here are some names to remember:

Chlorine
Chlorine is the most common man-made chemical in the United States. It is used in manufacturing and found in bleach and other common household products. It is also used to make other chemicals to clean public drinking water and swimming pools.

Color and smell
Chlorine can be a yellow-green gas or a yellow-green liquid. It has a strong smell. When liquid chlorine is released in the air, it turns into a gas, hovers near the ground and spreads quickly.

How it can hurt you
Chlorine can damage your eyes, nose, mouth, throat and lungs as you breathe. Although chlorine is harmful if you eat or drink it, it can be deadly if inhaled.

Symptoms

- Coughing and wheezing
- Chest tightness and difficulty breathing
- Burning, watery eyes and blurred vision
- Burning nose and throat
- Nausea and vomiting
- Red, burning skin (if exposed to gas)
- Fluid in the lungs

Long-term effects
Exposure to large amounts of chlorine gas can result in long-term eye and lung damage. Some people develop a condition similar to mild asthma. Chlorine's effect on your health depends on how close you are to it when it is released into the air.

Treatment

There are no antidotes to treat exposure to chlorine. However, breathing difficulties can be helped with the use of oxygen and other supportive care.

In January 2005, a railroad accident in Graniteville, S.C. released a cloud of chlorine into the surrounding neighborhood. Nine people died from inhaling chlorine. More than 5,000 were forced to evacuate their homes.

Phosgene

Phosgene is the most common kind of choking chemical. Out of all the chemical weapons used during World War I, phosgene caused the most deaths. Phosgene is very common because companies that make plastics, metals, dyes or chemicals to kill bugs use it.

Color and smell

As a gas, phosgene has no color. In small amounts, it smells like mowed grass or cut hay. In large amounts, it has a strong, unpleasant smell. It can also be stored as a liquid. As a gas, it hovers near the ground and spreads quickly.

How it can hurt you

As a gas or liquid, phosgene can hurt you if you breathe it in. It can also irritate your eyes and throat and make you cough. Large amounts can make your lungs swell and make it hard to breathe. Even larger amounts can cause serious damage to your lungs and might lead to death.

Symptoms

- Burning throat and coughing
- Watery, burning eyes and blurred vision
- Difficulty breathing
- Nausea and vomiting
- Skin damage similar to frostbite or burns (with skin contact)
- Fluid in the lungs
- Coughing up fluid
- Low blood pressure
- Heart failure

Long-term effects

Most people recover completely after exposure to phosgene, but some may have long-term lung infections, diseases and problems breathing.

Treatment

There are no antidotes to treat exposure to phosgene.

Nerve

Nerve agents are the most poisonous and fast-acting chemical weapons. They are similar to chemicals used to kill insects in how they work and the harm they cause. These chemicals damage your brain and nerves and cause you to lose control of your muscles. They are especially dangerous because a small amount can cause serious damage and even death. Here are some names to remember.

Sarin, Soman, Tabun and VX

Germany made tabun, the first nerve agent, in 1936 and sarin in 1938 as chemicals to kills insects. Sarin was used in two terrorist attacks in Japan in 1994 and 1995. The sarin attacks killed 12 people and another 5,500 sought medical care as a result. Germany also made soman as a chemical to kill insects in 1944. The United Kingdom first made VX in 1952. These nerve agents can be sprayed in the air and are most dangerous in enclosed spaces. They can also be added to water or food supplies or poured on surfaces people touch or walk on. Your clothes can release these chemicals for up to 30 minutes after you are exposed, which can expose more people.

Color and smell

Sarin, soman and tabun are clear liquids that have no color or taste. Tabun might have a fruity smell. Soman might smell like rotting fruit or vapor rub. VX is a clear, orange-brown, oily liquid with no smell. Once they are released, they can turn into a gas that settles low to the ground.

How they can hurt you

Sarin can harm you if it touches your eyes or skin, you breath it in, eat or drink it. Even a small drop of sarin on your skin can cause you to sweat and your muscles to twitch where the sarin touched your skin. It is absorbed through the skin or by breathing and causes serious damage to your breathing system. Small amounts can cause illness. Large amounts can cause death within seconds to minutes after exposure.

Symptoms
Small amounts can cause:

- Runny nose
- Watery, irritated eyes and blurred vision
- Small pupils
- Headache
- Difficulty breathing
- Tightness in the chest
- Cough
- Nausea, vomiting or stomach pain
- Sleepiness or weakness
- Confusion
- Drooling and heavy sweating
- Diarrhea and increased urination
- Bleeding
- Slow or fast heart beat
- Low or high blood pressure

Large amounts can cause:

- Passing out
- Convulsions
- Paralysis
- Breathing failure that could cause death

Long-term effects
People who are exposed to small amounts of sarin usually recover completely. Some may still feel tired or nervous and have memory loss as much as six weeks after recovery. People who are exposed to large amounts of sarin are not likely to survive.

Treatment
There is a medicine that you should take right after being exposed to nerve agents.

Evacuation after a chemical emergency

Officials may decide it would be safer for you to evacuate, or leave the immediate area, in a chemical emergency. You may need to go to an emergency shelter. It is important to stay calm, listen carefully and follow instructions. If you are told to evacuate, listen to your radio and make sure the order applies to you and understand if you need to evacuate right away or if you have time to pack basic things you might need.

If you are told to evacuate right away, you should:

- Take your Disaster Supplies Kit and medicine
- Close and lock your windows
- Shut off all vents. Move quickly and calmly.

If you have time to pack basic things, you should take:

- Your Family Disaster Supplies Kit and medicine
- A change of clothing for each family member
- Eyeglasses, hearing aids, dentures, canes or walkers if family members need them
- Personal items like toothbrushes and deodorant
- Baby items like diapers, formula or baby food
- Books, puzzles, cards or games for entertainment.

Shelters will not have everything you need. In most cases, the shelters will provide only meals, cots and blankets.

You don't need to turn off your refrigerator or freezer. You should turn off all other appliances and lights before locking your home when you leave.

Check on neighbors to make sure they know about the emergency and offer to help people with disabilities or other special needs.

Take only one car to the evacuation site. Close your car windows and air vents and turn off your heater or air conditioner. If you need a ride, ask a neighbor. If there are no neighbors who can help you, listen to the radio for instructions. Don't take shortcuts. For your safety, follow the exact route you are told to take.

Shelter in place

In a chemical emergency, you might be told to "shelter in place". This means staying where you are and making yourself as safe as possible until the emergency is over or you are told to evacuate.

- Take your children and pets indoors right away.
- If you're outside, cover your mouth and nose with a damp cloth.
- Close all windows in your home.
- Turn off all fans and heating and air conditioning systems.
- Close your fireplace and any other place air can come in from outside.
- Tape plastic garbage bags or plastic sheeting over windows.
- Tape around windows and doors to make an unbroken seal.
- Use tape to cover any exhaust fans, vents, electrical outlets or other openings.
- If you're told there might be an explosion, close the window shades, blinds, or curtains. Stay away from windows.
- Go to the room that you've picked ahead of time as your shelter room. It should be an aboveground room (not the basement) with the fewest windows and doors. A large room with a water supply or bathroom and a telephone is best. This room should be as high in your home as possible to avoid chemical gases that sink. This is different from sheltering in place for a tornado or nuclear event, when the shelter should be low in the home.
- Take your Disaster Supplies Kit with you.
- Wet some towels and stuff them in cracks under doors.
- Stay in the room and listen to your radio or watch your local news until you are told it is safe to come out or to evacuate.
- You can use the sink and toilet as you normally would. If you need to drink water, drink stored water only, not water from the tap.
- If you are away from your home when a chemical event happens, follow the instructions of emergency workers to find the nearest shelter.

Important Information:

Emergencies:	**9-1-1**
Palmetto Poison Control Center:	**(800) 222-1222**
CDC:	**(888) 232-4636**
S. C. DHEC: (During normal business hours)	**(803) 898-3242**

Dial 9-1-1 or Emergency Medical Services only if someone's life is in danger. Go to the hospital only if you have a medical emergency. Listen to your radio and television for information and additional instructions.

My Emergency Alert System radio station is:

Aiken/Augusta ..... WBBQ-FM 104.3
Midlands ..... WCOS-FM 97.5
Charleston/Low Country ..... WNKT-FM 107.5
Florence/Pee Dee ..... WJMX-FM 103.3/AM 970
Myrtle Beach/Grand Strand ..... WKZQ-FM 101.7
Greenville/Spartanburg/Upstate ..... WFBC-FM 93.7

Our family contact person is: _____

Phone number: _____

Emergency Meeting Place (outside home): _____

Meeting Place (away from home): _____

For more information

S.C. DHEC
http://www.scdhec.gov

Centers for Disease Control and Prevention
http://www.bt.cdc.gov

U.S. Environmental Protection Agency
http://www.epa.gov

EPA's Community page
http://www.epa.gov/epahome/comm.htm

EPA's Envirofacts page
http://www.epa.gov/enviro/

American Red Cross
http://www.redcross.org

This publication provides health information for your general knowledge. Talk to your doctor about your concerns about any medical condition. DHEC does not recommend you diagnose or treat yourself for a serious illness.

Notes:

South Carolina Department of Health
and Environmental Control

Be Safe. Be Smart.

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