



PRUDENT PREPARATION:

What Can I do in the Event of a Mass Casualty Incident?

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TABLE OF CONTENTS

I. Introduction	3
II. Catastrophic Terrorism and Civil Liberties	5
III. Government Management of a Mass Casualty Incident	6
IV. Defining the Threat	7
V. Preparation	14
VI. Response	19
VII. Responding to Biological, Chemical, and Nuclear Incidents	24
VIII. Recovery	26
IX. Summary	30
X. Additional Resources and Reference Information	32
XI. Notes	34

I. INTRODUCTION

No one can precisely estimate the likelihood of a terrorist attack in any particular American community. Fortunately, there have been no mass casualty incidents in the U.S. since September 11, 2001, and there is a profound hope there will be no attacks in the future. However, this hope could be shattered without warning. The degree to which individuals will ignore the threat or act upon it is a personal choice.

A mass casualty incident will stress the ability of emergency responders, medical service providers, and government agencies to respond to immediate needs. They will do all they can to help you. However, they may not be able to reach you immediately or they may have to focus their efforts on those with more critical needs. Individuals may need to take active measures to help themselves, their families, and their neighbors.

It is important to prepare individuals, government officials, and public and private agencies for the consequences of catastrophic terrorism such as a biological or chemical attack. Advance planning and preparation before such an incident could lessen panic and make public and private responses more effective.

Since September 11, many people want to do something to prepare.

There is a need for consistent, well organized information available that addresses the basic question, "What Can I Do?" One should not underestimate the ability of individuals to make decisions for themselves. For example, large segments of the American public have demonstrated their increasing ability to make personal healthcare decisions for themselves.

This assumes there is access to good information to make informed choices possible.

A key component of advance planning is recognition of the benefits of personal autonomy and self-assurance. This increases an individual's tolerance for uncertainty and receptivity to appropriate government direction. Effective government leadership will improve public compliance and cooperation.

A biological attack with an agent such as smallpox is lethal and persistent, with transmissible infection to the general public. The principal means available to government officials to prevent the spread of disease are the containment of infected persons and quarantine. Since the initial reaction of most people would be to flee the immediate occurrence area, it would be very difficult for the government to impose and enforce a quarantine. The American public is accustomed to a high degree of personal autonomy and civil liberties, and it is likely that many would disregard or resist quarantine orders.

An alternate approach to a widespread quarantine is family home treatment. Indeed, it may be more beneficial for individuals as well as the wider community than a mass

exodus from affected areas be avoided. A household may be a better place for individuals than a hospital or temporary community shelter. During a bioterrorism event this could help break the disease cycle and reduce the burden on incident managers and first responders. With proper advance training and minimal supplies, individuals could monitor themselves for indications of exposure to disease and treat injuries at home. Also, anxiety decreases when there is a combination of good information coupled with familiar and stable surroundings.

The public expectation that the government will respond effectively in a crisis is high. This confidence is well-warranted; government emergency response teams at all levels have shown their effectiveness many times over in the past. However, trauma creates personal confusion, fear, mistrust, and hostility. If government action is not rapid and effective—a strong possibility in the wake of a catastrophic terrorism incident—the public may become unwilling to follow government direction. Advance planning involving both the public and government can help reduce expectation to a reasonable level and show individuals what they can do to help themselves.

Information is critical. People are vulnerable to inconsistent, conflicting messages. The public message should avoid false reassurances and provide individuals with options and alternatives that are feasible and helpful.

Advance planning could help survival odds in a major terrorist incident. To this end, we offer our members and their families a summary of available information as a brief guide to prudent preparation. Readers are advised that additional information is becoming available from government agencies.

Richard Friedman

Chair/President

II. CATASTROPHIC TERRORISM AND CIVIL LIBERTIES

The United States Constitution provides for civil liberties: due process, protection from unlawful government search and seizure. The essence of the ongoing debate is the balance to be struck in time of emergency between public welfare and protection of civil liberties. Government agencies are sensitive to this issue and they are faced with the dilemma of how to protect the public without diminishing civil liberties.

For example, in a bioterrorism incident, government agencies may attempt to contain infected individuals by concentrating medicine and supplies at specified locations. However, if this method of containment proves ineffective, law enforcement personnel may be required to take sweeping actions such as quarantine, involuntary confinement, confiscation of scarce medical supplies, access to confidential personal medical records, and restrictions on travel. There is a legitimate basis for these seemingly sweeping actions: to protect the public at large from an expanding contagion.

State public health law in Illinois and most other states authorizes public health departments to take robust action in the event of a public health emergency, including a mass casualty incident. The state governor may declare a public health emergency that would trigger sweeping action by government agencies pursuant to law.

It is essential that the public understand what constitutes a public health emergency and what actions may be taken by government agencies to protect the public.

Consider, for example, a terrorist attack involving weaponized germs at a hockey game or opera. The attack would not be immediately detected. However, assume that public health officers quickly identify the germ agent as being highly contagious. People in the auditorium who return to their respective homes would be carriers of the disease. It is likely that they would infect their family and neighbors, resulting in the spread of disease to the larger community.

Once public health officers determine that an attack has taken place, they might decide to confine people temporarily. Police officers would be stationed on site to prevent people from leaving. Some people would voluntarily cooperate; others would use their cell phones to contact their lawyers, others would try to exit by any means available. The possibility of confusion, panic, and chaos is great.

One way to avoid or diminish a deleterious result is prudent preparation resulting in an informed public who, collectively, have thought about the problem in advance and have discussed the matter with their family and friends. Ideally, the legal community would have researched the issues in advance and would provide sound advice if called upon. The reciprocal is that the public health and law enforcement communities would be prepared to understand the need for sensitivity to public reaction and the need to provide clear and immediate information and guidance.

III. GOVERNMENT MANAGEMENT OF A MASS CASUALTY INCIDENT

Management of a bioterrorism incident requires help for those directly affected, but it also calls for protection of the community at large by preventing the disease from spreading. A bioterrorism incident might effectively be managed in the following phases:

- *Investigation.* Public health and law enforcement officers would try to determine the source of the contagion as rapidly as possible. This could require quarantine or voluntary or involuntary confinement of persons infected with the disease.
- *Identification* of the disease. For example, the *bacillus anthracis*, the organism that causes anthrax, has many different strains.
- *Treatment and Prevention.* Once the disease is identified, public health departments must determine the course of treatment available, if any, and how to prevent the disease from spreading.
- *Assessment.* Public health officers must also determine the magnitude of the disease and decide whether to declare a public health emergency. If a public health emergency is declared, sweeping action may be taken that will require the cooperation of an informed public.
- *Timing.* Public health officers will work at top speed to develop and implement a plan for containment of the disease. This may require complex laboratory evaluation. False leads may occur. A correct determination will not be instantaneous.
- *Coordination.* Public health agencies, law enforcement officers, and elected government officials will have the awesome responsibility of marshalling intellectual and physical resources, coordinating independent government entities and private organizations, and managing a mass casualty event on a regional basis.
- *Inform the public:* clear and correct information regarding the nature of the incident, government action being taken, and directions to the public are basic and essential. In the early phase of a mass casualty incident, objective information may not be available. There is a narrow window between a calm environment and panic.

IV. DEFINING THE THREAT

It is important to understand the unusual circumstances associated with a terrorist attack. Should you come across situations that seem unusual or dangerous, distance yourself from potential harm and contact your local authorities (9-1-1). Common sense should guide you. Frivolous reporting will burden law enforcement agencies.

Here are some general warning signs that each individual should be alert for:

- Unusual behavior in persons, especially strangers
- Unattended packages in high risk areas
- Hazardous materials or laboratory equipment not relevant to the area
- Unscheduled spraying or abandoned spray devices
- Large numbers of people seeking medical attention for symptoms uncharacteristic for the season

A terrorist attack can be executed swiftly, and in the event of a biological or radiological attack, may remain undetected for some period of time. It is important to be aware of medical symptoms that may be the result of a bioterrorism attack in the event that an immediate physician's diagnosis is not available.

The six major types of terrorist attack are:

Biological: Smallpox, Anthrax, Plague

Chemical: Choking, blister, nerve, blood agents

Radiological: Radiation bomb (or "dirty" bomb) or non-dispersive device containing radioactive material

Explosive: Conventional bomb or other explosive device

Incendiary: Explosive designed to produce/spread fire

Nuclear: Atomic/Hydrogen Bomb or Missile

Biological

The medical symptoms of a biological attack may go undetected for days. The number of casualties may increase due to the movement of infected people. In a biological attack (smallpox, plague, anthrax), there are few preventive measures aside from vaccination. A HEPA (High Efficiency Particulate Air Filter) mask, similar to a doctor's mask, may be purchased over the counter at a pharmacy as a preventive measure. Considering the immediately undetectable nature of such an attack, a mask may be ineffective; timing would be crucial. Additionally, the mask needs to be fit for initial use and each subsequent use. The masks do not fit children and have the potential to make heart and lung conditions worse.

Smallpox

Smallpox is a serious and contagious infectious disease affecting various parts of the body. Smallpox is most contagious with the

onset of the rash. It is transmitted from person to person through respiratory droplets released from the infected individual by coughing or sneezing. Individuals may also be infected if they have direct contact with contaminated clothing, bed linen, or blankets. Smallpox can be fatal in a high percentage of cases.

Symptoms:

- High Fever
- Exhaustion
- Headache, backache, abdominal pain
- Rash (inside the mouth, pharynx, face, forearms, trunk, legs)
- Pustules (raised bumps containing pus)

Treatment

One preventive measure that can be taken for smallpox is vaccination (which may not be available to the general public). If the vaccination is not available, avoid contact with infected individuals.

Anthrax

Anthrax is a disease that can be spread in three ways: by skin contact, by ingestion, and by inhalation. Individuals can acquire anthrax by handling an item that contains anthrax spores, an infected animal, or product of an infected animal. For example, one of the anthrax incidents following September 11 involved an individual who opened an

envelope containing anthrax spores. Anthrax is not contagious. If anthrax is left untreated it can be fatal.

Symptoms:

- Raised itchy bumps with a characteristic black center
- Swollen Lymph glands
- Common cold symptoms
- Inflammation of the intestinal tract
- Nausea
- Loss of appetite
- Vomiting
- Diarrhea

Treatment

One preventive measure for anthrax is vaccination. At this time, it is not available to the general public. Antibiotics can be used to treat anthrax but they may be in short supply after a terrorist attack. Local authorities would need to make arrangements with the National Pharmaceutical Stockpile to have sufficient medical supplies delivered to the area.

Plague

Plague is a bacterial infectious disease affecting both humans and animals. Most commonly, plague is transmitted from rodents to humans by fleas. Plague can be transmitted by the release of respiratory droplets into the air and cutaneous (skin) infection. Symptoms of plague may take days to weeks to detect. Plague can be fatal if left untreated. Plague infections in humans usually occur in one of three forms: Bubonic, Pneumonic, and Septicemic.

Bubonic plague is transmitted when the bacteria infects an opening in the flesh. It is very uncommon for the bubonic plague to be transmitted from person to person.

Symptoms of the bubonic plague are:

- Swollen, painful lymph nodes (buboes)
- Fever
- Headache, muscle ache

Pneumonic plague is transmitted when the bacteria infects the lungs. It can be spread from person to person through respiratory droplets released by coughing and sneezing. Transmission can occur with face-to-face contact. Symptoms of pneumonic plague are:

- Fever
- Headache
- Weakness
- Cough (blood, watery saliva and mucus)

Septicemic plague results when the bacteria are present in the blood and begin to multiply rapidly as a complication of bubonic or pneumonic plague. Symptoms of septicemic plague are:

- Seizures
- Shock
- Confusion

Treatment

Plague can be treated early with antibiotics and vaccination.

Chemical

Chemical attacks can occur in three states: gaseous, liquid, or solid. Chemical agents can be transmitted in three ways: by skin contact, by ingestion, and by inhalation. Symptoms of a chemical attack may be detected within hours or days. With each of these agents, quantity and concentration determine severity.

Nerve agents (sarin, VX) disrupt the body's nervous system. Symptoms of nerve agents are:

- Runny nose
- Tightness in chest area
- Nausea, vomiting

Choking agents (chlorine, phosgene) attack the lungs. Symptoms of choking agents are:

- Coughing, tightness in chest area
- Rapid breathing
- Shock followed by death

Blood agents (cyanide) carry tissue-killing poisons throughout the body. Symptoms of blood agents are:

- Rapid breathing
- Violent convulsions
- Cardiac arrest

Blister agents (mustard gas) attack skin and eyes and cause pain and skin blistering. Symptoms of blister agents are:

- Irritation of eyes, throat, and lungs
- Redness, blistering of skin
- Skin ulcers
- Incapacitation, death

Other indicators of a chemical attack are:

- Colored residue on surfaces
- Dead foliage
- Strong odor
- Dead insects/animals

Treatment

Antidotes to reverse or weaken the effect of a chemical agent exist for certain chemical agents. However, there is no vaccination available. An individual can protect his/her body by avoiding a contaminated area. If near a contaminated area, protect the skin and cover the eyes with eye protection (tight-fitting goggles). Once away from the area, remove clothing and other articles and place them in a plastic garbage bag for safe disposal. Wash with soap and water immediately.

Radiological

Radiological attacks spread radioactive material that can contaminate the nearby area. Radioactive material can affect people if they come into contact with, ingest, or inhale it. Radiological attacks are difficult to detect because the onset of the symptoms may take days to weeks and radiological materials are generally odorless and colorless. The attack may occur by placing a non-dispersive device containing a low-level of radioactive material in a public location or by detonating a "dirty bomb" containing highly toxic nuclear material such as uranium and plutonium. If left untreated, radiation sickness can be fatal.

Symptoms:

- Skin reddening (burns)
- Nausea
- Vomiting

Treatment

There are two health conditions that can result from exposure to radioactive material: radiation sickness and an increased likelihood of developing cancer in the future. Radiation sickness can be treated by a physician. In any case, the following measures can be taken:

- Avoid the contaminated area by increasing the distance between you and the source of radiation.
- If you have been exposed, wash and change your clothes; wash your hair and skin with soap and water.
- Do not apply ointment to burns.
- Place clothing and articles in a plastic garbage bag for safe disposal.
- If you are outdoors, breathe through a cloth or use a filter mask to limit inhalation.
- If you are indoors, close all windows and doors.
- Do not eat or drink anything that may be contaminated with radioactive material.

An area (home, office, school, hospital) contaminated with radioactive material may remain uninhabitable for an extended period of time. Check with local authorities before returning to an area contaminated with radioactive material.

Explosive

A conventional explosive such as dynamite kills or injures through the initial blast. A “dirty bomb” is a conventional bomb packaged with radioactive material. A dirty bomb kills or injures immediately through the initial blast of the conventional explosive and later by radiation and contamination. The number of deaths and injuries from a conventional explosive or a dirty bomb explosion depend upon the sophistication of the bomb and atmospheric conditions.

Incendiary

Incendiary devices range from simple (a Molotov cocktail constructed of a bottle, rag, gasoline, and match) to sophisticated (napalm). Incendiary devices can cause loss of life and extensive property damage. Treat an incendiary attack as a major fire and get as far away as possible from the source.

Nuclear

A nuclear bomb is a weapon of mass destruction (atom bomb, hydrogen bomb). Nuclear bombs involve a complex nuclear fission or fusion reaction. The massive destruction caused by a nuclear bomb is the result of the initial blast or shock, the heat that irradiates immediately after the blast, and the residual radiation emitted from the explosion. The loss of lives and the destruction and contamination caused by a nuclear bomb would be devastating.

V. PREPARATION

There are various ways to prepare for a mass casualty incident. For example, first aid classes and regular evacuation drills could make the difference between incurring minimal and serious injuries—even life and death. As you actively consider taking precautions, you may discover other like-minded individuals with whom you can cooperate to provide information to friends and neighbors.

Develop a personal disaster plan. Some basic things to be included in this plan are:

- Determination of multiple evacuation routes out of your home and office.
- Identification of two meeting places (one near home, one that is distant from home in case that area is affected) with friends and loved ones in case of separation.
- Designation of an emergency contact person to assist in the process of notifying friends and family.
- Recognition that phone lines may be tied up.
- Recognition that computers and other electronic equipment may be inaccessible.

Create a personal disaster kit. Some suggestions for what to pack in a disaster kit:

- A large plastic trash bin with handles for transportation to store your supplies
- Garbage bags
- Supply of drinking water (1 gallon/per day, per person, for three days)
- Supply of non perishable food that does not require cooking (a three day supply per person)
- Blankets
- Household chlorine bleach
- A change of clothing, including sturdy boots
- First aid kit
- Medicine dropper
- Flashlight w/spare batteries
- Battery powered radio w/spare batteries
- Essential medications/prescriptions
- Extra pair of eyeglasses/contacts/contact solution
- Local maps
- Sanitation goods (toilet paper, personal hygiene products, feminine products)
- Basic tools (tape, compass, pen/pencil, wrench, pliers, hammer, needle and thread, duct tape)
- Non-electric can opener

- Inexpensive filter mask
- Eye protection (goggles, safety glasses)
- Gloves (disposable/rubber)
- Car/house keys
- Whistle
- Child care items: diapers, baby wipes, formula, bottles
- Pet care items (food, ID tags, litter, veterinarian records)
- Photocopies of important personal/financial documents (driver's license, passport, will, stock certificates, birth and marriage certificates, tax returns, insurance policies, proof of residence, social security)
- Cash
- List of telephone numbers of friends, family, business associates, banks, physicians

Healthcare

On September 11 travel was disrupted. People were stranded for several days and were unable to get back to their jobs and homes. Healthcare needs present special problems.

- Consider before you travel any specific medical condition that requires prolonged or special care.
- If you are overseas, identify the nearest doctor, medical facility, or US embassy. Check with your healthcare insurance carrier to determine coverage in overseas areas and what procedures are required for authorization.
- If you are a Medicare/Medicaid or other government program beneficiary, check to determine coverage and benefits.
- Carry sufficient financial means (cash, credit cards, travelers' checks) to cover pre-pays, co-pays, deductibles, or, in extreme circumstances, the whole bill.
- Carry insurance cards with you.

If you are at home, consider your personal medical and physical condition. Consult with your private physician. If you don't have a private physician, identify one or a physicians' group in your community. Free clinics are an alternative if a private physician or group is not an option.

Medications-Prescriptions, Supplies, and Over the Counter Medications

If you require prescription medications, particularly anti-depressants, cardiac, high blood pressure, and other critical medicine, ensure that you have enough. What do you do if you do not have a sufficient supply? Where can you get a supply? What would you do if you could not get medications for a week or more?

- Keep a stock of normally used over the counter medications in your home or, if you are traveling, keep these things in your luggage or briefcase. Items should be those that you would normally use: diarrhea, headache, cold medicine, nasal sprays, eye drops, skin lotions, burn medications, sore throat remedies, sinus medications, and aspirin (or your preferred substitute).
- Use of other people's prescribed medications is inadvisable.
- If you are used to mildly addictive substances, such as caffeine, be prepared to have those food substances available. Headaches and other symptoms may result from deprivation, which can aggravate stressful situations.
- Ensure that you or your family members have necessary medical supplies for diabetes, incontinence, low blood pressure, etc.
- If you use eyeglasses or contact lenses, carry extra sets and the supplies to go with them.

Communication

Plan on being out of contact with family and friends after an event, at least temporarily. On September 11, 2001, in New York City, phone lines, cellular phones, and the Internet were jammed and inaccessible. However, out of state phone calls worked best and internet access via DSL: lines were not interrupted.

- Discuss and plan with your family, friends, and others what alternative means of communication might be, what alternate locations for regrouping might be, and over what period of time.
- Learn now what emergency radio channels are available in your area from which you might get important information until normal communication is restored

Medical Alert Identification

If you have important medical, dental or physical conditions that require wearing medical alert identification, ensure that all information is current and that you wear identification as instructed

Dependents

Ensure that people you are responsible for are taken care of. Elderly people, children, or those with special needs require continuing care during your absence.

- Ensure that an alternate caregiver is available in your absence.
- Ensure that someone is monitoring his or her meals, water, and environmental conditions. Make these preparations in advance rather than relying on communication by phone, E-mail, or other modes of communication during emergencies. Temperatures in homes during periods of power outages can be deadly, hot or cold. People who are elderly, ill, handicapped or otherwise unable to care for themselves may not realize that they are becoming dehydrated, ill, or experiencing excessively cold or hot temperatures that can kill them.
- If you have left children or minors with friends or relatives, ensure that custodians are able to authorize routine care if such becomes necessary. This commonly overlooked requirement causes lost time and sustained discomfort. Check with a doctor or the local hospital before the need arises.
- If you have relatives in nursing homes, check with the nursing home administrator to determine the need for special authorizations, consents, or orders and alternative points of contact if you are out of communication.
- Consider continuing services such as Meals on Wheels, which may be disrupted in an emergency situation. Keep the phone number of the agency providing this service handy.
- Plan on keeping some easily prepared meals in that person's freezer.

Schools

Parents may wish to contact schools (and School Boards) and daycare centers attended by their children to determine the status of planning for a mass casualty incident, and how school children and their parents will receive appropriate guidance.

The following steps can be taken to ensure better communication between you, your child, and the school:

- Leave emergency contact numbers with the school administration office.
- Give your child a card with telephone numbers at which you can be reached throughout the day.
- Discuss the school's emergency plan with your child.
- Be familiar with your child's extracurricular activities (time, date, location).

Pets and Other Animals

Pets require many of the considerations above, plus special ones. The importance of pets when human lives are at stake may be overlooked. Keep a disaster preparedness kit readily available for your pets. This kit should include:

- Extra collar with tags
- Extra copy of pet's medical records
- Water/food bowl
- Emergency tag with contact information. Include your information, a family member/friend's, veterinarian's.
- Toy, treats, food, leash, muzzle, brush
- Veterinarian Emergency release form
- Notify an alternate caregiver of your absence. Make sure that your pet's identification information is up-to-date.
- Photos of your pet (in case your pet is lost)

VI. RESPONSE

Terrorist attacks are executed to inflict personal and structural harm to disorient the public and spread fear. It is critical to know how to respond to immediate and long-term dangers.

The First Step

Taking the first step can help start you down the path of safety and security.

Space

Attempt to assess your proximity to the attack. If danger threatens, try to get as far away as necessary using planned evacuation routes, etc. Do not use short cuts because passage may be blocked.

Routine

The goal is to survive a mass casualty incident and its immediate aftermath and return to daily routine as soon as possible. Disruption of services you rely on is likely.

Time

Attempt to assess the length of the attack and prioritize your actions in accordance with that assessment. Should you be unable to leave an attack area immediately, attempt to minimize the time that you are in the hazardous area.

Exposure

Attempt to assess your susceptibility to and defenses from the attack's effects. Respond by taking available precautions to limit the degree of exposure to harm. This step is especially important if space or time considerations are unavailable.

Person

Attempt to assess your condition. Try at all times to remain calm and optimistic. Conserve your energy. Detect any injuries and address them according to their nature and extent. Attempt to determine if you are able to help others and what inherent risks you might undertake should you decide to so.

Water shortage

Your home hot water tank, ice cubes, and water from streams, lakes, and rivers can serve as additional sources of water. Sterilize any water that is taken from a source that may be unsanitary. Boiling the water or treating the water with a small amount of household chlorine bleach (5 drops per gallon) may be necessary. If chlorine bleach is used as a sterilizer, make sure the water does not smell like chlorine before ingesting it.

Store water in a plastic container such as a soda bottle. A milk jug will decompose and a glass bottle can break. Change stored water every six months.

Fire/Debris

If confronted with a fire, distance yourself while staying low to the floor to avoid smoke and heat. Cover your nose and mouth with a wet cloth to avoid the inhalation of smoke or toxic fumes. Cover your nose with a dry cloth to avoid inhalation of particulates in the air after an explosion.

If trapped in debris, tap on a pipe or wall to attract attention of rescuers or use a whistle if available. Avoid movement or prolonged shouting since both actions can interfere with breathing.

Evacuation

In case of evacuation, remain calm, move, and have your light-weight traveling disaster kit with you. Wear full length protective clothing. Utilize evacuation routes you have tested which are government/business approved, unless these options are unavailable.

Ensure that your business has an emergency evacuation plan that is regularly practiced including an emergency evacuation kit for each employee.

Crown Safety

The recent events involving Chicago and Rhode Island nightclubs (panic and fire related events, respectively) suggest precautions to be taken concerning crowd safety. Personal safety principles in a large audience venue or in a mass casualty incident are similar.

Source: Dateline NBC, accessible via the web at www.msnbc.com.

Preparation

- 1) If you' re attending a ticketed event, like a concert or game, leave a copy of your ticket and details with someone at home. If an incident does occur, they' ll know how to locate you to make sure you' re ok.
- 2) Don' t plan on going to a crowded event alone. You should always have at least one other person looking out for you. A helping hand in a crush or a stampede can mean the difference between life and death if you'v e fallen or become injured.
- 3) Being in the middle of an active crowd can get hot, so drink plenty of fluids and stay hydrated. This can prevent overheating and passing out if things get too close for comfort.

Clothing/ Accessories

- 1) Experts suggest wearing something bright and recognizable so friends and family can better locate you.
- 2) It' s also smart to bring your ID, special medical information, and if you have one, a cell phone.
- 3) Leave behind dangerous accessories like spikes and chains, as well as long jewelry and purses which can become tangled and cause injuries.
- 4) Wear comfortable footwear, and make sure the laces are tied so you don' t trip and fall. If you lose your shoes in a crush or stampede, don' t stop to get them. Getting knocked down is the last thing you want to happen.

The Venue

- 1) When you get to a venue, keep track of where the exits are located. In a stampede, the closest exit might not always be the best one to use.
- 2) Be aware of your surroundings like the location of first aid stations, the presence of security workers, how the crowd is behaving, and what the weather is like.
- 3) Be careful of what you' re standing on. Wet, muddy and uneven ground can be slippery or hazardous in a moving crowd. Broken bottles, cans, and other debris are also dangerous.
- 4) Be careful walking down stairs, escalators, and hills. These are places where the momentum of a moving crowd can change, causing you to trip and fall – and be trampled.
- 5) Don' t stand near or climb on temporary structures, which could collapse under too much weight.
- 6) If you can help it, don' t be the first in line waiting for the doors to open. This spot can be dangerous if there' s a delay and an anxious crowd starts to push forward.

Moving Crowds

- 1) A surge or stampede generates an incredible amount of energy. Experts compare it to a locomotive: once it gets going, it' s hard to stop. If you find yourself in the middle don' t stand still or sit down – you can easily get trampled. Keep your legs moving in the direction of the crowd, and try getting to the outside where the flow is weaker.
- 2) The last thing you want to do is fall. But if you do, get up quickly. If you can' t, get someone to pull you back up. This is when having a friend nearby can be a lifesaver.

3) If you can't get up, keep moving by crawling in the direction of the crowd. If that's not possible, your last resort is to ball up and cover your head.

4) Sometimes, high energy crowds create an ebb and flow of people that could sweep you off your feet. Fighting against these "waves" will probably knock you over, so keep your legs moving, try not to fall, and take advantage of any space that may open up in front of you. If you're lucky, you may be able to work yourself to the side where the crowd is weaker.

5) The worst place in a surge is at the very front of the crowd against an immovable object, like a fence or stage barricade. It may be tempting to make your way up close to where the action is on stage. But it's smart to stay away. Crowd pressure here can build up quickly and be deadly. People in back will have no idea what's happening up front.

Sporting Events

1) Some of the worst crowd tragedies happen at sporting events, where overselling, poor management, frenzied fans, and festival seating all create problems.

2) Experts say when you go to a game, watch from a seat, not the aisles or walkways where foot traffic flows. And keep away from fences, boards, or barricades where there's no escape if fans behind try to rush the field or court.

3) Be aware of what's going on around you, like crowd behavior, what the score is, and how much time is remaining. It might be smart to leave a few minutes early to avoid the reaction of frenzied fans.

Festival Seating Hazards/ Children

1) Most crowd accidents happen in "standing room only" or festival style events, where there are no assigned seats. Problems like early arrivals, rushing in to claim space, crushes at gates and stage areas, and trampling are far more common.

2) If you're bringing small children, it's best to avoid this type of seating all together, so check your tickets beforehand. If possible, try and upgrade your ticket to general admission or reserved seating. It's usually a much safer bet.

Emergency Care

If you believe that you have an emergency condition that requires medical care, go to a hospital or dial 9-1-1. Be aware that local hospitals may be stressed and unable to examine or treat you.

- Find an alternate hospital or healthcare facility to which you can go for care. Check transportation routes to these facilities. Highways and city streets and public transportation may be extremely congested during critical events.
- Check with your health insurance carrier or with your employer's human resource department about how to obtain care from alternate sources wherever you may be traveling. Some carriers require pre-approval before a beneficiary obtains non-approved care from a provider. However, in emergency situations, get the care as soon as possible while someone else (a family member, companion, for example) is managing the administrative details.
- Ensure that all your health insurance identification papers (or copies) are carried with you and are current. Each family member should have these papers with him or her.

VII. RESPONDING TO BIOLOGICAL, CHEMICAL AND NUCLEAR INCIDENTS

Here are a few short and longer-term biological, chemical, radiological, and nuclear specific suggested responses:

Sheltering in Place

Sheltering in place is a temporary solution. Should orders be given to quarantine an area or “shelter in place” until a contaminant or fallout can be contained, go with your supplies to an area in your home or other living space that you can seal off. Preferably this room will have toilet facilities and few windows or doors. Close, shut, and tape over and around all ventilation shafts, doors, and windows. Do not exit or break the seal you have created until instructed to do so by proper authorities signaling the all clear.

For further guidance, consult the following website:

<http://cseppweb-emc.ornl.gov/SIP/SIP.htm>

Decontamination

Trained professionals should conduct the decontamination process at designated decontamination sites. (Listen to local radio and television stations to find out information on the location of these sites.) However, emergency responders may be overwhelmed and unable to treat you immediately. Because of disruptions, you may not be able to reach a treatment station for an extended period of time.

- If you suspect that you have been exposed and experience unusual symptoms, or if your companions notice that you are experiencing difficulties or exhibiting abnormal behavior, remove your clothing and wash immediately with water. Place all articles of clothing in a garbage bag for disposal.
- Become familiar with symptoms of chemical, biological, radiological or other contaminants. Medical sources can be located on the internet via search engines to find information on common symptoms and recommended treatment actions. Your public health office can provide you with sources of information on common symptoms.
- If you are sheltering in your home or office, keep a guide available that describes symptoms, palliatives, treatments, and help resources.
- If you believe that you have been exposed to any chemical or biological agents, be prepared to report them to your nearest medical facility. Accidental acts can expose people to fuels, gases, and aerosols. If the agent is identifiable by labels, report this information to your nearest emergency management agency or physician. Dialing 9-1-1 is advisable if the identified agents are toxic or harmful.

Fatalities

In the aftermath of September 11th, average citizens were confronted with tasks they never thought they would have to undertake. In the case of a mass casualty incident:

- Find out as much information as possible about what has happened and seek out the best available advice for how to deal with fatalities.
- Prepare a list of survivors, a list of those individuals unaccounted for, and a list of fatalities.
- Depending upon directions given by the authorities, you may have to find a location to serve as a temporary mortuary.
- If the attack is chemical, radiological, or biological, change your own clothing and avoid contact with the skin or clothing of fatalities.

VIII. RECOVERY

Re-establishing Routine

The Federal Emergency Management Agency is tasked to provide food, clothing, temporary housing, and counseling assistance for all “federally declared disaster areas”. Other local, state, and federal emergency response teams may be on site to provide requisite medical assessments and temporary assistance.

Once you are out of danger, in sufficient health, and have a place to operate from, putting the pieces back together in the wake of disaster can be broken down into five steps.

1. **Conduct a post-disaster inventory.** List all items and their condition. Complement your list with video, photographs, and other sources of documentation for insurance reimbursement purposes.
2. **Reproduce your records** (if need be, reacquire records if possible). Gather and organize insurance policies, bank accounts, and previous inventories that you stored in your disaster kit or other safe location. Otherwise, replicate them from appropriate agencies.
3. **Notify all creditors and employers of your situation.** If your job site is operating, determine whether you can get an advance salary payment, if needed.
4. **File insurance claims.** This should be done with both your private insurance carrier and with FEMA in order to receive fair and prompt reimbursement.
5. **Obtain claims, loans, grants, and any entitled relief victim funds to assist with your rebuilding process.** Low interest loans and grants are available to disaster victims in addition to any insurance claims you may receive. Disaster relief funds may also be available.
6. **Cash.** In the event of a mass casualty incident, the usual methods of replenishing your cash supply may be disrupted temporarily—access to ATM’s and banks may be diminished. You may wish to consider having a bit more cash available on your person or in a secure

Coping with Disaster

A terrorism attack can cause great psychological and physical trauma. The loss or injury of friends and loved ones or the stress of an attack can cause emotional harm. Understanding your feelings is as much part of the recovery process as rebuilding your home and finances. The National Center for Post-Traumatic Stress Disorder recommends several things that you can do:

- Spend time with other people.
- Talk about how you are feeling.
- Get back to your everyday routine as soon as possible.
- Take time to grieve.
- Ask for support from friends and family.
- Eat well and take time to exercise.
- Get enough sleep.
- Find enjoyable things to do.

Professional assistance is available for those who find themselves unable to cope with events on their own. Following are suggested places to start should you feel that you or someone else needs further help.

- National Institute for Mental Health
www.nimh.nih.gov
- American Psychological Association
www.apa.org
- National Association of Social Workers
www.naswdc.org

Child and Adolescent Response

Children, it is often said, are not just small adults. Their capacity to react optimally to stressful situations is obviously dependent on their age, developmental status, and, of course, the degree to which their caretakers, usually parents, are able to nurture them through the crisis. While no formula will apply perfectly to every child, the following recommendations may assist in planning for your children's well-being in the aftermath of a terrorist attack.

Pediatric Vulnerabilities and Potential Remedies

Physiological Differences

Small children, especially infants, have higher metabolic rates, breathe relatively more air per minute for their body weight, and have a larger relative skin surface for weight. These factors translate into increased susceptibility to airborne particles or chemicals, increased risk of rapid dehydration, and increased risk of hypothermia (low body temperature), all

of which can be life-threatening. Several responses may mitigate some of these differences.

Children should be among the first victims to be sheltered and decontaminated, if possible. Gas masks resulted in several tragic child suffocations during Scud missile attacks on Israel during the Gulf War because they were ill-fitted for children. Currently, the home use of child-sized gas masks is not recommended.

Water used to wash contaminated small children should be warm, as you would use for a baby's bath.

Ill children with decreased feeding and/or vomiting or diarrhea must be encouraged to drink small volumes of fluid frequently, watched carefully for signs of dehydration, and may require earlier institution of intravenous fluids.

Developmental Factors

Young children have less capacity to escape attack or take evasive actions without parental guidance. Planning ahead for parental surrogates or shared child care in the event of crisis may be crucial for young children's survival after an attack.

Psychological Factors

Children will likely have fewer coping skills if a loved one is injured or killed, and may experience greater anxiety over reported incidents (even hoaxes) and media coverage. Children and adolescents may manifest this anxiety in subtle ways for which parents will need to be alert. Younger children may become more clingy, less playful, or regress developmentally (thumb-sucking or bed-wetting). School age children and adolescents should be monitored for disturbed sleep, fatigue, decreased pleasure in usual activities, isolation from former friends, decline in school performance, and new onset substance abuse.

Parents may be able to mitigate some of this anxiety and post-traumatic stress with some common sense approaches. These might include:

- Communicating with children, as much as possible, that they are safe. Indicate willingness to discuss their concerns and fears.
- Avoiding repetitive exposure to TV coverage of traumatic incidents, especially by young children watching alone.
- Professional counseling for older children with evidence of significant stress response may be needed.

Community Response Capabilities

Emergency medical services and hospital bed capacity may be particularly stressed by a large influx of pediatric patients. Ordinary referral patterns (transfer of critically ill or injured children from community hospitals to children's hospitals) may be limited or inoperative.

Individual parents may feel that they have little to offer in minimizing these problems, but together they can advocate on a community-wide basis for robust planning for pediatric patients in the event of a tragic incident. Parents can raise questions about adequacy of pediatric preparedness with their physicians, local hospitals, regional pediatric society, and health departments. Such advocacy would also help address other scenarios such as natural disasters, infectious disease epidemics, or large-scale accidents (such as a school bus crash) involving multiple children.

Additional Resources

American Academy of Pediatrics

www.aap.org/advocacy/releases/disastercomm.htm

American Academy of Child and Adolescent Pediatrics

www.aacap.org/publications/facts-fam/disaster.htm

IX. SUMMARY

Things you should understand about a mass casualty incident:

- **DO** understand the context of a mass casualty incident; patterns of daily life, including civil liberties, will be temporarily disrupted.
- **DO** understand that government agencies and public service companies will with be stressed.
- **DO** understand that in an emergency situation you are primarily responsible for your well-being.
- **DO** understand that preparation and education will better equip you to deal with the effects of a mass casualty incident.

Things you can do to prepare for a mass casualty incident:

- **DO** create a personal disaster kit (*See [Preparation](#)*)
- **DO** create a family communication plan.
- **DO** learn about the different types of terrorist attacks.
- **DO** learn first aid and CPR.
- **DO** contact your local school board to determine the school's mass casualty incident emergency plan.
- **DO** assemble an animal evacuation and first aid kit (*See [Preparation: Pets and other Animals](#)*).
- **DO** keep your gas tank at least half full. Gasoline may not be available for several days. You cannot run the car's accessories long without the gas to start the engine and re-charge the battery. Remember that a filled gas container stored in a car is a potential bomb.

Things you should NOT do during a mass casualty incident:

- **DO NOT** panic. Remain calm and follow the directions given by authorities.
- **DO NOT** converge on the site of the event.
- **DO NOT** evacuate a location if advised to shelter in place.
- **DO NOT** evacuate downwind of the area of the disaster.
- **DO NOT** let modesty interfere with the decontamination of your body.
- **DO NOT** eat or drink anything that is potentially contaminated.

Things you can do following a mass casualty incident:

- **DO** provide standard first aid assistance to those in need of help.
- **DO** contact your local disaster relief service if you need temporary housing, food, or medicines.
- **DO** contact local authorities to reconnect your utilities.
- **DO** seek monitoring and decontamination. Realize that washing with soap and water and changing clothing will remove most external (chemical or radiological) contamination.

- **DO** keep contaminated clothing and other items in a plastic bag for disposal.
- **DO** make an inventory of damaged items for your insurance before you throw items away.
- **DO** notify insurance and mortgage companies.
- **DO** have enough cash on hand for a few days.
- **DO** listen to the radio, television, read local newspapers, and contact the local authorities to find out as much information as possible about what is happening.
- **DO** try to minimize the use of the telephone. Consider the volume of incoming telephone calls authorities will be receiving.
- **DO** prepare a list of names of survivors, those unaccounted for, and fatalities. Remove contaminated clothing and other items from the deceased, place them in garbage bags for disposal.

X. ADDITIONAL RESOURCES AND REFERENCE INFORMATION

Books

Germs: Biological Weapons and America's Secret War

Broad, William, Stephen Engelberg, and Judith Miller. Simon & Schuster. New York, 2001.

Are You Ready? A Guide to Citizen Preparedness. Federal Emergency Management Agency. September, 2002. (available on website: www.fema.gov)

When Every Moment Counts: What You Need To Know About Bioterrorism from the Senate's Only Doctor

Frist, Bill, Senator, M.D. Rowman & Littlefield Publishers, Inc: Maryland, 2002.

Facing the Unexpected: Disaster Preparedness and Response in the United States.

Lindell, Michael, Kathleen Tierney and Russell W. Perry. John Henry Press: 2001.

21st Century Complete Guide to Bioterrorism, Biological and Chemical Weapons, Germs and Germ Warfare, Nuclear and Radiation Terrorism - Military Manuals and Federal Documents with Practical Emergency Plans, Protective Measures, Medical Treatment and Survival Information. (CD-ROM)

U.S. Government: September, 2001.

First Responder Chem-Bio Handbook

Venzke, Ben N. (Editor). Tempest Publishing: Virginia, 2002.

Websites

American Red Cross

www.redcross.org

American Veterinary Association

www.avma.org

Centers for Disease Control and Prevention

www.bt.cdc.gov

Center for Civilian Biodefense Studies

www.hopkins-biodefense.org

Citizen Corps

www.citizencorps.gov

Department of Homeland Security

www.ready.gov

www.dhs.gov

Federal Emergency Management Agency
www.fema.gov

Illinois Homeland Security
www.Illinois.gov/security/athome.cfm

Local Emergency Planning Committees
<http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/index.html>

Medical NBC Online
www.nbc-med.org

Shelter in Place
<http://cseppweb-emc.ornl.gov/SIP/SIP.htm>

U.S. Department of Health & Human Services Office of
Emergency Preparedness
<http://ndms.dhhs.gov>

United States Postal Service
www.usps.com/news/2002/epp/emerpplan.pdf

Research

National Strategy Forum Staff (www.nationalstrategy.com)

Fred M. Henretig, MD, Medical Director, Poison Control Center, Philadelphia

John A. Williams, PhD, Loyola University-Chicago <http://homepages.luc.edu/~jwillia>

Major General Michael K. Wyrick (USAF Ret.), Consultant, Emergency
Healthcare Preparedness, Virginia

XI. NOTES