

What You Should Know About Biological Terrorism

Biological terrorism is the using of biological agents to wreak physical and psychological damage on an adversary's entire population.

Bioterrorism may be inflicted using bacteria such as Anthrax, viruses such as Smallpox, toxins such as Ricin, and others. Typically, these agents are deliberately made into weapons by converting them to an aerosol for airborne delivery. As the invisible biological agent is inhaled into the lungs, illness or death may follow, but this varies widely with the type of agent. Children may be at particular risk from biological terrorism.

A biological attack may be overt, with the terrorist announcing the release, such as happened in the Anthrax attack in the fall of 2001, or it may be covert, where the attack only becomes clear after people become ill and seek care from their doctors or emergency services.

A variety of factors affect the physical impact of a biological attack. Can the agent easily be "weaponized"? Is the agent highly lethal, with large numbers of individuals likely to die after contracting the illness? Can the illness spread rapidly or is it highly contagious? Has the population been - or could it quickly be - vaccinated against the agent? Are there effective treatments, and are they readily available? Currently the US Department of Health and Human Services has identified a limited number of biological agents on its "A List" of highest concern, based on ease of transmission, dissemination, and mortality. These are: Smallpox, Anthrax, Plague, Botulism, Tularemia, Filoviruses (Ebola, Marburg, etc.), and Arenaviruses (Lassa, Junin, RF).

In addition to inflicting injuries to victims, another goal of biological terrorism is to attack the basic sense of well being of a population. However, the goals of terrorists are only met if they succeed in undermining a nation's confidence in its ability to protect its citizens.

Our state, local, and federal agencies are making strides toward protecting us from the threat of biological terrorism. The Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Public Law 107-188 involves the largest investment in public health infrastructure in our history, giving over 2.5 billion dollars to states and hospitals to increase their capacity to be prepared for and respond to an act of biological terrorism.

Readiness: Before an Act of Biological Terrorism

Although there is no way to predict such an act of bioterrorism, there are some things to keep in mind about all possible acts of terrorism and disaster:

- Children's sense of being protected comes from a predictable daily routine and the consistent presence of caretakers.
- Be cautious and be prepared to limit your child's exposure to repetitive and frightening media images that are broadcast during a disaster. While you may gain important information from watching television, you also risk needlessly traumatizing your child.
- Consider having a [Family Preparedness Plan](#) similar to what you would have if you live in an area prone to [earthquakes](#), [tornadoes](#), [hurricanes](#), [seasonal wildfires](#), or other natural disasters.
- Your Family Preparedness Plan should include:
 - An [Emergency Supply Kit](#).
 - A Family Communications Plan. Make and carry a [Family Preparedness Wallet Card](#) so that key phone numbers are handy. Make sure your child knows names and phone numbers of local and long distance family or friends
- All family members should be familiar with the emergency plan for their child's school emergency after school program.

In the actual event of a warning of an act of biological terrorism, parents and families can get information from the Centers for Disease Control and Prevention at www.bt.cdc.gov.

Response: During an Act of Biological Terrorism

A biological attack may not have a distinct beginning and ending. Most likely there will not be sirens or police or fire trucks or a clearly identified "scene." A covert release of a biological weapon may not be detected until people start to become sick and seek care. Some biological weapons could have secondary effects, spreading far beyond the release point and extending for a considerable period of time. Some areas might start to recover while others are still in their initial response.

At Home

Once you suspect that you or your family members have been exposed to a biological agent:

- Get information to answer the key question, "How at risk am I or is my family?" by contacting the Centers for Disease Control and Prevention at www.bt.cdc.gov, your primary care provider, and/or your local and state departments of public health.
- Use these sources to assess the risk to you, your family, and your community

by finding out:

- The name of the specific biological agent (Anthrax, Smallpox, etc.). Be prepared for possible delays in the identification or determination of the exact biological agent.
 - How the agent is being transmitted to the population.
 - Where and when the attack occurred.
 - How exposure to the agent occurs and if the agent is contagious.
 - How rapidly might it spread.
 - How one can protect self and family.
 - What are specific recommendations of your community's Department of Public Health.
 - What are procedures the government is planning to use, such as mass vaccination, prevention or prophylaxis, shelter in place, quarantine/isolation, or evacuation.
- Follow-through on public health recommendations.
 - Limit children's viewing of television without the presence of an adult who can interpret information and calmly answer questions. Adults should also guard against excessive media exposure, as reports about the risks can be confusing and anxiety provoking.
 - Use the information you gain from your research to answer your children's questions. Remember that children need varying amounts of information depending upon their age. Take time to talk calmly and openly when they show interest or concern.
 - Listen to your younger children's worries, but give them just enough information to answer their questions. Do not overload them with long answers, but let them know they can ask whenever they wish.
 - School age children will need you to correct misinformation they've heard at school and from friends. Also they will be reassured by knowing their school's safety plans.
 - Adolescents will have a more sophisticated understanding of terrorist threats, but might not accurately assess the real dangers and so might be hesitant to compromise social activities. Older teenagers might wonder about their potential involvement in the military.
 - Activate your personal support system: talk to your neighbors, friends, and religious or civic leaders. Taking care of yourself will enable you to take better care of your loved ones.
 - Remember: in the case of a biological attack, you must be exposed to become ill. No exposure, no illness.

At School

A biological attack could occur while your child is at school. Become familiar with your school's emergency plan and resources. School and after school program plans should include:

- How and to where the children might be evacuated.
- How reunification or sheltering in place will occur.
- Where and how children should be picked up.

- What are the school's steps for seeking medical care.
- What are the provisions for the children with special needs.

Recovery: After a Biological Attack

A biological attack most likely will not have a clear beginning or ending. New cases of exposure may occur while others are in recovery. The timing will depend upon the extent of the area exposed to the agent, the lethality of the agent, the ease with which the illness spreads, and the availability and effectiveness of treatment. What will linger - beyond the physical results of bioterrorism - will be the psychological impact: the undermining of our national confidence and the continuing fear of another attack. Individuals will feel more helpless to protect loved ones. Children will question whether their parents and teachers can keep them safe.

After an act of terrorism or natural disaster, most families can be expected to recover over time, particularly with the support of family, friends, and organizations. The length of recovery will depend upon how frightening the experience was, whether evacuation from home was necessary, and the extent of the injury or loss. Some families will return to their normal routine fairly quickly, while others will have to contend with ongoing medical issues, the loss of a loved one, or other results of the attack.

Children's functioning will be influenced by how their parents and other caregivers cope during and after the event. Children often turn to adults for information, comfort, and help. Parents and teachers should try to remain calm, answer children's questions honestly, and respond as best they can to requests.

In the days following an act of biological terrorism, continue to monitor yourself and your family. If anyone appears to have persistent fears, sadness, anger, irritability, or acting-out behaviors, seek an evaluation from a mental health professional with expertise in posttraumatic stress.

Children's Reactions

Children react differently, during and after an act of terrorism or other crisis, depending on their age, developmental level, and prior experiences. Some will respond by withdrawing, while others will have angry outbursts. Still others will become agitated or irritable. Parents should attempt to remain sensitive to each child's reactions. The following are typical reactions children might exhibit during any disaster:

- Fear and worry about their safety or the safety of others, including pets
- Fear of separation from family members
- Clinging to parents, siblings, or teachers
- Worry that another attack will come
- Increase in activity level
- Decrease in concentration and attention

- Withdrawal from others
- Angry outbursts or tantrums
- Aggression to parents, siblings, or friends
- Increase in physical complaints, such as headaches and stomachaches
- Change in school performance
- Long-lasting focus on the attack, such as talking repeatedly about it or acting out the event in play
- Changes in sleep patterns
- Changes in appetite
- Lack of interest in usual activities, even playing with friends
- Regressive behaviors, such as baby-talk, bedwetting, or tantrums
- Increase in risky behaviors for teens, such as drinking alcohol, using substances, harming themselves, or engaging in dangerous activities

What You Can Do to Help Your Child

Parents should spend time talking to their children, letting them know that it is okay to ask questions and to share their worries. They should answer questions briefly and honestly and be sure to ask their children for their opinions and ideas. Issues may come up more than once and parents should remain patient and open to answering the same questions again. Although it will be hard finding time to have these conversations, parents can use regular family mealtimes or bedtimes to talk. They can let children know what is happening in the family, at their school, and in the community. For younger children, after talking about the attack, parents might read a favorite story or have a relaxing family activity to help them feel more safe and calm.

To help children's recovery, parents should:

- Be a role model. Try to remain calm, so your child can learn from you how to handle stressful situations.
- Monitor adult conversations. Be aware of what adults are saying about the attack. Children may misinterpret what they hear and be unnecessarily frightened.
- Limit media exposure. Protect your child from graphic images of the attack, including those on television, on the internet, and in the newspaper.
- Reassure children they are safe. You may need to repeat this frequently, even weeks after the attack. Spend extra time with them, playing games outside, reading together indoors, or just cuddling. Be sure to tell them you love them.
- Calm worries about their friends' safety. Reassure your children that their friends' parents are taking care of them, just the way they are being taken care of by you.
- Tell children about community recovery. Reassure children that things are being done to help those who got sick. Tell them that the government is taking steps to make sure people are protected against future attacks.
- Take care of your children's health. Help them get enough rest, exercise, and healthy food. Be sure they have a balance of quiet times and physical activities.
- Maintain regular daily life. Even in the midst of disruption and change,

children feel more secure with structure and routine. As much as possible, keep to regular mealtimes and bedtimes.

- Maintain expectations. Stick to your family rules about good behavior and respect for others. Continue family chores, but keep in mind that children may need more reminding than usual.
- Encourage children to help. Children cope better and recover sooner if they feel they are helping out. Give them small clean-up tasks or other ways to contribute. Afterward, provide activities that are not related to the attack, such as playing cards or reading.
- Be extra patient once children have returned to school. They may be more distracted and need extra help with homework for a while.
- Give support at bedtime. Children may be more anxious at times of separation from parents. Spend a little more time talking, cuddling, or reading than usual. (You will want to start the bedtime routine earlier so children get the sleep they need). If younger children need to sleep with you, let them know it is a temporary plan, and that soon they will go back to sleeping in their own beds.
- Keep things hopeful. Even in the most difficult situation, it is important to remain optimistic about the future. Your positive outlook will help your children be able to see good things in the world around them. This will help get them through even the most challenging times.
- Seek professional help if your child still has difficulties more than six weeks after the attack.

Therapy for Children

If children have difficulties for more than six weeks after the attack, consult a mental health professional for an evaluation. If the clinician recommends counseling, keep in mind that Cognitive-Behavioral Therapy (CBT) has the strongest evidence for helping children recover from a disaster. Therapy for children should typically include:

- Family involvement
- Awareness of developmental level and cultural/religious differences
- Assessment of preexisting mental health problems and prior traumas and loss
- Explanation and normalization of the child's psychological reactions to the attack
- Teaching ways to manage reactions to reminders of the attack
- Teaching problem-solving and anger management skills as needed
- Helping to maintain normal developmental progression

What Parents Can Do to Help Themselves

Parents may have a tendency to neglect their own needs during a crisis. In order to be able to take care of their children, parents must take care of themselves. Here are some things parents should keep in mind:

- Take care of yourself physically. Eat healthily, get enough sleep, and get proper medical care.
- Support each other. Parents and other caregivers should take time to talk together and provide support as needed.

- Put off major decisions. Avoid making any unnecessary life-altering decisions during this stressful post-attack period.

What Teachers Can Do to Help Their Students

Teachers can play an important role in helping their students recover. Returning to school is important, in and of itself, in promoting the welfare of children and families. Try the following suggestions to assist you in your work with children, adolescents, and families:

- Take care of yourself emotionally. You and your family may have had a stressful experience and may have suffered losses and stresses like those of your students. To be able to support them, you must have support yourself.
- Take care of yourself physically. Eat healthily, get enough sleep, and get proper medical care.
- Communicate with others. Make sure that you and your fellow teachers schedule ongoing times to talk together and give each other support. Teachers might consider covering for each other, if something comes up that must be taken care of.
- Put off major decisions. Avoid making any unnecessary life-altering decisions during this stressful, post-attack period.
- Put aside the time to take care of the personal needs of your own family. Even though you may be very committed to your students, take special time with your own family members or friends.
- If you have a lot of attack-related responsibilities, talk with your school administrators about temporarily altering your work schedule.