

BIOCHEMICAL HOME DEFENSE



The Scariest Scenarios

"Survival preppers" want to be prepared for any emergency. Whether it's a natural disaster like a hurricane or tornado, or a man-made disaster such as civil unrest or government collapse, we want to be ready. We want to make sure that our families are safe, no matter what catastrophe happens. In previous books in this series, we focused on creating plans for "hunkering down" (living in your home during a disaster) and on "bugging out" (being prepared to evacuate during an emergency). There's no doubt that to be fully prepped for anything that happens, you need plans in place both to survive in your home, and also to leave your home and head to safety.

But of all the things we prep for, there's nothing more scary than biological/chemical disasters. Whether it's an act of deliberate bioterrorism, or a rampant pandemic, or an accidental biohazard release, we want to be able to survive no matter what happens. In this book, we turn our attention to helping you hunker down and survive these disasters. We've previously covered the basics of hunkering down thoroughly in our book on *Hunkering Down: Prepping to Survive in Your Home During a Natural Disaster*. So we won't try to pad this new book out by repeating a bunch of beginner's information you already may have. Instead, we'll focus on advanced practices and supplies you'll need to be prepared for biochemical disasters that might happen.

Speaking of hunkering down, lots of preppers focus on what supplies they need to stockpile for hunker-down emergencies, and for their GOOD (get out of Dodge) evacuation plans. And we spent quite a bit of time on both of those subjects in the previous books in the series. That's what most preppers focus on, and these plans and supplies are important. And as new preppers, it gives us a good sense of accomplishment to find items to stock our emergency shelves, or put together our bug out bag, or scout for bug out locations. But there's one thing that's more important than all of this. And that is to develop the right mindset for survival. What makes a good survival prepper is how mentally prepared we are to face the challenges that may or may not be headed our way in today's world. It's the mindset that allows us to stop burying our heads in the sand, and to develop the

mental focus that puts our family's safety first. As always, my books are written for "ordinary folks" who want to get started on survival prepping. If you are already an experienced prepper, this book might be a good refresher. But it's really written for the average Jane and Joe to get started on survival prepping. And in this book we're going to focus on information to help you develop the mindset to face the most frightening survival scenarios out there.

In this book, we'll start by looking at the various types of chemical and biological hazards, and the most common bioterrorism agents. And we'll be paying close attention to one of the most common forms of medical emergency throughout history, pandemics. All of this can be scary reading. It can cause most non-preppers and even some of us preppers to feel overwhelmed. Especially if you talk about this to non-preppers about these subjects, you might find that they go into a mental and emotional "shutdown" - like it is too much information to handle. They want to bury their heads in the sand until the overwhelmed feeling goes away.

But for preppers like us, this information is what we want. We want to know what's out there. Yes, there is some scary stuff out there. But learning about it doesn't frighten us. It empowers us, because the more we know, the better our chance of survival. So if you start reading about all of these hazards, and your old "non-prepper" habits of thought start causing you to feel a little overwhelmed, take a moment. Put down the book, take a deep breath, consciously relax your body, and remind yourself why you are here.

You are here because you and your loved ones are depending on you. Instead of scaring you, let the information on these hazards motivate you. Let it embolden you. Let it strengthen your resolve to be prepared to protect yourselves and your family. Let it remind you - that's why you're here. You are a prepper. After talking about the various types of biological, chemical, and medical dangers, we'll dive in to some details to help us be prepared. We'll look at the items to add to your hunker-down emergency supplies to help you cope as best as you can with bioterrorism, pandemics, and bio-chemical hazards.

As I've written in previous books, I sincerely hope you NEVER have to use anything I've written here. I pray that you and your family never have to try to survive an act of bioterrorism or a pandemic. But in case you ever do face such a situation, I want to help you be prepared to take care of yourself and your family.

Chemical and Biohazard Emergencies

The thought of terror attacks and nuclear threats can strike fear into your heart and leave you worried for the future. However, there are far more insidious threats out there. The chances are good that you will never have to worry about nuclear fallout, but biological, chemical and pandemic disasters are very real threats to your safety.

Chemical Dangers

Hazardous chemicals are in use all around us. The military uses nerve agents like sarin and VX. Industrial manufacturers commonly use chlorine, benzene and ammonia. Still others, such as poisonous plants, are commonly found in nature.

Whether the source is intentional in the form of a terror attack, accidental through our manufacturing plants or from some other cause, the chemicals around us pose real dangers. From chemicals that blister eyes and burn the respiratory tract to caustic agents that can burn the skin on contact, chemicals can cause serious and even fatal health problems. Nerve agents and long-acting anticoagulants that prevent blood from clotting can be fatal.

One of the fears with chemical warfare is that our food supply may be contaminated. While releasing the chemicals in a busy city would certainly be dangerous, the same results can be achieved by destroying the agricultural network and essentially starving a population.

Several international treaties have addressed the potential use of these weapons and banned them, but there are still nations working on developing this type of warfare. In recent decades, terrorists put chemical warfare to use for the first time in history. One memorable event was the release of sarin in Matsumoto, Japan.

A year later, sarin vapor was used on the Tokyo subway system during morning rush hour. The attack killed twelve people and caused more than 5,000 injuries. These were small-scale attacks, but they make it clear that larger-scale attacks are possible.

The Threat of Biohazards

Viruses, medical waste and toxins are all biohazards that can pose threats to your health. The Center for Disease Control (CDC) breaks biohazards into four different levels with level 1 being the lowest and level 4 being the most dangerous. Level 3 biohazards pose a significant risk.

They can be fatal if they are not diagnosed and treated in time. Anthrax, West Nile virus, typhus and malaria are all examples of level 3 biohazards. The most dangerous biohazards, level 4 biohazards are generally fatal and are spread easily through both direct contact and may be airborne. Dengue fever and Ebola are examples of level 4 biohazards that threaten your safety.

Even diseases once thought extinct can be used as part of biological warfare. The Bubonic plague that attacks the lymph nodes is still alive and well, and it is spread through fleas. Other dangerous versions of the plague are the pneumonic plague that attacks the lungs, and septicemic plague that spreads in the blood.

The Incredible Fear of Pandemic Disaster

Largely unavoidable and potentially fatal to large populations, pandemic disasters are nothing new to our modern era. One of the most well known examples would be early settlers in America bringing diseases like smallpox, measles and mumps that Native Americans had very little resistance to. More recent examples include the Spanish Flu of 1918 and the current concern about the H1N1 influenza virus.

A pandemic is the massive spread of a disease, whether that disease is known or completely new. While an epidemic simply refers to a disease breaking out, a pandemic refers to a disease that has spread over a larger population.

To see how pandemics spread, let's look at H1N1 as an example. The first case of H1N1 influenza was documented in Mexico in February, 2009. Just two months later, in April, the infection was documented in the United States. By May, the virus had spread to other countries thanks to air travel.

By July, there were a million people infected and 429 confirmed deaths from H1N1. A year later, in June 2010, the disease was named as the cause of more than 18,000 deaths worldwide. As another example, the Spanish Flu outbreak of 1918 to 1919 was shorter lived, but the consequences were more devastating. This disease infected nearly 500 million people, or one-third of the world's population at that time. There were nearly 50 million deaths from this fatal influenza.

Bioterrorism: Agents Used in Intentional Attacks

Bioterrorism is a special concern in this day and age. And there is a seemingly endless supply of possible bioterrorism agents. Many of these agents come from natural sources. Some agents are aerosolized for dissemination in public places. Knowing more about symptoms and different types of bioterrorism agents can prepare you in the event of a possible attack.

Bioterrorism Agent Categories

The Center for Disease Control (CDC) has three separate categories for bioterrorism agents. The agents can be classified depending upon how easily they spread, and how severe they are. Category A is for bioterrorism agents that pose the greatest risk to public health. Category B is the next most dangerous, with Category C following behind. The following list includes some of the more dangerous types of bioterrorism agents listed in Category A.

Bioterrorism Agents

Anthrax

Anthrax is caused by contact with spores of the *Bacillus anthracis* bacterium. These spores can infect people through skin, lungs or digestive tract. You can contract anthrax from animals, especially from the wool of infected sheep. Another way to get anthrax from animals is from eating undercooked meat of animals that may have been infected. Weaponized anthrax is typically done by milling it into a fine powder. The 2001 anthrax attacks were weaponized this way and sent through the mail. The CDC puts anthrax in category A. This makes anthrax one of the more dangerous bioterrorism agents. The most deadly form of anthrax is contracted through the lungs. Symptoms generally occur within a week.

It is important to recognize anthrax symptoms as soon as possible. The cutaneous (skin) form of anthrax usually develops like a blister with a black center. The gastrointestinal form of anthrax is accompanied by bloody diarrhea, nausea and bad stomach pains. If you inhale anthrax, the symptoms may resemble that of a flu or cold at first. Symptoms will increase in severity if not treated immediately. An aggressive antibiotic schedule in conjunction with the anthrax vaccine is the treatment for exposure.

Botulism

Botulism remains one of the most deadly toxins. *Clostridium botulinum* is the bacteria responsible for causing botulism. Botulism is typically ingested from contaminated foods. Botulism paralyzes the muscles in your body. Eventually, you will become unable to swallow, and you will need a mechanical ventilator for breathing. If you suspect botulism, immediate medical attention is crucial. Symptoms usually occur between 12 and 36 hours after exposure. The CDC does have a stockpile of antitoxin in the event of a public outbreak. Long-term supportive care may be necessary for recovering patients.

Pneumonic Plague

Yersinia pestis is the bacterium that causes a severe lung infection. Within a week of exposure you may have flu-like symptoms. The symptoms get increasingly severe and generally end with respiratory failure and death. The ability of *Yersinia pestis* to be aerosolized makes it a possibility for bioterrorism attacks. There are a few naturally occurring cases of the plague each year in the United States. If you think you may have the plague, it is important seek medical attention immediately. An aggressive antibiotic schedule can be used, if you seek medical attention within the first 24 hours that symptoms appear. Quick intervention can drastically improve your chances of living through this disease. It is possible to contract this disease from another infected person. The CDC reports that federal and state government health organizations have large amounts of antibiotics ready in the event of a bioterrorist attack.

Smallpox

Smallpox is another possible agent that could be used in the event of a bioterrorism attack. The last case of smallpox in America occurred over 60 years ago. Smallpox is generally considered a disease of the past. The federal government is taking

precautions for treatment in the event of a bioterrorism attack. Smallpox is characterized by the spotted rash that accompanies the disease. Variola major is the most common type of the disease. Variola major has an average incubation period of about 12 to 14 days. After this incubation period you will begin to display initial symptoms. The initial symptoms are flu-like. Following a few days of initial symptoms you will begin to see a rash. Smallpox hasn't been a worldwide concern since the 1970s. Aggressive vaccination procedures effectively eradicated the disease. The CDC states that there are enough vaccinations stockpiled in the event of a possible bioterrorism attack.

Tularemia

Tularemia has also been called “rabbit fever.” This disease is typically seen in rural communities where people may have contact with infected rabbits or rodents. *Francisella tularensis* is the bacterium which causes Tularemia. The possibility of infection from an airborne version of this bacterium makes it a possible bioterrorism threat. Symptoms of Tularemia can include skin ulcers, sore throat, diarrhea, painful swollen lymph nodes and even inflamed eyes. Symptoms can get progressively worse, and this disease can turn fatal if not treated. An antibiotic schedule is necessary for successively treating Tularemia. Early intervention is important for treatment and recovery.

Viral Hemorrhagic Fevers

Viral hemorrhagic fevers such as Ebola or the Hantavirus could be incredibly dangerous if used as bioterrorism weapons. The viruses that cause these types of illnesses are often zoonotic - that is, they can jump from animals to humans or from humans to animals. Symptoms of viral hemorrhagic fevers are often flu-like at first. Symptoms progress and usually also include internal bleeding and bleeding under the skin. Complications in advanced stage patients include coma, shock, seizures and nervous system malfunction. For many viral hemorrhagic fevers there are no known cures. Supportive therapy is usually the only course of treatment. The most important thing is to avoid coming into contact with an infected host. Rodent and insect control is important in areas where infected host animals reside. Arming yourself with knowledge is crucial in the event of a bioterrorism attack. Many experts agree that the above listed agents are likely to inflict the most damage in the event of an attack.

More About Pandemics

Of all the possible biological, medical, and chemical scenarios in this book, pandemics are certainly the most common throughout history. We spoke a little about pandemics earlier in this book, but let's look at them in more detail now.

Phases

A pandemic disease is one that is highly infectious and can spread through the population across a large area. Affecting more people than an epidemic, the Center for Disease Control has categorized six phases of a pandemic. Knowing these phases and understanding what they mean can save your life in the event of an outbreak.

Phase 1 indicates the virus is being seen in animals, but it has not yet moved into the human population.

Phase 2 means that the virus has moved into humans and officially become a pandemic threat.

Phase 3 indicates that the disease has been found in small groups of humans, but it has not yet become contagious between people.

Phase 4 is the point at which the disease is being transmitted between people and indicates a heightened risk of pandemic outbreak.

Phase 5 is the point where the spread of the disease between humans has breached country borders and is in two or more countries.

Phase 6 is the most serious. It indicates that the disease is a pandemic with global reach affecting three or more countries.

Influenza Pandemics

Influenza or flu viruses have caused some of the most serious pandemics in the past.

The flu virus is typically broken up into three different categories, A, B or C, with influenza A being the most likely to cause extensive and severe outbreaks. Influenza A viruses will affect both humans and animals, making widespread contagion much more likely. Influenza B viruses, on the other hand, only affect humans, and for the most part, influenza C simply stops at mild respiratory discomfort.

An influenza A virus is the most likely to cause a pandemic because the methods of transmission crosses the species border, and can be spread back and forth between people. Some examples of influenza A outbreaks include swine flu and avian flu.

SARS

SARS is the abbreviation for Severe Acute Respiratory Syndrome, and this pandemic occurred between 2002 and 2003. During the course of its run, it was responsible for almost a thousand deaths. SARS is considered an influenza A virus, with the origins of the virus starting with the spread of the disease from small animals to people.

After that however, the main cause of the disease's spread was through simple human sneezing and coughing. On top of that, the virus was resilient enough to be passed through touching a contaminated surface and then touching the nose, eyes or mouth. SARS is treated in a number of ways, including antibiotics, medications, and steroid injections, which can reduce the swelling and the inflammation in the lungs.

HIV and AIDS

Both Human Immunodeficiency Virus (HIV) and Acquired Immuno-Deficiency Syndrome (AIDS) are pandemics of global proportions. HIV is originally thought to be a result of contamination from Old World, non-human primates.

Between humans, the major source of the disease's spread is through sexual contact, though before it was well-understood, there were many other vectors for the disease. Organ transplant was once a source for HIV transmission, as were other medical practices.

According to the most recent reporting, as many as 34 million people around the world have HIV, and over the course of the disease's outbreak, almost 30 million people have died from complications with the disease. Though the number of deaths from AIDS has grown fewer, dropping from 3.1 million deaths in 2001 to 1.8 million deaths in 2010, AIDS is still considered a serious pandemic.

The Black Death

Though the word “pandemic” seems like a modern idea, the truth is that history is rife with pandemics. Since the 1500s, there has typically been on average three pandemics every century, though they are not at all equal in terms of mortality, spread and death toll.

One example of a historic pandemic would be the famous Black Death, known in the modern era as the bubonic plague, which had a death toll that is commonly numbered at around 25 million, though some historians make the death toll much higher.

The disease swept through Asia to the Mediterranean, and from there it went north to western Europe. The disease's spread was facilitated by cross-contamination with fleas and rodents.

The plague could be said to have lasted for three hundred years, with some of the outbreaks lasting for years at a time in certain places. Interestingly enough, the bubonic plague is still a disease that breaks out from time to time in the modern era. If it is caught within the first 24 hours, it is entirely treatable by modern antibiotics

The Real Risk of Pandemics

Whether they are mild or severe, pandemics are not things to be taken lightly. With international travel being so prevalent, viruses can cross boundaries and vast distances more easily than they ever could before.

This means that it is possible to spread diseases very quickly, especially when you take into account time spent at an airport or any other travel hub.

Pandemics are a serious issue that can take on startlingly real effects in a very short amount of time. If you are someone who is invested in emergency preparedness, it is very important that you understand the risk of pandemics, especially when other disasters may be going on.

For example, due to the decreased hygiene and sanitation that usually occurs during a disaster situation, contagion becomes more likely.

Your Armory Against Chemical, Biological, and Pandemic Threats to You and Your Family

All of this past discussion might make biological, chemical, and pandemic threats seem almost invincible. But there are measures that you and your family can take to prepare for your safety to prevent or at least reduce the impact of these agents. Ironically, in the war against these highly complicated dangers, the best defensive weapons are actually quite simple to obtain and easy to use.

How to Seal Your Home

It is essential to seal your house during many biological and chemical disasters, as well as some pandemics. This keeps you and your family safe from contaminants. If you are coming from outside your home, you should remove all exposed clothes and accessories before going indoors. Leave all these things outside. This keeps you from contaminating your home if you have come in contact with the toxin.

Immediately take all family members and pets inside. Ensure that they also remove their clothing and accessories. Everyone in the household should shower and clean their bodies to remove any toxins.

Things that you need in sealing your home include the following.

- Duct tape
- Scissors
- Plastic sheeting

You will need to cover all doors, windows, vents, and any openings in your house. Before starting, put on an N95 mask. (N95 mask are discussed below.)

Lock all doors and windows, except the front door. Locking will keep the doors and windows sealed tighter to allow fewer contaminants to go into your home. However, leave the front door unlocked in case emergency crews need to enter.

Make sure to close fireplace dampers and places where air from outside can enter. Turn off air-conditioning, fans, heating and vents.

To secure any opening, first use duct tape to tape over any seams in the opening. For example on a window, place duct tape over where the window meets the sill and window frame. On a covered vent, tape over any place the cover meets the wall or ceiling. On a door, tape around where the door meets the frame. Make sure to cover all areas around the hinges as these are usually not air-tight. Once you've taped the seams, then cover the opening with plastic sheeting. Inexpensive plastic polyethylene sheeting is often available at "dollar stores" and hardware stores. In a pinch, you can tape together plastic garbage bags, or use plastic shower curtain liners, or even painter's plastic drop cloths.

Use scissors and/ or tape to create plastic sheets that are the correct size for each opening. Place the plastic sheets over the openings and secure them with duct tape. It's better to use too much tape than too little.

Creating a Quarantine Room

If you or a family member has been exposed during this emergency, it is important to keep them away from those who have not been exposed. Create a quarantine room in order to isolate any exposed family members. Choose a room in your house, preferably a bedroom, to use as the quarantine room. Ideally, it should be a room with as few windows and openings as possible. In addition, the quarantine room should have its own bathroom. If it doesn't, place a "honey bucket" or chemical toilet into the room.

Also put into the room 72 hours worth of food and water for each person. If you have bug out bags prepared, you can put the bug out bag in with the family member. Also make sure there are N95 masks for each person in the room. (N95 mask are discussed below.) To create the quarantine room, place all the supplies in the room first. Then put on your own N95 mask, and seal all of the doors, windows, and vents except for the entrance door. Follow the instructions above on how to seal these openings.

Once everything but the entrance door is sealed, have your exposed family members put on their N95 masks and enter the room. Once they are in, exit the

room and cover the entrance door from the outside with duct tape and plastic sheeting.

Soap and Water

During many of these disasters, and especially during pandemics, the best way to defend yourself and your family is sometimes just plain old soap and water. It may be trite, it may be boring, but washing your hands thoroughly and often is one of the survival prepper's secret weapons.

In most cases, contagious illnesses must enter the body in order to make a person sick. By simply making a habit of washing your hands and making sure that your family does the same, you are drastically reducing the danger of contracting a contagious illness, including those of large-scale proportions. When hand washing is not possible, an alcohol based hand sanitizer is very effective at killing germs. Hand sanitizer doesn't always remove solid particles, so it should only be used to supplement hand-washing, not replace it.

In the rare situation that you are exposed to dangerous chemicals or a biological weapon, soap and water can save your life. Immediately after exposure, clothing, glasses, contact lenses, and jewelry should be removed. Shirts should be cut off as opposed to lifted over your head in order to reduce the risk of inhaling the offending chemical.

Once your clothing and contacts are removed, they need to be sealed in a plastic bag and thrown away. It may be possible to re-use eyeglasses and jewelry after they are thoroughly rinsed, but it would be better to discard them. For eyeglasses, always have a spare pair or two with your emergency items. It is crucial that you rinse your body within a few minutes of exposure to the substance, and to do so before you enter your home. Once you are completely stripped (now is NOT the time for modesty), use your outdoor garden hose to thoroughly wash yourself with soap and water for ten to fifteen minutes.

If you believe that there is a possibility that any of the powder, liquid, or vapor may have gotten in your eyes, rinse them with running water for ten minutes. Use soap and running water to remove any residue from your skin as promptly as possible to reduce the amount that is absorbed. Once you are clean, put on freshly laundered,

non-contaminated clothes. Go immediately into your house, and into your quarantine room if necessary.

Hygiene

Hygiene is a primary consideration when dealing with these types of disasters. In addition to soap and hand sanitizers, make sure you have plenty of toilet paper, facial tissues, deodorant, and disinfectants like chlorine bleach with your emergency supplies.

If water is not available for human waste, use "honey buckets" (a bucket designed for capturing and storing human waste), or place garbage bags over your toilet bowl to catch and dispose of waste. Use baking soda or quicklime to help cut down on odor and neutralize the waste. And make sure you keep your waste at least 100 feet away from your food and water.

Air Filters

In the case of an air-borne threat, a HEPA filter can reduce the danger within your home or office. Although a HEPA filter cannot stop a chemical weapon from wreaking havoc, it can prevent the spread of disease. If your home or office has a central heating and cooling system, HEPA filters can be attached directly to the system. If you do not have such a system, a freestanding unit can also be used. A freestanding HEPA air filter can also be put into your quarantine room. It will maintain the air quality of the room for your exposed family members.

Food and Water

In the direst of circumstances, it is possible that basic services will be reduced or even cease altogether. It is important to have food and water stored for such a situation. We recommend a minimum 10-day supply of food and water. Of course, 30 days would be better, and even up to a year is ideal. But start with a 10-day supply and you can build up from there.

For help with prepping your home emergency supplies like food and water, see my book on *Hunkering Down: Prepping to Survive in Your Home During a Natural Disaster*. We go into great detail in that book, but here are the basics. Store three gallons of water per day per person (for drinking water, bathing, and washing dishes). This water should be stored in appropriate containers in a dry and cool place. Store it away from chemicals or other possible contaminants. Make sure you change this water out every six to twelve months with fresh water.

Stock your emergency food larder with any foods that have a long shelf life and don't require refrigeration. Canned foods are ideal, such as meats, soups, chili, beans, and stews. Also include canned fruits and vegetables, as well as aseptic-packaged soups, juices, and drinks. Other items you might want to include are dried nuts, peanut butter, energy bars, granola bars, dry cereals, and canned milk. You might also include dehydrated "camping meals" and MRE ("meals ready to eat") packages from your local outdoor or sporting goods store.

All of these items can be eaten without heating. While you may be able to cook during some pandemics, as a precaution, you should never use stoves or anything that uses fire during biological and chemical disasters. Some of these agents may be flammable. In addition, in a sealed home, there is a risk of poor ventilation from things like camp stoves and sterno burners. Make sure to regularly check expiration dates of your stored foods. You should also replace things that are nearly expired to replenish your supply. Remember to include a can opener with your emergency supplies, plus eating utensils such as plastic knives, forks and spoons, plates, and paper cups. You'll also want dish soap for clean up.

First Aid Kit

A first aid kit is necessary in all emergency situations. Family members are prone to injuries and sickness during these disasters. Your kit should include all necessary medicines and equipment. It should have all the things needed for wound care. Also include a booklet on first-aid techniques.

Make sure your first aid kit includes:

- Bandages, cotton pads, elastic wraps, gauze and medical tape. These items will help in the event that any abrasions or sprains occur. A box of steri-strips can help close larger cuts.

- Rubbing alcohol, peroxide, and witch hazel. These can all be used to clean wounds.
- Aspirin. Aspirin will reduce fevers and ease pain.
- Anti-diarrhea medications. Many biological and pandemic episodes will have diarrhea associated with the effects of the virus. Having this type of over-the-counter medication will be quite useful.
- Multi Vitamins. You should have multi vitamins packed so that all people affected can maintain their strength. You may not be able to eat healthy during this period and vitamins will ensure you stay well nourished.
- Cough and Cold medicines. A multi-purpose medicine will come in handy if symptoms arise.
- Soap. Make sure that you have bars of soap in your medical supplies. It will be very important to clean your hands in the event of bioterrorism or pandemic.
- Prescription medications. If you have time to prepare for the event, call your doctor and request an extra month of your prescription medications.

N95 Masks

An N95 mask is an air-purifying mask. It protects the user from particulates such as vapor and noxious gasses. You should have these prepared for the whole family. This is helpful in case airborne biological or chemical contaminants are present.

Communication

For biohazards and pandemics, we don't usually expect electricity or utilities to be disrupted. So you may still have access to your landline phone, television, and even the internet for communication. However, in case the pandemic does disrupt utilities, you may wish to have at a minimum a cell phone, and a battery powered transistor radio to stay in touch with the situation. Don't forget to have external batteries or extra charged batteries for your mobile phone, as well as extra batteries for the radio. Additional options for communications are ham radios, CB Radios, and walkie-talkies. Check the Hunkering Down book for more details.

General Equipment

You should also include in your emergency supplies:

- Flashlights or lanterns. You should always have battery powered flashlights or lanterns with extra batteries available. As a precaution, never use candles during bio-chemical emergencies. Some biological and chemical agents can be highly flammable.
- Baby wipes. Baby wipes are perfect for keeping things clean when you do not have access to running or clean water.
- Toiletries. You should have a supply of toiletries on hand that will allow you to maintain your cleanliness for at least a month. This includes toilet tissues, feminine products, shampoo, soap, shaving cream, and toothpaste.
- Diapers and baby supplies. You should have a supply of diapers and infant formula on hand at all times.
- Children's supplies. Especially favorite pillows, blankets, and clothing.
- Pet supplies. If you are sheltering with your pet, don't forget his or her needs: Food and water, medicine, first aid kit, flea and tick treatments, litter, newspapers, trash bags, toys, and treats
- Tool Box. Simple tools such as a hammer, a few screwdrivers, nails, screws, pliers and a wrench should be in your kit.
- Buckets, bottles, and containers. You can use these for storing food, water and waste.
- Board games and entertainment for the family. Children can be restless, and that will be an inconvenience. Make sure to have board games or other fun activities that can keep your children busy and occupied.

These are the essential items for sealing yourself in during biological and chemical disasters. Once again, for additional ideas on how to prepare for surviving in your home, check my book on *Hunkering Down: Prepping to Survive in Your Home During a Natural Disaster*.

Special Considerations for Pandemics

For some pandemics, you may not need to seal yourself in your home. As a matter of fact, your normal daily activities may actually continue during pandemics. But you may need to take special precautions during the pandemic to avoid having you or your family become infected. You should first identify the kind of pandemic that is present in your area. You can listen to or watch the news to get information. There are different kinds of diseases that can cause a pandemic. The three main types are water-borne, air-borne, and vector-borne. Each kind of pandemic has its own precautionary measures. You should be able to avoid getting infected by knowing what the pandemic is and learning how to survive it without getting infected.

Water-borne Pandemics

Cholera is an example of a water-borne disease that has caused pandemics. Cholera pandemics are commonly found in third world countries, and there have been numerous accounts of these pandemics all over the world. This disease has also hit areas in Europe and America causing the deaths of over 300,000 people.

Mode of Transmission

Cholera and other water-borne pandemics spread through water and foods. This disease can be easily transferred when a person with cholera prepares food. If the water supply gets contaminated, all households in the area are in danger of being infected. A number of pandemic cholera outbreaks were spread through water supplies.

Things to Consider

Because water-borne pandemics like cholera can spread through foods and liquids, it is best to be careful with your intake. You should keep enough food to last your family for at least a month. Make sure to regularly check the food supply for expiration dates and consume the ones that are nearly expired first. Since you won't be sealed in your home, cooking will usually be available, and all food should

be thoroughly cooked. If you buy food prepared in restaurants and eateries, you should cook it again to destroy any bacteria present.

You should store bottles of clean water if possible. The water supply is not always safe for drinking during an outbreak, and may even be unsafe for washing and cooking. You may be able to purify the water by boiling and chlorination. The basic process is to boil the water for five to ten minutes, then allow it to cool. Add about one-eighth teaspoon of standard, non-scented household chlorine bleach per gallon of water. Shake it thoroughly, then allow it to set for at least 30 minutes. This may work for most water-borne pandemics, but watch the news or listen to the radio for specific details on how to do this for the pandemic specific to your area.

It is also important to wash your hands before preparing food with safe water. You should also wash your hands when you get home and after going to the bathroom. This will stop the transmission of cholera and keep you and your family safe.

Air-borne Pandemics

Influenza pandemics have long been the cause of thousands of deaths worldwide. The Asiatic Flu, Spanish Flu, Hong Kong Flu and Bird Flu are some of the recognized influenza pandemics that have hit worldwide. This kind of pandemic usually spreads fast as the diseases are airborne. You can be infected by an influenza virus even without physical contact. Other air-borne diseases like Severe Acute Respiratory Syndrome (SARS) and tuberculosis have also caused widespread pandemics. These diseases have caused the death of over 100 million people in the 20th century.

Mode of Transmission

Different strains of the influenza virus are spread through the air. Some strains can infect a person as far as a few meters away. On the other hand, some people get infected from nasal and oral secretions. You usually need to be really close to the infected person to get the virus.

Things to Consider

Tuberculosis and influenza and corona viruses are airborne and can easily infect you. One precautionary measure is to stay at home and avoid unnecessary bodily

contact with other people. You should also avoid populated areas. Thoroughly wash your hands with soap and water after handling objects. You can also use a disinfectant if there is no soap and water available.

You should always cover your nose and mouth when sneezing or coughing. After sneezing or coughing, dispose of used tissues properly. Make sure not to touch or come in contact with other people's secretions. If you need to go outside, you should wear approved masks like an N95 mask. This will purify the air you breathe and keep you from being infected. The influenza virus will not be able to pass through the mask's material.

If you are developing flu-like symptoms, you should stay home and not have physical contact with other people. You should monitor your condition and take necessary medications. Anti-viral medications that are made to counter influenza viruses are available in pharmacies. It is also important to stay updated on the pandemic's development. Watch the news or listen to the radio to learn about the specific strain of the virus or bacteria. You should take the appropriate safety measures to protect yourself and your family.

Pandemics Transmitted by Vectors

Vectors are organisms that transmit diseases from one host to another. Common vectors are invertebrates like mosquitoes. They spread diseases through their bites and feces.

Although vector diseases like malaria are commonly found in tropical and subtropical areas, a few temperate areas have also had malaria outbreaks. Historically, malaria caused a pandemic called Roman Fever that contributed to the fall of the Roman Empire. This disease also infected people in America during the Civil War. It caused infections in over one million soldiers.

Mode of Transmission

Mosquitoes that get infected and spread the disease are females in the *Aedes Aegypti* genus. They spread pandemics like malaria and dengue fever through their bite. The mosquito will also lay infected eggs. These will hatch and spread the disease.

Things to Consider

The best way to prevent these diseases is to make sure your home is free of disease-bearing insects. Spray your home with bug sprays and insect killers, following the manufacturer's instructions. Outdoor ponds and water supplies should be covered as mosquitoes lay their eggs in water. When these eggs hatch, the larva look similar to frog tadpoles, but have a distinctive jerky, "shimmy" style of movement that is different from tadpoles. Make sure to drain unnecessary pools of water outside your house. You should also use insect repellent when outdoors. Have your children use the repellent BEFORE going out of the house. It is also best to wear long pants and long-sleeved shirts to protect yourself from mosquito bites.

Keeping Your Family Safe

When it comes to keeping your family safe, the most important concept to focus on is:

DON'T PANIC

Of course, in a bioterrorist act, or even an accidental release of chemical hazards, widespread panic can sometimes cause more harm than the original event does.

But by taking the steps in this manual, you'll not only be preparing yourself and your family physically. You'll be doing something even more important. You'll be preparing mentally and emotionally. You and your family will be developing the "survivalist" mindset that will be far more valuable than any of your physical preparations. This mindset will not only serve all of you well during an emergency, but it will also contribute to your regular, daily life.

That's one thing most new preppers are surprised to find once they get started. Rather than becoming scared and paranoid, prepping for survival actually enhances our lives. It makes us appreciate all the things we do have, and also gives us confidence as we go about our work, home, and social lives. And because of this confidence, it's not unusual to become more successful in life, to have higher self esteem, and to be just a much happier person - all from getting involved in prepping. I know that might sound weird to those outside the prepper movement, but to those of us on the inside, we know it, because we've experienced it first-hand.

Final Check: Your Sealing In Checklist

Here is a final checklist you can use to put together your emergency supplies. It includes all the recommendations in this book, plus additional supplies to help you prep fully for sealing yourself in during a biological, chemical, or medical disaster.

- Duct tape
- Scissors
- Plastic sheeting (polyethylene sheeting, alternative: plastic garbage bags, plastic shower curtain liners, plastic drop cloths)
- Soap
- Alcohol based hand sanitizer
- Toilet paper
- Facial tissues
- Deodorant
- Chlorine bleach and disinfectants
- Honey buckets or garbage bags for human waste
- Baking soda and/ or quicklime
- HEPA filter (central or freestanding)
- Water - 3 gallons per day per person, 10-day supply minimum
- Food - 10 day supply
- Can opener
- Eating utensils – plastic knives, forks and spoons, plates, paper cups
- Dish soap
- First aid kit
- Bandages, cotton pads, elastic wraps, gauze and medical tape

- _ Rubbing alcohol, peroxide, and witch hazel
- _ Aspirin
- _ Anti-diarrhea medications
- _ Multi Vitamins
- _ Cough and Cold medicines
- _ Prescription medications
- _ N95 masks
- _ Toilet paper
- _ Deodorant
- _ Disinfectants
- _ Mobile/ cell phone with external/ spare charged batteries
- _ Transistor radio with batteries
- _ Flashlights or battery-powered lanterns, with extra batteries
- _ Baby wipes
- _ Toiletries (feminine products, shampoo, soap, shaving cream, and toothpaste)
- _ Diapers
- _ Infant formula
- _ Children's favorite pillows, blankets, clothing
- _ Tool Box
- _ Pet food and water
- _ Pet medicine, first aid kit, flea and tick treatment
- _ Pet litter, newspapers
- _ Pet toys and treats
- _ Board games and other entertainment
- _ Buckets, bottles, and containers