## Surviving The Next Black Death

Throughout human history there have been several pandemics and hundreds of epidemics that have swept over the world, devastating the population of the human race and leaving innumerable dead in their wake.

The most famous of the pandemics is undoubtedly the bubonic plague, or Black Death, that began in Asia and swept through Europe with horrific results during the 1300s. In some regions, the Black Death wiped out entire villages, and the total death toll for Europe is estimated to be between 40% – 70% of the population.

In the aftermath of that pandemic, it took Europe more than 100 years to recover. Outbreaks of the plague, and various mutated forms of it, recurred throughout the world clear through the 1700s and into the 1800s, while isolated cases still crop up today.

More recently, another famous pandemic broke out in Europe in 1918; it became known as the Spanish Flu and it killed an estimated 100 million people of the 500 million it infected, particularly healthy young adults as opposed to children, the elderly or those with an otherwise compromised immunity.

This pandemic hit near the end of the First World War, and although its death toll only accounted for 3%-6% of the world population at the time, many areas experienced the loss of upwards of 20% of their population and some remote villages were wiped out completely in only a matter of months. It was devastating.

Today, our planet sports a burgeoning population of between 6.5-8 billion humans, and population centers have grown to number in the tens of millions as sprawling urban-suburban

megalopolises are created to meet the needs of the population. With so many people living so closely cramped together, and with global travel having taken on a wholly new dimension in the last century, the threat of a potential pandemic is something well worth consideration.

Many doctors and scientists agree that another pandemic could break out, and in recent years there have been scares around the H5N1 'bird flu' virus, as well as the H1N1 'swine flu' virus and their potential to mutate and spread amongst humans with deadly results.

Part of what makes these strains potentially so dangerous is that humans have little or no immunity to them. Take the more recent case where Chinese authorities have been closely monitoring the development of a new avian flu virus throughout 2013.

The H7N9 virus is a new variation of avian influenza that recently began jumping from poultry to humans in China, with a mortality rate of roughly 22%. Infected poultry, however, may show absolutely no sign of the illness.

Suspecting that live bird markets were responsible for the initial transmission of the virus, the Chinese authorities have carried out massive culling of several large bird markets. Incidences of the H7N9 virus fell as summer came on in China, but many professionals think there may be a resurgence of the strain this winter when temperatures fall.

So the threat of an epidemic or pandemic is out there. With any luck, hopefully none of us will ever have to deal with the ramifications of such an event, but there are some simple preparations you can make (without breaking the bank) to better ensure your family's survival.

1) Limit your exposure to others. This might sound like a bit of a no-brainer, but in the event of a pandemic or other widespread illness, one of the best things you can do to

protect yourself is to limit your exposure to, and contact with, other people. This can be hard to accomplish in an urban or suburban setting, so if you live in a densely populated area you'll definitely want to take additional precautions.

- 2) Wear protective coverings over high-risk areas of your body. This includes a facial mask or respirator, such as an N95 or N100 mask. Other protective measures may include medical gowns, latex or nitrile gloves, and possibly boot / shoe coverings. These protective measures are primarily aimed at reducing viral load on your clothing or skin and in the air you breathe. The viral load is a measure of how much contagion is present in the air you are breathing or on the surfaces you come into contact with. Protect your eyes, nose, mouth and any open or healing wounds, and you'll cut down substantially on the likelihood of becoming infected.
- 3) Maintain sanitary living conditions, including washing your hands regularly and keeping high traffic areas sanitized and disinfected as much as possible. If you have to go out or continue working in a densely populated area, carry disinfectant wipes with you and some form of hand sanitizer. Wash your hands often, and avoid touching your nose, mouth, face or eyes; the mucous membranes in your nose, mouth and eyes are the most susceptible to infection.
- 4) Secure isolation for infected victims. Anyone who comes in contact with the infected person(s) should be using maximum protection to minimize the possibility of transmitting the disease. A HEPA (High-Efficiency Particulate Absorption) filter for filtering the contaminated air is strongly recommended. Also, depending on the severity of a pandemic or epidemic, if you wind up having family or friends who come to stay with you to weather the storm, you will want to quarantine all new arrivals for a period of time to ensure that they won't track in the infection and get everyone sick or killed in the process.

To better ensure that you and your family are well prepared for a possible epidemic or pandemic, you can also keep a stock of some critical items. The most important items to stock include:

1) N95 or N100 particle masks for you and your family. The N in N95 or N100 stands for NIOSH and reflects the effectiveness rating given to the masks by the National Institute for Occupational Safety and Health. N95 masks are rated to filter out approximately 95% of airborne particles, whereas N100 masks are rated to filter roughly 98% of all airborne particles.

Both N95 and N100 masks are quite suitable for droplet containment. Since the masks are cheap and disposable, and because an epidemic or pandemic can last for months or years, you may wish to stock up accordingly. With any mask, the most important feature is a good fit, so masks with a metal noise piece that can be bent around the shape of your nose are better than those without a nose piece.

- 2) **Bleach** is a powerful aid in maintaining sanitary conditions, especially when it comes to high traffic areas and objects like countertops, tables, doorknobs and other hard surfaces. A basic cleaning solution can be made by combining bleach and water at a ratio of 1 cup bleach to 4 gallons water. This mixture can be used to regularly wipe down and disinfect most any hard surface, especially if you find yourself operating an isolation room or mini-ward where you want to keep things as sanitary as possible.
- 3) Heavy duty rubber gloves and latex or nitrilegloves; these are pretty affordable to stock up on, and nitrile gloves tend to hold up a bit better to long-term storage. Disposable gloves will help reduce the direct contact you have with potential pathogens or contagions, but you should still wash your hands thoroughly any time you remove or replace your gloves. If you find yourself caring for someone who is

infected, you may opt to wear two pairs of gloves for added protection.

4) Stock medicine & antibiotics ahead of time. During times of epidemics or pandemics, many of the victims who die actually die because of secondary infections that crop up after their immune system is weakened and compromised by the initial infection. Pneumonia is one of the most common infections that crops up after you're already sick. Since medicine and antibiotics are in short supply during massive disease outbreaks, you can stock up on OTC medicines and source antibiotics such as amoxicillin and penicillin from the local farm supply store or vet.

Other supplies that you may wish to stock up on include trash bags, duct tape, water filtration and purification methods, and various medical supplies (see my article on emergency first aid for more details on recommended medical gear). Depending on how bad an epidemic or pandemic gets, you may need additional supplies more akin to a TEOTWAWKI (The End Of The World As We Know It) situation, including fresh water, food storage, supplies for setting up a sanitary outhouse, waste containment, etc.

## **Even SWAT Teams Are Helpless Against This**



This article has been written by Gaia Rady for Survivopedia.

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