

Chapter Nine

EPIDEMICS AND THE COMING PANDEMIC

A Russian scientist in 2004 has alarmingly announced that one billion people stand to die from the coming global flu pandemic. Are these figures for real? They may be on the high side, but even the World Health Organization now says the next global pandemic is overdue.

The First World War killed seven million people. But the strain of flu that followed incubated, experts reckon, in pigs that were kept near the front lines to help feed the troops - killed up to 100 million maybe even up to 150 million, helped by the movement of troops returning home from the war.

The consequences of a really big, fatal flu epidemic on modern society are hard to imagine, partly because they're so enormous. Air passengers would be the first vector of infection, followed by the people who traveled with them in the train or Underground train or coach from the airport, followed by the family and friends of those people. Give it a few days and people would be falling ill, then over the next weeks dying. You could be seeing ships leaving ports and becoming ghost ship before they reach their destination. Ships that did reach their destination would be quarantined and not allow to leave their ship. You could be seeing whole neighborhoods quarantined. If the strain is new and unexpected, there wouldn't be time to produce enough vaccine to treat it.

"The global economy would come to a halt, and since we could not expect appropriate vaccines to be available for many months and we have very limited stockpiles of antiviral drugs, we would be facing a 1918-like scenario. Given current technology, we could vaccinate about 500 million people, tops - about 14 per cent of the world population.

Only essential services would be given the vaccines such as the Armed Forces, Police, essential business, doctors, health care workers and government employees. If you're not involved with the electricity, water, fuel distribution, phone or gas industries, then you probably will not get the vaccine and owing to our global 'just-in-time delivery' economy, we would have no surge capacity for health care, food supplies, and many other products and services,

You can expect the mass media to severely distort this story as it unfolds in order to avert a public panic. People will be told there is no pandemic even while tens of thousands are dying from it. Vaccines will simply not be available on a widespread basis. But the

people in the know will have long since prepared for the pandemic with their own anti-viral herbs and immune-boosting nutritional strategies.

Influenza pandemic



An **influenza pandemic** is a large scale epidemic of the influenza virus, such as the 1918 Spanish flu. The World Health Organization (WHO) warns that there is a substantial risk of an influenza pandemic within the next few years. One of the strongest candidates is a highly pathogenic variation of the H5N1 subtype of Influenza A virus which is rapidly mutating and could mutate into a variation that transmits easily human to human causing a pandemic. If such a mutation occurs, it might remain an H5N1 subtype or could shift subtypes as did H2N2 when it evolved into the Hong Kong Flu strain of H3N2. For the purpose of flu pandemic preparedness, prepandemic flu vaccines are being developed against the most likely suspects which include H5N1, H7N1, and H9N2.

Nature of a pandemic

Some pandemics are relatively minor and can be contained quickly such as the one in 1957 which only killed around a million people throughout the world. The mutation in the virus that causes the high infection rate may also cause the virus to be less deadly as it needs to pass between host to host and replicate itself.

In a bad pandemic, some communities attempt to cut themselves off totally while others have half (or more) of their population die, and others may not feel many of the effects but may still be affected due to the high degree of illness and the bereavement felt by the members of the community. Desperate people try anything to cure or prevent the illness.^[2] The 1918 pandemic killed around 150 000 people in the UK, but even the loss of this relatively small number of people in the population caused upheaval and psychological damage to many people.^[3] There are not enough doctors, hospital rooms, or medical supplies for the living due to their contracting the disease and dead bodies often lie unburied as few people are available to deal with them. There is great social disruption and a sense of fear and efforts to deal with the pandemic always leave a great deal to be desired due to selfishness, lack of trust, illegal behavior, and ignorance. For example in the 1918 pandemic "This horrific disconnect between reassurances and reality destroyed the credibility of those in authority. People felt they had no one to turn to, no one to rely on, no one to trust."^[4]

A letter from a physician at one U.S. Army camp in the 1918 pandemic said:

It is only a matter of a few hours then until death comes [...]. It is horrible. One can stand it to see one, two or twenty men die, but to see these poor devils dropping like flies [...]. We have been averaging about 100 deaths per day [...]. Pneumonia means in about all cases death [...]. We have lost an outrageous number of Nurses and Drs. It takes special trains to carry away the dead. For several days there were no coffins and the bodies piled up something fierce .

H5N1

To have a flu pandemic several distinct phases must happen. H5N1's next phase is easy person to person transmission. After that occurs, it is theoretically possible to stop it before it becomes an epidemic, or if that opportunity is missed, to stop the epidemic before it becomes a pandemic. It is widely believed by the experts that it will not be possible to prevent any of these phases from occurring with H5N1, but if we are lucky enough to delay it for a few years, we might come up with a solution such as a flu vaccine.

H5N1 is just one of the many subtypes of the species Influenza A virus. Any one of them can combine with each other or with different variant genotypes within its own subtype creating new variants, any one of which could become a pandemic strain. We know enough about the genetics to know what strains to fear most

(example: only H5 and H7 subtypes are "highly pathogenic") and we know what genetic factors make a flu virus a human virus (i.e. easily passed human to human); so we know H5N1 is the biggest pandemic threat of all the strains in circulation and we know it is only a few antigenic shift mutations or antigenic drift mutations from being an avian flu virus to being a human flu virus. (How few, no one knows.) If it does this it may or may not still be in the H5N1 subtype. Both the drift and the shift can happen in any infected animal and then be passed to a human and spread like wildfire. Possible shift scenarios include the shift occurring in humans, pigs, or cats. To acquire the needed mutation through drift, it simply has to continue being an epidemic in birds long enough for the mutations to occur and then be passed to a human.

Comes in waves

Flu pandemics typically come in waves. The 1889–1890 and the 1918-1919 flu pandemics each came in three or four waves of increasing lethality. But within a wave, mortality was greater at the beginning of the wave.

Variable mortality

Mortality varies widely in a pandemic. In the 1918 pandemic:

In U.S. Army camps where reasonably reliable statistics were kept, case mortality often exceeded 5 percent, and in some circumstances exceeded 10 percent. In the British Army in India, case mortality for white troops was 9.6 percent, for Indian troops 21.9 percent. In isolated human populations, the virus killed at even higher rates. In the Fiji islands, it killed 14 percent of the entire population in 16 days. In Labrador and Alaska, it killed at least one-third of the entire native population.

Individual response

(The World Health Organization published a compendium of non-pharmaceutical interventions in November 2005. The following list is not identical to the WHO recommendations.)

- **Social distance.** By travelling less, working from home or closing schools there is less opportunity for the virus to spread.
- **Respiratory hygiene.** Populations should be repeatedly informed of the need for "respiratory hygiene" (covering mouth when coughing or sneezing, careful disposal of soiled tissues or other materials).
- **Masks.** No mask can provide a perfect barrier but products that meet or exceed the NIOSH N95 standard recommended by the World Health Organization are thought to provide good protection. WHO recommends that health-care workers wear N95 masks and that patients wear surgical masks (which may prevent respiratory secretions from becoming

- airborne).^[17] Any mask may be useful to remind the wearer not to touch his face. This can reduce infection due to contact with contaminated surfaces, especially in crowded public places where coughing or sneezing people have no way of washing their hands. The mask itself can become contaminated and must be handled as medical waste when removed.
- **Hygiene.** Frequent handwashing, especially when there has been contact with other people or with potentially contaminated surfaces can be very helpful. Alcohol-based hand sanitizers also kill both bacteria and viruses.

Strategies for individuals in a pandemic

In the case of a flu pandemic, to avoid the risk of contracting H5N1 (or indeed, any other strain of the flu virus) people may have to take certain precautions, and make changes to their routine, to minimize the risk of infection. They may also have to prepare for the possibility of their lives being disrupted in a significant way, even if they do not actually become ill.

Social disruption

A flu pandemic could cause major disruption to everyday life, with footpaths and the countryside being partially or even totally off-limits, and even restrictions on public gatherings (such as public meetings, parties, services at places of worship), quarantine, and bans on individuals travelling to certain locations. However, there are a number of things people could do to prepare themselves:

- Plan for the possibility that usual services may be disrupted. These could include services provided by hospitals and other health care facilities, banks, stores, restaurants, government offices, and post offices. Think of a back-up plan - what would you do, for example, if you could not buy food from the supermarket, because it was closed?
- Think about the possibility of having to grow your own food, and if it is possible, "stock up" on essentials.
- Prepare backup plans in case public gatherings are cancelled - keep in touch via telephone, for instance.
- Consider how to care for people with special needs or with severe illnesses or disabilities in case the services they rely on are not available - could medicine be delivered to the house, for instance?

Work

- Find out if you can work from home.
- Ask your employer about how business will continue during a pandemic.
- Plan for the possible reduction or loss of income if you are unable to work or your place of employment is closed.
- Check with your employer or union about sick leave policies.

Education

- Help your child's school plan for pandemic influenza. Talk to the school nurse or the health center. Talk to your teachers, administrators, and parent-teacher organizations, and help them put together a strategy if they have not already done so.
- Be prepared for the idea that you might have to teach your kids at home. Have textbooks, audiotapes etc on hand, and prepare some exercises for the children to do so that their education doesn't suffer. Also plan recreational activities that your children can do at home, so that they do not begin to suffer from boredom. Video games and the Internet are two primary forms of entertainment that are still easily accessible during a quarantine.
- Be prepared for the possibility of your child's school being closed for a prolonged period of time, meaning that your child, and probably you, will be stuck at home..

Transport

- Think about how you can rely less on public transport during a pandemic. For example, store or grow food and other essential supplies so you can make fewer trips to the store. Stock up on gas so that you don't have to use the bus or train.
- Prepare backup plans for taking care of loved ones who are far away. Make sure you keep in touch with these people on a regular basis.

Organizing

- Think about what information the people in your workplace will need if you are a manager. This may include information about insurance, leave policies, working from home, possible loss of income, and when not to come to work if sick.
- Meet with your colleagues and make lists of things that you will need to know and what actions can be taken. For example, does everyone have access to a computer or a fax machine in the event that the business has to close?
- Find volunteers who want to help people in need, such as elderly neighbors, single parents of small children, or people without the resources to get the medical help they will need. You could become a volunteer yourself as there are plenty of people who will need your help.
- Make sure that those close to you know the risks and are safe and sensible, not putting themselves in danger of infection.
- Provide support to friends, family and others in your community who need it.

Food storage

Keep a supply of water and food. During a pandemic you may not be able to get to a store. Even if you can get to a store, it may be out of supplies or it may not be safe to enter it. Public waterworks services may also be interrupted. Stocking supplies can be useful in other types of emergencies. Store foods that:

- are nonperishable (will keep for a long time) and don't require refrigeration - such as tinned fruit, condensed milk, etc
- are easy to prepare in case you are unable to cook
- require little or no water, so you can conserve water for drinking

Personal health and hygiene

Will the seasonal flu shot protect me against pandemic influenza?

- No, it won't protect you against pandemic influenza. But flu shots can help you to stay healthy.
- Get a flu shot to help protect yourself from seasonal flu.
- Get a pneumonia shot to prevent secondary infection if you are over the age of 65 or have a chronic illness such as [diabetes](#) or [asthma](#).
- For specific guidelines, talk to your GP or another healthcare provider.
- Make sure that your family's immunizations are up-to-date.

Take common-sense steps to limit the spread of germs. Make good hygiene a habit.

- Wash hands frequently. Touching your face with contaminated hands can infect you with human-adapted flu viruses.
- Cover your mouth and nose with a tissue when you cough or sneeze. Put used tissues in a waste basket. Do not use cloth or other reuseable methods. Reuseables spread flu.
- Clean your hands after coughing or sneezing. Use soap and water or an alcohol-based hand cleaner.
- Stay at home if you are sick.

It is always a good idea to practice good health habits.

- Eat a balanced diet. Be sure to eat a variety of foods, including plenty of vegetables, fruits, and whole grain products. Also include low-fat dairy products, lean meats, poultry, fish, and beans. Drink lots of water and go easy on salt, sugar, alcohol, and saturated fat.
- Exercise on a regular basis and get plenty of rest.

Being informed during a pandemic

Knowing the facts is the best preparation. Identify sources you can count on for reliable information. If a pandemic occurs, having accurate and reliable information will be critical. Listen to local and national radio, watch news reports on television, and read your newspaper and other sources of printed and Web-based information. Talk to your local health care providers and public health officials. Read your government Web sites. As you begin your individual or family planning, you may want to review your state's planning efforts and those of your local public health and emergency preparedness officials.

Massive population reduction is a common occurrence in mankind's history. If one looks at history, one would find that the demise of great civilizations are not so much the result of conquest as it is the result of natural disasters, such as plagues that depopulate large areas once occupied by great civilizations.

Pandemics and notable epidemics through history

There have been a number of significant pandemics in human history, generally zoonoses that came about with domestication of animals — such as influenza and tuberculosis. There have been a number of particularly significant epidemics that deserve mention above the "mere" destruction of cities:

- Peloponnesian War, 430 BC. Typhoid fever killed a quarter of the Athenian troops and a quarter of the population over four years. This disease fatally weakened the dominance of Athens, but the sheer virulence of the disease prevented its wider spread; i.e. it killed off its hosts at a rate faster than they could spread it. The exact cause of the plague was unknown for many years; in January 2006, researchers from the University of Athens analyzed teeth recovered from a mass grave underneath the city, and confirmed the presence of bacteria responsible for typhoid. [1]
- Antonine Plague, 165–180. Possibly smallpox brought back from the Near East; killed a quarter of those infected and up to five million in all. At the height of a second outbreak (251–266) 5,000 people a day were said to be dying in Rome.
- Plague of Justinian, started 541. The first recorded outbreak of the bubonic plague. It started in Egypt and reached Constantinople the following spring, killing (according to the Byzantine chronicler Procopius) 10,000 a day at its height and perhaps 40 percent of the city's inhabitants. It went on to eliminate up to a quarter of the human population of the eastern Mediterranean.

- The Black Death, started 1300s. Eight hundred years after the last outbreak, the bubonic plague returned to Europe. Starting in Asia, the disease reached Mediterranean and western Europe in 1348 (possibly from Italian merchants fleeing fighting in the Crimea), and killed twenty million Europeans in six years, a quarter of the total population and up to a half in the worst-affected urban areas.
- Cholera
 - first pandemic 1816–1826. Previously restricted to the Indian subcontinent, the pandemic began in Bengal, then spread across India by 1820. It extended as far as China and the Caspian Sea before receding.
 - The second pandemic (1829–1851) reached Europe, London in 1832, Ontario Canada and New York in the same year, and the Pacific coast of North America by 1834.
 - The third pandemic (1852–1860) mainly affected Russia, with over a million deaths. (Where it had killed Peter Tchaikovsky and his mother.)
 - The fourth pandemic (1863–1875) spread mostly in Europe and Africa.
 - In 1866 there was an outbreak in North America.
 - In 1892 cholera contaminated the water supply of Hamburg, Germany, and caused 8,606 deaths.
 - The seventh pandemic (1899–1923) had little effect in Europe because of advances in public health, but Russia was badly affected again.
 - The eighth pandemic began in Indonesia in 1961, called El Tor after the strain, and reached Bangladesh in 1963, India in 1964, and the USSR in 1966.
- Influenza
 - The "first" pandemic of 1510 travelled from Africa and spread across Europe.^{[2][3]}
 - The "Asiatic Flu", 1889–1890. Was first reported in May of 1889 in Bukhara, Russia. By October, it had reached Tomsk and the Caucasus. It rapidly spread west and hit North America in December 1889, South America in February–April 1890, India in February–March 1890, and Australia in March–April 1890. It was purportedly caused by the H2N8 type of flu virus and had a very high attack and mortality rate.
 - The "Spanish flu", 1918–1919. First identified early March 1918 in US troops training at Camp Funston, Kansas, by October 1918 it had spread to become a world-wide pandemic on all continents. Unusually deadly and virulent, it ended nearly as quickly as it began, vanishing completely within 18 months. In six months, 25 million were dead; some estimates put the total of those killed

worldwide at over twice that number. An estimated 17 million died in India, 500,000 in the United States and 200,000 in the UK. The virus was recently reconstructed by scientists at the CDC studying remains preserved by the Alaskan permafrost. They identified it as a type of H1N1 virus.

- The "Asian Flu", 1957–58. An H2N2 caused about 70,000 deaths in the United States. First identified in China in late February 1957, the Asian flu spread to the United States by June 1957.
 - The "Hong Kong Flu", 1968–69. An H3N2 caused about 34,000 deaths in the United States. This virus was first detected in Hong Kong in early 1968 and spread to the United States later that year. Influenza A (H3N2) viruses still circulate today.
- Typhus, sometimes called "camp fever" because of its pattern of flaring up in times of strife. (It is also known as "gaol fever" and "ship fever", for its habits of spreading wildly in cramped quarters, such as jails and ships.) Emerging during the Crusades, it had its first impact in Europe in 1489 in Spain. During fighting between the Christian Spaniards and the Muslims in Granada, the Spanish lost 3,000 to war casualties and 20,000 to typhus. In 1528 the French lost 18,000 troops in Italy and lost supremacy in Italy to the Spanish. In 1542, 30,000 people died of typhus while fighting the Ottomans in the Balkans. The disease also played a major role in the destruction of Napoleon's Grande Armée in Russia in 1812. Typhus also killed numerous prisoners in the Nazi concentration camps during World War II.
 - Effects of Colonization. Encounters between European explorers and populations in the rest of the world often introduced local epidemics of extraordinary virulence. Disease killed the entire native (Guanches) population of the Canary Islands in the 16th century. Half the native population of Hispaniola in 1518 was killed by smallpox. Smallpox also ravaged Mexico in the 1520s, killing 150,000 in Tenochtitlán alone, including the emperor, and Peru in the 1530s, aiding the European conquerors. Measles killed a further two million Mexican natives in the 1600s. As late as 1848–49, as many as 40,000 out of 150,000 Hawaiians are estimated to have died of measles, whooping cough and influenza.

There are also a number of unknown diseases that were extremely serious but have now vanished, so the etiology of these diseases cannot be established. The cause of English Sweat in 16th-century England, which struck people down in an instant and was more greatly feared even than the bubonic plague, is still unknown.

Reference:

<http://en.wikipedia.org/wiki/Pandemic>

http://en.wikipedia.org/wiki/Influenza_pandemic

Dream by Anonymous_5

100,000 * the Month of Yod

Posted on: Saturday 03 January 2004

Anonymous writes "Early last year I the following dream: 100,000 times the month of Yod. I asked a Jewish friend what YOD was, and he said that it had multiple meanings: the tenth letter of the Hebrew alphabet, or the number ten, or the first letter and last letter of the name of God. A Hebrew scholar also told me that the "month of yod" in ancient biblical terms would begin on the last day of Hannukah, meaning that most of January this month is the month of Yod! I hope this does not mean 100,000 casualties will happen in January. I also recently had the impression that the color pink would be somehow related to a terrorist-- either that victims would be girls, or that the terrorist would wear something pink such as pink shoes? Go figure! "

Mt thoughts on this dream

YOD= The Hand of God

100,000 times 10 (**Yod**) = global plague, hundreds of thousands will die.

Month= at the time of God's choosing

Pink= Love is given unconditionally, also means I will never forget you.

Pink also suggest feminine & women in general.

The Third Fatima Prediction

When she was 10 years old, Lucia dos Santos claimed to have seen the Blessed Virgin Mary in Fatima, Portugal, near her home. In a series of visitations, Lucia received three secrets or predictions. Two of those came true.

After the two parts which I have already explained, at the left of Our Lady and a little above, we saw an Angel with a flaming sword in his left hand; flashing, it gave out flames that looked as though they would set the world on fire but they died out in contact with the splendor that Our Lady radiated towards him from her right hand.

Pointing to the earth with his right hand, the Angel cried out in a loud voice: Penance, Penance, Penance! And we saw in an immense light that is God: something similar to how people appear in a mirror when they pass in front of it; a Bishop dressed in white; we had the impression that it was the Holy Father; other bishops, priests, religious men and women going up a steep mountain at the top of which there was a big cross of rough-hewn trunks as of a cork-tree with the bark.

before reaching there the Holy Father passed through a big city half in ruins and half trembling with halting step, afflicted with pain and sorrow, he prayed for the souls of the corpses he met on his way;

having reached the top of the mountain, on his knees at the foot of the big cross he was killed by a group of soldiers who fired bullets and arrows at him and in the same way there died one after another the bishops, priests, religious men and women and various lay people of different ranks and positions.

Beneath the two arms of the cross there were two angels each with a crystal in his hand, in which they gathered up the blood of the martyrs and with it sprinkled the souls that were making their way to God.

My thoughts on Fatima

I wonder if the third secret has something to do with the bird flu since Francisco and Jacinta died in the influenza pandemic of 1918. Could this imply 2/3 of mankind dieing of some type of influenza.



**THE END
OR IS IT THE BE BEGINNING?**