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For health professionals

## WHAT'S TRUE ABOUT FLU? Part 1

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**Influenza** ('flu') is medically defined as "a contagious viral infection mainly affecting the nose, throat, airways, and lungs." There are several strains of viruses (classified as type A, B, or C) blamed for causing flu. Each strain can mutate and change frequently. Type A is most common and found in many animals (such as chickens, ducks, and pigs) as well as humans. It's credited with causing the worst kinds of flu. Type B is said to cause milder cases of flu. Type C hasn't been associated with causing the annual plague of flu. A common cold is not considered to be flu. 'Stomach flu' is not influenza.

Flu comes around every year, usually from November to March in our part of the world. Symptoms (fever, headache, muscle aches, cough, runny nose, fatigue) are uncomfortable but usually not dangerous. Yet certain people—like those older than 65 or younger than 5, pregnant women, and those with lung, heart, or other chronic conditions—are at higher risk of serious complications. It's estimated that 5% to 20% of people get 'infected' every flu season. Each year the flu is blamed for 200,000 hospitalizations and 36,000 deaths in the US. The best defense against influenza, we are told, is the flu vaccine. <sup>1</sup> What's true about flu?

**Do I have the flu?** Many flu cases are not really flu. You could have a bad cold, but if it occurs during flu season, it will invariably be diagnosed as flu. Many people have "influenza-like illness" which is attributed to viruses other than flu viruses. Or they have "respiratory syncytial virus" (RSV) which produces complaints *like* flu, thus causing "confusion." Doctors usually diagnose flu on the basis of whether it's occurring in the community and whether symptoms come close to the current pattern. Rarely is laboratory testing used to identify the virus. Subacute (develops at a moderate rather than fast pace) carbon monoxide poisoning is often mistaken for flu since the symptoms are similar. Sudden increases in air poisoning (pollution) create illness mistaken for flu. So you probably don't know if you have flu. <sup>2</sup>

What about the statistics? No one really knows how many people actually get the flu or how many die of it. A computer-generated hypothesis is used and reported as fact. Since the 1990s, the annual number of guessed deaths has been 36,000. The deaths are not equally spread across age groups. The elderly are hardest hit; 90% of those who die are over 65. It may be more accurate to say they die with a flu-like illness, not die of flu. This is because of underlying complications such as respiratory or cardiovascular diseases that existed before 'coming down with' flu. Chronic illness means there is an already-stressed or compromised immune system (and possibly respiratory tract), making it harder to deal with a cold or flu. About 20% of children and 5% of adults develop symptoms of flu each year. How things go is affected by age, smoking, other existing illnesses or diseases, medications that can affect the immune system, or other stressors such as pregnancy. It's scary to think of 36,000 people dying each year from flu. But if deaths from pneumonia are removed, the real number is

closer to 750. In other words, people already in poor health who develop flu-like symptoms (whether or not they have flu) advance to pneumonia, die, and are counted as flu deaths. The number of deaths can be estimated, but "it is another problem entirely to determine what proportion is actually due to influenza," says David M Morens, MD. The number of *reported* influenza deaths has remained about the same or has increased during the last few decades despite the fact that the number of people receiving flu vaccines has substantially gone up. <sup>3</sup>

Don't scientists know whether it's flu or what type of flu it is? Dr Maria Zambon (who works in an influenza lab) wrote, in a *Lancet* commentary, that predicting the outcome of the flu "remains an inexact and observational science...observations for one viral subtype might not hold for another." Flu strains are diverse and change every year. The vaccine "weapon" (another medical war) "is woefully unsophisticated." The virus is blamed for this. "Influenza is caused by an unintelligent, unstable virus," says Dr Kennedy Shortridge. The virus is not only stupid, but evidently immoral: "The virus' instability is genetically based and goes hand-inhand with its polygamous behaviour." A lack of fidelity, it seems. "Influenza research is a continuing detective story, with all the intrigue of an Agatha Christie novel." Though the flu virus is called unintelligent, scientists speak of its high rate of change in which it evolves "rapidly to evade recognition" by the host's immune system. At least it's smart enough to find a disguise. Detective stories have a solution, but so far, medically, the flu does not.

Each February, scientists from the World Health Organization (WHO) meet to define the three most likely flu viruses that might hit the following fall and winter. Once they decide, the vaccine for that flu season is formulated on that basis. These experts "often get it wrong." Even if they guess the correct strain, not everyone responds with the antibodies that supposedly fend off the flu. As many as 40% of people over age 65, for example, don't respond to vaccines as far as antibodies go. Studies by the Centers for Disease Control (CDC) showed that each year virtually the same percentage of people suffer from flu-like illness—whether they are vaccinated or not. The researchers concluded that the vaccine "[w]as not effective or had very low effectiveness." Besides being ineffective, typical ingredients in the flu vaccines include toxins such as aluminum hydroxide, thimerosal (mercury-based toxin), and phenol (a potential carcinogen), among other additives.

In many undeveloped regions, flu is not seasonal. It occurs year-round and "often manifests as pneumonia." Is it flu or pneumonia? I'm confused. Perhaps in developed countries like ours, it's a bad cold if it occurs in April, but flu if it occurs in November. <sup>4</sup>

Shouldn't we prepare for the predicted flu pandemic? For many years, scientists have been saying we're due for a pandemic that mimics the 1918 flu pandemic which accounted for an estimated 40-100 million deaths worldwide. A virus or germ is predicted to emerge that will cause much illness and mayhem. "However," explains Dr John Burndage who works in medical surveillance, "outside of highly controlled laboratory settings," the characteristics of most such diseases "are much more complex than implied by a simple 'one germ, one disease' model" because the effects of viruses or bacteria—"particularly influenza viruses"—

modify the effects of other viruses and bacteria. Put another way, in real life with real people in real circumstances, no one can predict what will happen. Linking a specific 'germ' with a specific illness is not really possible. The plan to stop future flu pandemics, as adopted by the WHO "may be flawed," according to some researchers. There is controversy. Jeremy Berg, director of the US National Institute of General Medical Sciences, says: "If the controversy illustrates anything, it's that we still know very little about how pandemics start." A Cochrane review found that vaccines and anti-viral drugs will not be enough to stop a viral epidemic, if and when one breaks out. Still, the prestigious journal, *Science*, did mention a positive note: "With such a wide range of viruses causing a multitude of human and animal diseases, there remains a furrative market for drugs that can target multiple classes of viruses and hence boost the current armory of antiviral therapies." Drug companies may be happy, but I'm not. <sup>5</sup>

How about examples of recent flu pandemics? One is the avian or bird flu (H5N1 in medical parlance), a type A. It's been a concern since 1997; by 2006 there was worry that the "pandemic H5N1 influenza could escape human control." In 1997 chickens were the principle source of the virus, particularly in China and Hong Kong. Then it started showing up in various countries. Some scientists attributed the spread to migratory birds, but others disagreed. If migratory birds were the carriers, outbreaks would have occurred along their migratory routes. But they didn't. The more likely explanation is industrialized chicken farms. The virus quickly disappears in areas where there aren't any industrial confinement facilities. Researchers identified unhealthy, toxic chicken farms as the sector most vulnerable. The spread of bird flu was increasingly suspected to be "not entirely governed by nature, but by the human activities of commerce and trade." For at least 50 years milder strains of the virus were found in wild and domesticated birds, yet the virus never caused problems before. By 2008 the 5-year human death toll attributed to avian flu amounted to 243. Tragic but not even close to the usual 500,000 deaths worldwide blamed on ordinary seasonal flu. National Institutes of Health (NIH) researchers point out that the bird flu virus has yet to cross the species barrier. It seems to spread only from direct contact with infected birds, but there was concern that the virus could mutate into a form that could be transmitted from human to human. This hasn't happened. Experts say the virus would need to accumulate many genetic mutations to adapt to human hosts. Plus no serology studies were conducted to determine the infection rate of those living in the area of the 243 who died-who had this flu was not verified. Of the 200,000,000 birds that died, 99.9% were due to official extermination, not flu. Dr Marc Siegel, New York University School of Medicine, remarked, "The fear of bird flu has become particularly virulent. There is a vaccine for this fear: it is called information with perspective." The most likely explanation for bird flu is filthy, overcrowded, unnatural, stressful conditions in confinement operations for raising chickens. Government veterinarians privately thought this was the case when they looked into an outbreak of bird flu which decimated poultry operations in the Shenandoah Valley in 2003. 6

Another example is the recent **swine** flu (medically, **H1N1** virus—the "H" and "N" referring to particular versions of two proteins, hemagglutinin and neuraminidase), a new type A. Flu viruses have few genes; H1N1 possesses 8. Two genes came from birds, three from swine,

two from other swine, and one from humans. This virus was predicted to cause the pandemic of the century. It was supposed to be particularly virulent because it was new and people would have no immunity against it. This didn't happen. Actually, H1N1 strains have been circulating in humans for a long time, at least back to the early 1900s. This "novel form" was considered unusually dangerous. Unlike seasonal flu, people over age 60 were not supposed to be affected. But some were. Young children and pregnant women were considered at high risk. The H1N1 flu felt a lot like seasonal flu—maybe milder—but often with gastrointestinal issues like vomiting and diarrhea. Severity was linked to underlying disease. In other words, if a person was already sick, he/she was at higher risk of more serious complications. That's true of any flu. H1N1 seemed to be less efficiently transmitted by respiratory droplets (sneezing, coughing) than is attributed to regular influenza.

Experts think the virus originated in Mexico. In May 2009 the world was warned to "expect further deaths" than the initial ones in Mexico. The number of those "infected" was predicted to increase and expand. A team of scientists collaborating for the WHO said there could be a huge pandemic outbreak with impact on human health difficult to quantify. People began to panic. By June 29, 2009, worldwide there were 71,000 reported cases of H1N1 with 311 deaths. More panic. Then it was admitted that the flu's outbreak "seems to have prompted a lower threshold for diagnosis of influenza in patients presenting with non-specific symptoms." Translation: people were diagnosed with H1N1 when there was no evidence that's what they had. Early on, in April 2009 it was reported that, "176 people have been killed in Mexico." Soon after, lab analysis showed only 7 deaths could be blamed on H1N1. A week later the official toll was only 19. Similarly, in late April 2009 in New York City, several hundred children were categorized as having H1N1 flu; but none of the cases was verified by a lab test. In June 2009 the WHO stated that all cases of common flu would be categorized as H1N1. In July 2009, the CDC ceased tracking individual cases. They advised states to stop testing for the virus because there was no need for confirmation of actual cases since the epidemic was obviously underway. But many states continued to test for H1N1 anyway. In most states, between 83% and 98% of reported cases were (not/H1N1 and not even flu at all. Most were either colds or upper respiratory problems caused by something else.

Dr Len Saputo and Byron Belitsos explain that, although flu viruses mutate quickly, there was no evidence that a more virulent strain of H1N1 would evolve. It would be "highly unlikely." What's more likely is that which is commonly seen with seasonal flu viruses: they become less virulent. As the world was becoming more afraid of this flu, Mexicans were blaming local pig farms and their poor levels of hygiene. In particular, local plants of Smithfield Foods, the world's largest pork packer and hog producer, were suspected. The outbreak was believed to have started in the town of Perote, Veracruz, Mexico. Residents were concerned that the pigbreeding farm there (where 950,000 hogs a year are raised) polluted the atmosphere and local water supplies. Smithfield also owns a million-pig operation near La Gloria, Mexico, where flu was first detected. It was felt that conditions there—"horrifically unsanitary"—made it possible for the virus to arise. Also, the widespread use of modified live and genetically-engineered viral vaccines in pigs raised questions about mutations and genetic exchanges

between virus strains and different species. The overcrowding, extreme confinement, and unsanitary conditions of factory farms stresses pigs' immune systems as do the use of drugs and nutritional deficiencies. The toxic results are none to healthful for humans in the vicinity.

By January 2010, the so-called pandemic and panic subsided. According to the CDC, between April 2009 (when this flu first emerged) and March 12, 2010 an estimated 12,000 North Americans died from the H1N1 swine flu. This was a lot less lethal than the ordinary seasonal flu with its estimated 36,000 deaths each year. "If this turns out to be the weakest pandemic in history, as it currently appears," wrote Dr Jeremy Laurance, "it will pose some tough questions for the scientific community." Epidemiologist Wolfgang Wodarg, MD, chairman of the European Council's Health Committee, followed the H1N1 virus pandemic story. He concluded: "We have had a mild flu—and a false pandemic."

Didn't the H1N1 flu vaccine prevent a pandemic? In August 2009, the President's council of Advisors on Science and Technology highlighted a "plausible scenario" that the H1N1 virus could infect up to half the US population during the following 6 months and kill as many as 90,000 people. In September 2009, the WHO referred to the H1N1 virus as "unstoppable." and called on all countries to vaccinate their citizens. Flu experts warned that, by the time a vaccine arrives, it might be too late to stop the wave of disease, especially since it was highly transmissible ('catchy'). The hurry to develop vaccines, said a Lancet editorial, "means that a vaccine might be licensed without the usual safety and efficacy data requirements." Try-outs would be very limited. The US Food and Drug Administration approved four H1N1 vaccines and confirmed that "a robust immune response was seen after a single dose." How was this known? It was "measured by serological responses as a surrogate for vaccine efficacy." Huh? They look at the quantity and quality of antibodies or clumping of red blood cells once people are injected with an experimental vaccine. If a pre-set measurement is met the vaccine is considered "protective." The question is how these laboratory markers relate to actual flu protection. Many vaccinated people can still get the flu. Real outcomes are rarely looked at. With H1N1, antibody levels were often lower than expected. This was explained by a possibility of previous "subclinical" infection or because the virus was different from others.

The October 10, 2009 Lancet reported: "H1N1 influenza has been good for drug-company coffers. Three major pharmaceutical firms—Johnson & Johnson, Abbott Laboratories, and Merck & Co—have just announced massive H1N1 vaccine deals in what experts say is a strategic move." Some scientists and a large number of people questioned the safety and the effectiveness of the H1N1 vaccine. The vaccine was not put through rigorous testing to demonstrate safety or effectiveness. There was concern about ingredients (including mercury) and biological materials capable of causing problems. Once people became aware of the mildness of this 'pandemic' and of the facts and potential dangers of the vaccine, many opted not to get vaccinated. Healthcare workers were especially reluctant about getting vaccinated. Millions of doses of the vaccine remained to be sold. Publicity campaigns sprang up to encourage the public to get their vaccines. The US government spent \$1.8 billion to put the vaccines into production. Were they effective in preventing death and hospitalization?

When such concerns were directed to the CDC, their reply was that no decision has been made to study these issues. It turns out that people who got the vaccine were no better off than those who did not. Hundreds of thousands of children were given one type of H1N1 vaccine that was recalled because it was found to be weak and useless. Yet children who received the recalled (useless) vaccine did not have more incidence of flu than those who received a full-strength vaccine. 

Is there anything else we can do to help prevent or treat flu? The next issue will search this question.

For support to the immune and respiratory systems in order to help keep the body healthy during flu season, the following can be considered:

Upon arising:

4 Calcium Lactate

Just before two meals:

2 Allerplex

2 Cataplex C -chew

1 Organic Minerals -chew

After two meals:

3 SP Cleanse

1 Tuna Omega-3 Oil Chewable

1 Garlic capsule

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