

Swine Flu Update – Epidemic hysteria revisited

98 to 99% of people diagnosed with the swine flu actually do not have it

October 24, 2009 – Matt Irwin, M.D.

If someone told you that 98 to 99% of people diagnosed with swine flu actually did not have it, you would probably say they were misguided or had simply lost their senses. However, that is what a 3 month CBS investigation found, just published three days ago, on October 21, 2009. Furthermore, in 86 to 93% of these “probable” or “presumed” swine flu cases, regular seasonal influenza did not cause the symptoms, either. The vast majority of people diagnosed with the swine flu today most likely have a viral syndrome similar to the common cold. This confirms the message I sent out last May with similar complaints about swine flu false positives, and the fact that there are no specific symptoms to tell you who has what illness. It also suggests that regular influenza has no specific symptoms, and that the belief that the swine flu is worse than the regular flu, or any other type of illness, is false.

Amazingly, instead of reassuring the public with their findings, CBS used them to further fan the flames of epidemic hysteria, as they and other news organizations have been doing since the beginning of the “pandemic”. CBS also recently used even more severe scare tactics in their news magazine, 60 Minutes, on Sunday, October 18th, by examining in detail the tragic case of a teenager with life-threatening illness attributed to the swine flu. People who have such difficult and traumatic experiences deserve compassion and as much assistance as possible, but one can find tragic cases of all kinds and use them to justify widely varying actions and beliefs. It seems better when making decisions to also keep in mind that for the vast majority of people such illnesses are an unpleasant, often miserable, but routine part of life, without any lingering after effects.

Unfortunately, good news about the swine flu is a topic that people do not want to hear about. That is why it does nothing to generate ratings, sell newspapers, or sell vaccines, and, therefore, is widely ignored. It is also unfortunate that the fear and anxiety created by this campaign undermines people’s health, probably having a greater impact on public health than the swine flu, itself. When subjected to chronic stress and anxiety, it is hard for people to get through routine illnesses, and makes it more likely that a routine illness will turn into a severe illness. The rampant over-diagnosis of swine flu also leads to false hope that vaccines will help avoid illness and that Tamiflu will help you recover more quickly. However, vaccines and other treatments can have a powerful placebo effect, and can be used to counter the nocebo effect that has been generated. Therefore I am in favor of people seeking out treatment and/or vaccination if that is in line with their core beliefs. ☺

Has anyone you know been recently diagnosed with the swine flu in their doctor’s office? Maybe some students at your local school were diagnosed with it. These people might have even been prescribed Tamiflu or Relenza to treat it. Well, the chances are about 98 to 99% that they didn’t actually have swine flu. In fact, the chances are that they did not even have seasonal influenza, but more likely had a routine viral-syndrome such as the common cold.

I hope all of you read the article I sent out in May, in the beginning of the swine flu/H1N1 “epidemic”. If not, it appears below, and this new report by CBS confirms

what I wrote then. They just published the results of a 3 month investigation showing that the non-specific nature of swine flu has created wildly inflated estimates of swine flu prevalence. This has also resulted in over-diagnosis of swine flu in doctor's offices, overtreatment of non-existent swine flu, and generalized epidemic hysteria. This does not mean that people are not sick, but argues rather that what they need most in order to get better is the usual combination of rest, interventions that make them more comfortable, and patience to wait until their health improves.

Another major issue CBS did not discuss is that the swine flu vaccine is unlikely to be effective, and neither is the regular flu vaccine. To begin with, if 98 to 99% of flu-like illness is not caused by swine flu, then the vaccine will only protect us against 1 to 2 % of this type of illness. That is assuming the vaccine is actually 100% effective, which is very questionable. Many studies have found that the regular seasonal influenza vaccine does not affect any significant measures of public health, except possibly in people with chronic lung disease such as emphysema/COPD. If the regular seasonal influenza vaccine is not effective, even with all the combined experience of yearly vaccination campaigns, the new swine flu vaccine is even less likely to be effective. I sent out a separate article last fall on the ineffectiveness of the regular flu vaccine, including citations and abstracts of review articles in major medical journals such as the *British Medical Journal (BMJ)* and the *Archives of Pediatric and Adolescent Medicine*. Here is a link to the complete *BMJ* article for those interested:

<http://www.bmj.com/cgi/content/full/333/7574/912>

The key finding of the recent CBS report from October 21st is that someone who has “probable” or “presumed” swine flu actually only has about a 1 to 2% chance of testing positive on a “confirmatory” test. This means that *at least* 98 to 99% of cases of flu-like illness are not due to H1N1. At the time the tests were done, in June and July 2009, many factors were used to determine “probable” and “presumed” cases of swine flu. In addition to flu-like symptoms such as fever, body aches, and fatigue, other factors such as contact with another “probable” or “presumed” case of H1N1 or recent travel to Mexico were used. This means that many people who had flu-like symptoms but did not have contact with a “probable” or “presumed” swine flu case, or had not recently travelled to Mexico, would have been excluded. That is why I emphasized the words, “*at least*” when I referred to the 98 to 99% false positive rate. Most likely the false positive rate today is even higher than 98 to 99%, since the criteria have been widened to include just about anybody with flu-like illness.

The CBS research also showed that the vast majority of people with these symptoms did not have the regular seasonal influenza, either. For example, California had the largest sample size of 13,704 people who had been diagnosed with either “probable or “presumed” swine flu, but confirmatory testing showed only 2% tested positive for swine flu, and only 12% tested positive for seasonal influenza. That left 86% having other types of upper respiratory illnesses such as the common cold.

Another topic that is not mentioned at all by CBS or other news organizations, which I wrote about in my article in May, is that the “confirmatory” tests themselves are not as reliable as doctors and other medical establishments believe. See the article below for more details, but in general the “confirmatory” tests they are referring to are actually non-specific screening tests which are also prone to false positives. All screening tests

generate more false positives than true positives because it is considered preferable to treat many people who will not benefit in order to help one person who will. This is known in research studies as the “number needed to treat”. In some screening tests it is fairly easy to perform a confirmatory test, such as a biopsy or bacterial culture. However, viruses are not visible except in an electron microscope, making confirmatory tests extremely difficult and expensive, so they are simply not used. Similar problems even exist with some bacterial diseases such as pertussis (“whooping cough”) and lyme disease.

Unfortunately, instead of trying to reassure people with their findings, CBS used them to further fan the flames of epidemic hysteria. Here’s how good news about a dramatically lower incidence of swine flu can be used to generate even more fear and anxiety. They argue that people who have already had the swine flu have been given false reassurance, and are still at risk for getting it. According to their investigation, there is at least a 98 to 99% chance that they are actually not protected at all, because they never had it in the first place. Therefore they still need the vaccine, and also need to remain frightened and anxious. I guess it is hard to sell papers when you give too much positive news, so even positive news needs a negative spin. The closest we typically come to good news making national headlines are things like the discovery that the “balloon boy” was actually never in any danger... ☺

Here is a link to the complete CBS report:

http://www.cbsnews.com/stories/2009/10/21/cbsnews_investigates/main5404829.shtml

Here is a link to a report on the balloon boy, another sad case of mass hysteria:

<http://www.thestar.com/comment/article/714600>

Below is my earlier article on swine flu.

Sincerely,

Matt Irwin
October 24, 2009

Swine Flu and Epidemic Hysteria

Hi Everybody,

May 3rd, 2009

I realize many people have been frightened by the swine flu “epidemic”. However, from a broader perspective there is little to be afraid of, and I am writing this e-mail in hopes of balancing things out a little. If it has reached you in error or you are not interested, please fell free to delete it. If you find it helpful, feel free to send it to others who may be interested.

I began writing this 24 hours ago, and since then have realized that the swine flu is fizzling out as a news story, just as so many other examples of epidemic hysteria have in the past 90 years. The number of deaths in Mexico from the swine flu was just revised

downwards, from 176 to 101 in one press report yesterday (May 2nd), but another one said the death toll “remains at 16” (see links to articles at the end of this e-mail, below). How could it be revised *downwards*, and how could there be such divergent estimates? I will answer this in detail below, but in short, it is because the tests they are using are not reliable. Many “probable” cases turn out to be false positives. These tests are used to try to diagnose a wide variety of illnesses, but are fraught with uncertainty and prone to high false positive rates. Many, or most, of the cases “spreading worldwide” are probably false positives. But a basic problem is that no one even knows for sure if “confirmed” cases really have a new illness, because the confirmatory tests are also not reliable.

It saddens me that so much of our worldwide energy gets used up on “epidemics” that have minimal impact on public health, such as swine flu, SARS, and the “bird flu” to name just a few. I prefer to spend my energy on things like mindfulness practice, attentive driving, conflict mediation, and poverty alleviation.

While there may be significant suffering from the swine flu, even if you accept the statistics generated by the new tests, there are many much more serious causes of suffering in our world. Child mortality estimates worldwide range from 20,000 to 40,000 deaths *per day*, mainly due to malnutrition, which in turn is usually exacerbated by ethnic conflicts and wars (see the link at the end of this e-mail for an article on malnutrition and poverty alleviation). Motor vehicle accidents are another leading cause of mortality, in both non-industrialized and industrialized nations, and in our own country about 1000 people die each week from motor vehicle accidents. Another untold cause of suffering worldwide, which I frequently suffer from myself, is too much self-importance and a missing sense of humor ☺.

Of course, I would prefer no one get sick from the swine flu, or any other illness. But my prayers are also being sent to the tens of thousands of children who die each day from malnutrition related causes, their families and loved ones, and the billions of us who suffer for other reasons.

Very few people are aware of the problems with false positives on the new tests used to try to diagnose all kinds of illnesses these days. Did you know that as of 3 days ago, April 30th there were only 97 “confirmed” cases of swine flu, according to the CDC’s own website (see the link at the end of this e-mail)? The press and other organizations emphasize the much higher numbers of “suspected” or “probable” cases, which was usually listed at that time as over 400.

Diagnosis is especially a problem in illnesses such as the “swine flu” which has exactly the same symptoms as the regular flu or even the common cold, so you cannot rely on the clinical picture to guide you. In fact, it is possible that many cases diagnosed as “swine flu” are actually the regular flu or common cold, especially when there are a few cases reported in various parts of the world. I wrote a paper in medical school on this problem, which reviewed the literature on false positives in HIV/AIDS where these tests are used the most. The new diagnostic tests use polymerase chain reaction (PCR) and similar assays that look for tiny fragments of genetic material, usually fragments of RNA, in

people's blood. The problem is that our own human cells, especially when stressed by illness, produce thousands of times more genetic material than any virus, making false positives likely, especially in people who are already ill. Below are two examples.

Example #1 – False positive pertussis (“Whooping Cough”) tests.

The CDC itself recognizes that many false epidemics have been created by PCR testing, even though they continue to rely on it inappropriately, in my opinion. Pertussis, for example, has caused many false scares. Below are a link to a review of this problem, and a brief quote from the review. The quote recommends using cultures to confirm positive PCR tests, but pertussis cultures are expensive and difficult to obtain, so in practice are rarely used. In viral illnesses, like swine flu, cultures are often nearly impossible because the viral particles are so tiny that they can only be seen with an electron microscope and usually the “cultures” contain mostly cellular debris. This has been well established by some of the most prominent specialists in electron microscopy, such as Etienne de Harven. So “viral cultures” actually rely on other surrogate markers to “confirm” the presence of the virus. Here is the excerpt and link; note that there were 43 positive PCR results but only one confirmed by culture, making a staggering false positive rate of 98%. You might also note that they used the clinical picture of pertussis to guide them, which is also pretty non-specific (cough for 2 weeks).

Polymerase chain reaction (PCR) analysis of samples from 317 symptomatic patients yielded only 43 (14%) positive tests for *B. pertussis*. Only two of the 43 (5%) had a cough for at least two weeks (the definition of a clinical case). Of 284 specimens submitted for culture, only the sample from the original case grew *B. pertussis*.

<http://www.medpagetoday.com/PublicHealthPolicy/PublicHealth/6505>

Example #2 False positive HIV “viral loads”.

HIV/AIDS is the area where PCR has been used the most, and has had a massive infusion of money to develop the test. It is used to find someone's “viral load”. One would expect this to be the area with the highest quality PCR testing, especially given the social and psychological impact of an HIV diagnosis. However, even here false positives are common. A review of the literature that I performed in a paper that I wrote as a medical school project revealed that 3 to 10% of healthy, hiv-negative people have positive “viral loads” using PCR and similar tests. Because the prevalence of HIV in the general population is only about 0.4%, this makes another staggering false positive rate of 90 to 95%. This is why these tests are not used for diagnosis, but only to measure the person's “viral load”. However, there are also problems with the other “confirmatory” tests for HIV. The false positive rate for PCR and other tests is expected to be much higher in people who are already sick with some other illness when the test is performed, which is definitely the case when used in swine flu or pertussis.

With pertussis ("whooping cough"), where the illness and bacteria have been identifiable for over 100 years, and where bacterial cultures can be easily seen in a regular microscope, you would expect false positives to be less common than tests used in microbes such as H1N1 ("swine flu virus"), SARS, and "bird flu". However, even with pertussis there have been a number of false epidemics (see link to article at the end of this post). In these newer microbes, which are even more difficult to isolate, "epidemics" may be caused by an epidemic of testing resulting in false positives, rather than true cases of a new illness.

Some of you may remember the last "swine flu epidemic" in 1976. Panic was generated, and an emergency vaccine produced. But the "epidemic" fizzled with only one death, and the vaccine caused 100's of cases of Guillain Barre syndrome. The vaccine was quickly discontinued, but not before it caused much more death and permanent disability than the flu itself (see the links at the end of this e-mail).

Another good historical lesson comes from a comparison with the effects of public health with vaccines for other diseases which used to cause epidemics, such as typhoid, diphtheria, and measles. Did you know that mortality from these illnesses was almost eradicated *before* the vaccines were introduced, especially in the case of measles and pertussis (see the graph and link at the end of this e-mail)?

This brings us back to mindfulness practice, conflict mediation, poverty alleviation, and maintaining a healthy sense of humor, which are all basic parts of good public health.

Sincerely,

Matt Irwin, M.D., M.S.W.

Links to Articles on Swine Flu "Epidemic" of 1976:

http://en.wikipedia.org/wiki/1976_swine_flu_outbreak

<http://www.theledger.com/article/20090501/NEWS/905015050/1338?Title=Swine-Flu-Outbreak-Brings-Memories-Of-1976-Vaccine-for-Lakeland-Couple>

Link to an excellent summary of malnutrition-related child mortality:

<http://www.news.cornell.edu/releases/June03/prevent.kid.deaths.ssl.html>

Link to an introduction to microcredit, an excellent way to help reduce poverty:

http://www.grameen-info.org/index.php?option=com_content&task=view&id=211&Itemid=380

Here is a link to the CDC website – note Table 1 near the bottom with a timeline that notes 97 "confirmed" cases as of April 30th.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58d0430a2.htm>

Here is a link to the downward revision of the number of deaths (176 to 101) from swine flu.

http://news.sky.com/skynews/Home/World-News/Swine-Flu-Mexico-Lowers-Death-Toll-Estimate-As-France-And-South-Korea-Hit-By-H1N1-Infections/Article/200905115273564?lpos=World_News_News_Your_Way_Region_4&lid=NewsYourWay_ARTICLE_15273564_Swine_Flu%3A_Mexico_Lowers_Death_Toll_Estimate_As_France_And_South_Korea_Hit_By_H1N1_Infections

Here is a link to an article the same day saying the death toll “remains at 16”:

<http://www.washingtonpost.com/wp-dyn/content/article/2009/05/02/AR2009050200945.html?hpid=topnews>

Here is the graph of US mortality from older microbes that came in epidemics:

http://www.healthsentinel.com/graphs.php?id=14&event=graphs_print_list_item

