

IN THE FACE OF SWINE FLU, COMMON SENSE AND SCIENCE

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Abstract

1. Swine flu is very contagious. But the severity of swine flu is much lower than the seasonal flu (the flu of normal winters).
2. Swine flu demands common sense and calmness, as for seasonal flu. Contact your physician only in severe cases, such as coughing up blood or significant difficulty breathing.
3. Medications for swine flu such as Tamiflu and Relenza do not prevent the disease, and they are not useful for treatment in healthy people, They have common side effects some of which are serious causing admission to hospital. These medications might be useful in severe cases, but this is unproven.
4. Vaccine against swine flu is experimental. Nobody knows how effective it will be in preventing the disease or how safe it will be.
5. Swine flu does not have any different consequences for pregnant women than seasonal flu.
6. Previous flu pandemics do not produce high mortality since we have had antibiotics to cure pneumonias which complicate flu. Previous flu pandemics have no “second wave” and if it takes place it is not likely to be more severe.
7. Health services must always take care of thousands of acute and chronic patients, and it is important not to waste time and resources for mild cases of swine flu.

The Problem

Flu is a viral illness that usually strikes as an epidemic in the winter (a seasonal epidemic) and affects a large portion of the population. As the old adage says, “the flu lasts 7 days with treatment and one week without it”. Flu is a minor sickness with symptoms like fever, head and muscle pain, nausea, diarrhoea, and general malaise, which require a couple of days’ rest. It’s not recommended to lower the fever (not even in children), and the treatment is for the pain and malaise.

In spite of the mild course of flu, there are two annual peaks in mortality: one in summer during the hottest days, and another in winter during the flu epidemic. For this reason vaccination against the flu might decrease severe cases and mortality, however, this has not been proven.

The swine flu epidemic, which began in Mexico in 2009, is less severe than the seasonal flu epidemic. It's a very contagious flu, so it's called a "pandemic" because it could affect up to half the population. Thus far based on the experience in the Southern hemisphere it was much lower, around 10%. However, the contagiousness of swine flu has nothing to do with its severity, and in fact swine flu is less severe than any previous flu epidemic. It affects a lot of people, but it kills less than the seasonal flu. Numbers vary, but in the United Kingdom, for example, there have been hundreds of thousands of cases and only 30 deaths, and in the United States there have been a million cases and only 302 deaths. During the winter in the southern hemisphere (summer in the Northern hemisphere) 132 people died in Australia, 128 in Chile and 16 in New Zealand. When the southern hemisphere winter is coming to an end, the total the number of deaths in the world is 2,501. To put these figures in the proper context, during a usual winter in Spain (44 millions inhabitants) 1,500-3,000 people die from the seasonal flu. Spain, being a developed country with a public health system which covers the whole population, we can predict based on the experience from Southern hemisphere countries that about 500 deaths from swine flu will occur in the winter of 2009-2010.

We have had many pandemics, and the most lethal, the "Spanish flu" of 1918 killed mostly the impoverished (malnourished people who lived in poorly insulated dwellings) through bacterial pneumonias. The pandemics of 1957 and 1968 were not as lethal, due in part to the existence of antibiotics for treating bacterial pneumonias.

Looking back over the 14 pandemics from 1510, pandemic flu has never been able to infect the entire population at once. And although it tends to recur after a first wave, it eventually adopts the familiar seasonal flu pattern.

Swine flu appears to kill more younger people than older people. This is true as a percentage but as the total number of deaths compared to seasonal flu is much smaller, the total number of young people killed by swine flu is less than that killed by seasonal flu.

What can we do in the face of swine flu?

In 2005 the World Health Organization (WHO) predicted that up to 7 million people could die from bird flu, which unleashed worldwide panic. When the death toll was tallied, there were only 262 deaths. Obviously, the prediction was totally wrong. In the face of swine flu in 2009-10 we should not make the same mistake. Avoiding panic is essential. It's absurd to panic about swine flu, especially since it won't cause severe disease in many people. The current WHO messages, which are increasing fear of swine flu is a form of disease mongering.

One should approach swine flu like one would the normal/seasonal flu: take care of yourself and your family calmly and with common sense. Practice good hygiene and keep yourselves well hydrated and nourished. Consult a doctor only in the event of serious symptoms such as coughing up blood or significant difficulty breathing. Cover your mouth when you cough or sneeze. Don't touch your nose, and wash your hands before eating, after using the toilet and after blowing your nose. The virus is eliminated through nasal secretions during approximately the first five days of illness. Wearing surgical masks does not appear to prevent the spread of the epidemic. For the first days of illness, avoid social contact.

There is nothing special about swine flu for pregnant women. Pregnant women should follow a healthy lifestyle in any situation. During the last three months of pregnancy women have less respiratory capacity, which puts them at greater risk for pneumonias both from seasonal or swine flu. Therefore pregnant women should visit their doctors if they suspect they have the flu.

Obesity also limits breathing and thus swine flu or seasonal flu could be more severe in obese patients. However, unfortunately, in general, risk factors are not useful for deciding how to respond to flu of any kind. For example up to 70% of children who died of seasonal flu had no identified risk factors.

Policy makers should consider potential sources of socioeconomic disparities during pandemic swine flu and formulate specific plans to minimize these disparities.

There is no preventative treatment; medications for swine flu. The antiviral drugs oseltamivir-Tamiflu or zanamivir-Relenza do not prevent the illness. Even for people who have seasonal flu, these drugs are also almost useless (they shorten the duration of the illness by a half day). In the case of swine flu, we do not have proof that the drugs work. Furthermore, the antiviral drugs have important adverse effects. According to a London study, half the children treated with oseltamivir-Tamiflu had adverse effects. In most it was limited to nausea and vomiting, but in 18% there were neuropsychiatric adverse effects.

It remains possible that antiviral treatment is valuable in severe cases or in patients with previous serious chronic diseases, but this has not been proven at the present time. They are not useful in the treatment of otherwise healthy children or adults.

The seasonal flu vaccine is relatively ineffective in children and adolescents, with a success rate of 33%, and is absolutely useless for children under 2 years. There are doubts about how effective it is in preventing flu in adults and the elderly. We don't know anything about the effectiveness and safety of the swine flu vaccine which is ready to be marketed, but in 1976 the United States produced a similar vaccine (also created as quickly as possible in response to the danger of a swine pandemic), and the result was an epidemic of severe adverse side effects (Guillain-Barre syndrome, neurological illness) that required the vaccination program to be halted. Speeding the development

of these vaccines is good for no one, and even less so for swine flu, which has such a low mortality rate. We don't need to repeat the error of 1976.

If vaccination against the swine flu is offered, it is essential that subjects are required to sign an "informed consent" form and that this form makes all risks, benefits and uncertainties clear. The form should also provide clear directions as to how to proceed in the case of potential adverse effects. Being so new, the producers of the vaccine do not accept any responsibility for harms which may result from the vaccine and have passed this responsibility onto Governments.

Anything more?

The fast diagnostic tests for swine flu are not very accurate (only from 10-60%). Therefore it is not worth getting it as the test can't prove that you don't have swine flu.

Swine flu can mutate just like the seasonal flu, rendering the vaccine that is being produced useless. The seasonal flu vaccine will not give protection against the swine flu.

It's important to remember that children (and adults) can have other illnesses besides swine flu. In the United Kingdom there have been cases of children dying from meningitis after being falsely diagnosed with swine flu.

During the swine flu pandemic there will still be myocardial infarctions, appendicitis, cardiac failure, diabetes, asthma, suicide attempts, hip fractures, depression, schizophrenia and thousands of other illnesses that require medical attention. It's important that patients suffering with swine flu don't panic and overwhelm the system, so that hospitals and doctors can continue to treat all patients.

In front of the menace of avian flu, in 2005, the Canadian Government had two goals, 1/ to decrease mortality and 2/ to avoid social chaos. For swine flu goal number one should not be a problem because of its low severity. The second goal calls for a strong policy of calmness and accurate information for both professionals and public. The present messages by Governments, the WHO and the media focusing on the worst case scenario and the detailed description of each death is the completely wrong approach to fulfil the second goal. We need a health policy of common sense and self-control.

Note

The only purpose of the author is to transmit the best knowledge about the problem at present, and for that he has reviewed the world literature. This text is an informative one, not for clinical use. Sadly, the information you can obtain from other sources (public organizations, scientific societies, media) is very different; they will know why.

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-French (<http://pharmacritique.20minutes-blogs.fr/archive/2009/08/13/vaccin-et-tamiflu-sont-inutiles-dans-une-grippe-porcine-bien.html#more>), Portuguese and Spanish version in www.equipocesca.org

Translation

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Basic bibliography

- Antivíricos en la gripe: entre la incertidumbre y la urgencia de la pandemia por el nuevo virus A/H1N1. *Bulletí CROC*. 2009;22(2).
- Bath N, Wright JG, Broder KE et al. Influenza-associated deaths among children in the United States, 2003-2004. *N Engl J Med*. 2005;353:2559-67.
- Blumenshine P, Reingold A, Egenter S et al. Pandemic influenza planning in the United States from a health disparities perspective. *Emerging Infec Dis*. 2008;14:709-15.
- Burch J, Corbett M, Stock C et al. Prescription of anti-influenza drugs for healthy adults: a systematic review and meta-analysis. *Lancet Infec Dis*. 2009;doi:10.1016/S1473-3099(09)70199-9.
- Chowell G, Miller MA, Viboud C. Seasonal influenza in the United States, France and Australia. Transmission and prospects for control. *Epidemiol Infect*. 2008;136:852-64.
- Dodds L, McNeil S, Fell DB et al. Impact of influenza exposure on rates of hospital admissions and physician visits because of respiratory illness among pregnant woman. *CMAJ*. 2007;176:463-8.
- Ellis C, McEven R. Who should receive Tamiflu for swine flu? *BMJ*. 2009;339:b2698.
- Evans D, Cauchemez S, Hayden FG. "Prepandemic" immunization for novel influenza viruses, "swine flu" vaccine, Guillain-Barré syndrome and the detection of rare severe adverse affects. *J Infect Dis*. 2009;200:321-8.
- Gérvas J. Disease mongering by WHO. *BMJ*. 2009 [letter] http://www.bmj.com/cgi/eletters/339/aug10_1/b3172

- Health Protection Agency. Risk to pregnant women arising from influenza A infections. Background information for discussion with pregnant women. 25 August 2009. http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1247816600220
- Jamieson D, Honein M, Rasmussen S et al. H1N1 2009 influenza virus infection during pregnancy in the USA. *Lancet*. 2009. July 29. doi:10.1016/S0140-6736(09)61304-0.
- Kitching A, Roche A, Balasegaran S et al. Oseltamivir adherence and side effects among children in three London schools affected by influenza A (H1N1), May 2009. An Internet based cross sectional survey. *Eurosurveillance* 2009;29:1-4.
- Jamieson D, Honein M, Rasmussen S et al. H1N1 2009 influenza virus infection during pregnancy in the USA. *Lancet*. 2009; July 29. DOI:10.1016/50140-6736(09)61304-0.
- Jefferson TO, Demicheli V, Di Pietrantonj C et al. Inhibidores de neuraminidasa para la prevención y el tratamiento de la influenza en adultos sanos. www.cochrane.es/gripe/revisiones/CD001265.pdf
- Mateo M, Larraux A, Mesonero C. La vigilancia de la gripe. Nuevas soluciones a un viejo problema. *Gac Sanit*. 2006;20:67-73.
- Moreno DM, Taubenberger JK. Understanding influenza backward. *JAMA*. 2009;302:679-80.
- Sheridan C. Flu vaccine makers upgrade technology and pray for it. *Nature Biotechnology*. 2009;27:489-91.
- Shun-Shin M, Thompson M, Heneghan C et al. Neuraminidase inhibitors for treatment and prophylaxis of influenza in children: systematic review and meta-analysis of randomized controlled trials. *BMJ*. 2009;339;b3172.
- Simonsen L, Taylor RJ, Vibourd C et al. Mortality benefits of influenza vaccine in elderly people: an ongoing controversy. *Lancet Infect Dis*. 2007;7:658-66.
- Smith S, Demicheli V, Di Pietrantonj C, Harden AR et al. Vaccines for preventing influenza in healthy children. *Cochrane Database Syst Rev*. 2008;(2):CD004879.
- White N, Webster R, Govorkovs E et al. What is the optimal therapy for patients with H5N1 infection? *PLoS Med*. 2009;6:e1000091.
- Wilson N, Baker MG. The emerging influenza pandemic: estimating the case fatality rate. *Eurosurveillance*. 2009;14(26):pff=19255

