## Advice for pregnant women

Swine flu – Advice for pregnant women (<http://www.nhs.uk/conditions/pandemic-flu/pages/adviceforpregnantwomen.aspx>)

### Are you pregnant and feeling unwell?

If you are pregnant and have [flu-like symptoms](http://www.nhs.uk/Conditions/Pandemic-flu/Pages/Symptoms.aspx):

* Stay at home and call your GP, who will be able to give a diagnosis over the phone.
* If swine flu is confirmed, your GP will advise you on how to collect antiviral medication.
* Ask a healthy friend or relative to pick up the antiviral medication for you.

In the meantime, take paracetamol to reduce fever and other symptoms. Drink plenty of fluids and get lots of rest.

**For more advice see the** [**Swine flu pregnancy leaflet**](http://www.nhs.uk/Conditions/Pandemic-flu/Documents/Swine-Flu-Pregnancy.pdf)**.**

If you are pregnant, you are in one of the [high-risk groups](http://www.nhs.uk/Conditions/Pandemic-flu/Pages/QA.aspx#mostvulnerable) for swine flu, so it is important to read this page carefully and follow the advice to protect yourself and your baby.

This page explains why pregnant women are at greater risk from swine flu, what those risks are, the special precautions you should take and the safety information for swine flu treatments.

### Why pregnant women are more at risk

In pregnancy, the immune system is naturally suppressed. This means that pregnant women are more likely to catch swine flu, and if they do catch it, they are more likely to develop complications (see below).

Don't panic: your immune system still functions and the risk of complications is very small. Most pregnant women will only have mild symptoms.

### Symptoms and risks

If you are pregnant and you catch swine flu, the symptoms should be similar to those of regular flu. You will typically have a fever or high temperature (over 38°C/100.4°F) and two or more of the following:

* unusual tiredness,
* headache,
* runny nose,
* sore throat,
* shortness of breath or cough,
* loss of appetite,
* aching muscles,
* diarrhoea or vomiting.

Most pregnant women will have only mild symptoms and recover within a week. However, there is evidence from previous flu pandemics that pregnant women are more likely to develop complications.

Possible complications are:

* pneumonia (an infection of the lungs),
* difficulty breathing, and
* dehydration.

In pregnant women, these are more likely to happen in the second and third trimester.

If a pregnant woman develops a complication of swine flu, such as pneumonia, there is a small chance this will lead to premature labour or miscarriage. There is not yet enough information to know precisely how likely these birth risks are.

It is therefore important to be well prepared and to take precautions against swine flu.

### Special precautions

If you are pregnant, you can reduce your risk of infection by avoiding unnecessary travel and avoiding crowds where possible.

Pregnant women should also follow the general advice outlined in the box, top right. Good hygiene is essential.

If a family member or other close contact has swine flu, your doctor may prescribe you antiviral medication (usually Relenza) as a prophylactic (preventative) measure.

If you think that you may have swine flu, call your doctor for an assessment immediately. If your doctor confirms swine flu over the phone, you will be prescribed antiviral medication to take as soon as possible (see box, left).

Unless you have swine flu symptoms, carry on attending your antenatal appointments to monitor the progress of your pregnancy.

### Swine flu treatment

#### Antivirals

If you are pregnant and diagnosed with swine flu, you will usually be given a course of antiviral drugs, which should be taken as soon as possible.

If you have an uncomplicated illness due to influenza and do not have an underlying disease, you can take either Relenza or Tamiflu. Relenza is recommended as first choice.

Relenza is inhaled using a disk-shaped inhaler. It is recommended for pregnant women because it easily reaches the throat and lungs, where it is needed, and does not reach significant levels in the blood or placenta. Relenza should not affect your pregnancy or your growing baby.

However, Tamiflu should be offered to you instead of Relenza if you:

* have a condition such as asthma or chronic obstructive pulmonary disease,
* have difficulty taking an inhaled antiviral, or
* develop a severe or complicated disease due to influenza (where you will probably be treated in hospital).

[An expert group](http://www.emea.europa.eu/htms/human/pandemicinfluenza/antivirals.htm) reviewed the risk of antiviral treatment in pregnancy. It is much smaller than the risk posed by the symptoms of swine flu.

Some people have had wheezing or serious breathing problems when they have used Relenza. Relenza is therefore not recommended for people with asthma or chronic obstructive pulmonary disease (COPD). Other possible [side effects](http://www.relenza.com/important-safety-information.html) include headaches, diarrhoea, nausea and vomiting.

In a small number of cases, nausea is a side effect of Tamiflu.

If you take an antiviral and have side effects, see your healthcare professional to check that you are OK. Then report your suspected drug reaction to the Medicines and Healthcare products Regulatory Agency (MHRA) using their [new online system](http://www.mhra.gov.uk/Safetyinformation/Swinefluinformation/index.htm).

#### Painkillers

You can also take paracetamol to reduce fever and other symptoms; this is safe to take in pregnancy.

However, pregnant women should not take non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Nurofen).

### Vaccination and pregnancy

Pregnant women are in one of the groups who will be offered the swine flu vaccination first. The vaccine is recommended for all pregnant women, whatever the stage of the pregnancy.

There is no evidence that inactivated vaccines, such as the swine flu vaccine, will cause any harm to pregnant women or their unborn baby. Every year, the seasonal flu vaccine is given to pregnant women who are at risk of seasonal flu.

The Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency has given a clear recommendation that the GlaxoSmithKline vaccine Pandemrix can be given safely to all pregnant women.

The Department of Health have recently published an [information briefing](http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Dearcolleagueletters/DH_107824) on vaccination and pregnancy.

For more information and advice see ['Vaccination and pregnancy'](http://www.nhs.uk/Conditions/Pandemic-flu/Pages/QA.aspx#pv001).

# **H1N1 2009 influenza virus infection during pregnancy in the US**

<http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61304-0/abstract>

Original Text

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**Summary**

**Background**

Pandemic H1N1 2009 influenza virus has been identified as the cause of a widespread outbreak of febrile respiratory infection in the USA and worldwide. We summarised cases of infection with pandemic H1N1 virus in pregnant women identified in the USA during the first month of the present outbreak, and deaths associated with this virus during the first 2 months of the outbreak.

**Methods**

After initial reports of infection in pregnant women, the US Centers for Disease Control and Prevention (CDC) began systematically collecting additional information about cases and deaths in pregnant women in the USA with pandemic H1N1 virus infection as part of enhanced surveillance. A confirmed case was defined as an acute respiratory illness with laboratory-confirmed pandemic H1N1 virus infection by real-time reverse-transcriptase PCR or viral culture; a probable case was defined as a person with an acute febrile respiratory illness who was positive for influenza A, but negative for H1 and H3. We used population estimates derived from the 2007 census data to calculate rates of admission to hospital and illness.

**Findings**

From April 15 to May 18, 2009, 34 confirmed or probable cases of pandemic H1N1 in pregnant women were reported to CDC from 13 states. 11 (32%) women were admitted to hospital. The estimated rate of admission for pandemic H1N1 influenza virus infection in pregnant women during the first month of the outbreak was higher than it was in the general population (0·32 per 100 000 pregnant women, 95% CI 0·13—0·52 *vs* 0·076 per 100 000 population at risk, 95% CI 0·07—0·09). Between April 15 and June 16, 2009, six deaths in pregnant women were reported to the CDC; all were in women who had developed pneumonia and subsequent acute respiratory distress syndrome requiring mechanical ventilation.

**Interpretation**

Pregnant women might be at increased risk for complications from pandemic H1N1 virus infection. These data lend support to the present recommendation to promptly treat pregnant women with H1N1 influenza virus infection with anti-influenza drugs.