

Patient leaflets from the BMJ Group

Swine flu

There's been a lot of concern about the spread of swine flu, a new strain of flu virus which emerged in 2009. However, there are treatments that can help with symptoms. And there are things you can do to help protect yourself from catching the virus.

What is swine flu?

Swine flu is a type of respiratory disease, caused by a new strain of influenza A flu virus, thought to have originated in pigs. In April 2009 a new type began to infect people, probably starting with people who worked with pigs in Mexico and the US. It has been passed from person to person around the world. It causes an illness very much like seasonal flu.

Most cases in the UK have been described as mild.

The virus passes around in the way normal seasonal flu, or colds, pass around - in airborne droplets when people cough or sneeze, and by people touching surfaces that have been infected by these droplets.

Doctors classify viruses using numbers and letters. The type of flu we're talking about here is being called influenza type A, H1N1 2009. The reason people worry about a new strain is that people won't have built up immunity to fight it off, and we don't know how widely it will spread, or how badly it will affect people.

What are the symptoms?

The symptoms of swine flu are similar to those of normal seasonal flu. People get a feverish illness, with a high temperature. They may also have any of the following: cough, runny nose, headache, sore throat, aches, and chills. Some people have had vomiting and diarrhoea. Some people have described the symptoms as being like a bad cold, although others have been much more unwell.

If you are concerned you may have swine flu, don't go to the doctor or to hospital. Stay at home and telephone for medical advice.

In England, call the National Pandemic Flu Service on 0800 1513 100 or visit the website (<http://direct.gov.uk/pandemicflu>). You will be asked a number of questions. If appropriate, you'll be given a code for antiviral medicine. Ask a friend or relative to collect the medicine for you.

But these arrangements only apply in England. In Scotland, you should call NHS 24 on 08454 242424. In Wales, call NHS Direct Wales on 0845 4647. In Northern Ireland, call the swine flu helpline on 0800 0514 142.

What treatments work?

People who are likely to have swine flu will usually be offered antiviral medicines.

There are plenty of things you can do to cut your chances of catching the swine flu virus or spreading it around.

Medicines

Because this is a new strain of flu, it's hard to say what treatments definitely work. There hasn't been time for big, good-quality studies of medicines against this type of flu.

However, this is what we know from the research:

- Laboratory tests show that this type of flu virus is sensitive to two types of antiviral medicine: **oseltamivir** (Tamiflu) and **zanamivir** (Relenza)
- Both these medicines may reduce the amount of time you have normal flu symptoms by about a day
- Both medicines reduce your chances of getting complications from normal flu, such as pneumonia or bronchitis
- Studies show both these medicines reduce the chances of getting flu from a close contact (for example, someone you live with).

Oseltamivir is a capsule, and zanamivir comes as a spray you breathe in. You take them for five days (to treat flu symptoms) or 10 days (to protect against catching flu). Both may have side effects. Some people taking oseltamivir feel sick or vomit. Zanamivir can cause diarrhoea.

Other types of antiviral drugs, including **amantadine** and **rimantadine**, don't work against this type of swine flu.

It's important to know that taking these medicines will not stop the spread of swine flu. You will probably still be infectious while taking antiviral medicines. So you also need to take good hygiene measures, such as avoiding direct contact with people, regularly washing your hands, covering your mouth and nose with a tissue when you cough or sneeze, and throwing tissues away.

Things you can do for yourself

In addition to taking medicines, there are ways you can make yourself more comfortable if you have flu. Simple painkillers like **paracetamol** can help reduce your temperature and help with aches and pains. You should rest and drink plenty of fluids. Warm drinks can be comforting.

People can prepare for swine flu by identifying friends or family who could help collect medicines or shopping for them, should they become ill. You could stock up on basic foodstuffs, in case you or your family become ill and can't leave the house.

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Ways to avoid swine flu

The best way to avoid catching swine flu, or spreading it around, is to take sensible hygiene precautions, such as washing your hands regularly. There's good evidence that regular hand-washing (more than four times a day) cuts the spread of illnesses such as flu and the common cold.

These sensible hygiene measures should help prevent the spread of swine flu:

- Cover your nose and mouth when you cough or sneeze, using a tissue where possible
- Dispose of used tissues quickly and sensibly
- Wash your hands often, with hot water and soap
- Clean regularly-touched hard surfaces (for example, door handles and kitchen surfaces) frequently, using normal cleaning products
- Make sure your children follow these hygiene rules.

There's no good evidence that wearing masks in the street will protect you against swine flu. The evidence we found, which comes from the 2003 SARS outbreak, said masks in clinics and hospitals worked well. But it didn't look at wearing masks in everyday life (for example, on the street or on public transport). Most masks are designed to protect others from the viruses you breathe out, not to protect you from viruses in the air.

There's no need to worry about eating properly-cooked pork. Cooking at 70°C (160°F) kills the swine flu virus, as well as other germs.

Should I have the swine flu vaccine?

The swine flu vaccine is likely to offer some protection against the disease. Two different brands of the vaccine are to be used in the UK: Pandremix and Celvapan. Certain groups of people who are thought to be at higher risk of complications from swine flu are likely to be invited to have the vaccine first. They include people who have a chronic illness such as asthma or heart disease and pregnant women.

The swine flu vaccine isn't intended to replace the normal seasonal flu vaccine. If you normally have the seasonal flu vaccine, you may need both vaccines. Your local health care provider will tell you when you can come and be vaccinated.

Many people are worried about the possible side effects of the new vaccine. Side effects in trials have been mild and include headache, mild flu-like symptoms such as muscle aches, and soreness at the site of the injection. Bear in mind that the normal flu vaccine has been given to millions of people and that serious problems are rare.

If you're allergic to eggs, tell your doctor. You may be advised not to have the vaccine, since eggs are used in the manufacturing process.

The vaccine is safe for pregnant and breastfeeding women. For more about these groups, see below.

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What if I'm pregnant or breastfeeding, or looking after young children?

Normal seasonal flu can make pregnant women very ill, and can even cause problems like premature birth. Although most pregnant women with swine flu have had only mild illness, some have been more seriously affected.

Pregnant women who suspect they have swine flu should call their doctor immediately. They may need antiviral medicine. It's important for pregnant women with swine flu to start taking antiviral medicines as soon as possible.

If you do become ill with flu-like symptoms, drink plenty of fluids. You can also use paracetamol to bring down your fever.

There's not much information about the effect of antiviral drugs on pregnancy. But experts say it is likely to be much less risky than a bad attack of flu. You may be offered zanamivir (Relenza) instead of oseltamivir (Tamiflu) because it is breathed into the lungs, and is less likely to reach the growing baby.

If you're pregnant and get any of these symptoms while you have flu, you should call for emergency medical help:

- Difficulty breathing
- Pain or pressure in your chest or abdomen
- Sudden dizziness or confusion
- Severe or long-lasting vomiting
- Decreased or no movement in a baby that was moving previously
- High temperature that doesn't come down when you take paracetamol.

Breastfeeding your baby will pass on your body's own immune defences. So you should carry on breastfeeding if you can, even if you get sick. The breast milk will help protect your baby against the virus. You should take care not to cough or sneeze in your baby's face. You may be advised to wear a mask while breastfeeding. You can continue to breastfeed while taking antiviral medicines.

If you have **children**, it's important to make sure they follow hygiene measures like regular hand-washing and coughing or sneezing into a tissue. Children are often the first to pick up a virus. For most children, symptoms of swine flu are similar to those in adults, and the disease is not likely to be severe. However, children under 5 may not get all the usual symptoms, but they may seem lethargic and have trouble breathing.

If your child has flu, and gets any of the following symptoms, call for emergency medical help:

- Fast breathing or trouble breathing
- Bluish or grey skin colour
- Not drinking enough fluids
- Not waking up or not interacting

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- Being so irritable that he or she does not want to be held
- Not urinating, or no tears when crying
- Their symptoms improve, but then return with fever and worse cough.

Children can take antiviral medicines, on the advice of a doctor. Even babies under 1 year old can take a lower dose of antiviral medicines, if a doctor thinks it is necessary.

What will happen to me?

Most people who have had swine flu have been treated at home, and recovered in a few days. Some have had only mild symptoms, while others have been more unwell. A few people have had complications, such as pneumonia. Pneumonia is a serious infection of your lungs, and can cause difficulty breathing.

If you have difficulty breathing, or you are getting worse, you should call for medical advice by phone. People with complications such as pneumonia may need to be admitted to hospital. They may need additional medicine for secondary infections, which could be caused by bacteria.

Some people have died from swine flu, although it is a mild illness for most people. By the end of July 2009, 30 deaths in the UK had been attributed to swine flu. But according to the Health Protection Agency, about 100,000 people became ill from swine flu in just one week in July. Remember, people die of seasonal flu every year. We don't yet know whether swine flu will have a bigger effect than normal seasonal flu.

If you're caring for someone with swine flu, you should be especially careful with hygiene measures. The person you are caring for should wear a mask when you are within 2 metres of them in the same room.

People with confirmed swine flu should stay at home for seven days, or for 24 hours after their symptoms have gone, whichever is longer, and avoid direct contact with other people.

This information is aimed at a UK patient audience. This information however does not replace medical advice. If you have a medical problem please see your doctor. Please see our full Conditions of Use for this content <http://besttreatments.bmj.com/btuk/about/12.html>.

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