Facts you should know about pandemic flu
What’s this brochure all about?

This brochure provides information about pandemic flu. It gives the answers to 10 important questions concerning an influenza pandemic. This information will help you to be better prepared for a possible worldwide outbreak of influenza.

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What is pandemic flu?

Pandemic flu means that large numbers of people all over the world develop the same type of influenza. An influenza pandemic spreads within a few months and makes large numbers of people seriously ill. Some people may even die as a result of the flu.

An estimated 1 out of every 3 people will fall ill if pandemic flu breaks out. No one can predict how many people will become seriously ill or die.

An influenza pandemic occurs about once every 10 to 50 years. There were 3 serious influenza pandemics in the 20th century:
- Spanish flu (1918)
- Asian flu (1957)
- Hong Kong flu (1968)

**Influenza**

Influenza is a disease. People with influenza often have symptoms such as a sudden temperature, runny nose, sore throat, cough, headache and aching muscles. Influenza is caused by the influenza virus, which enters our bodies through the nose or mouth. The influenza virus spreads through the air and is transmitted through (nasal) mucus and saliva droplets. Influenza is also known as “flu”

**Influenza pandemic**

In the case of an influenza pandemic, large numbers of people all over the world develop the same type of influenza within a short space of time. The disease is caused by a new influenza virus. You could also call an influenza pandemic a worldwide flu epidemic.
How does seasonal influenza originate?

Seasonal influenza, also known as the common flu, is caused by an existing influenza virus. Each year, the existing influenza virus mutates a little, although it basically remains the same. Many people have already come into contact with the existing virus and have built up a resistance to this virus. This means that not everyone becomes ill, and that the virus is unable to spread as quickly. If an existing influenza virus mutates, there is enough time to develop a vaccine (flu jab) against the virus. The vaccine can prevent large numbers of people from becoming ill.

Influenza virus
An influenza virus is a small particle that causes influenza. The virus can mutate, which means several different kinds of influenza virus can develop. You can get influenza again from each type.

Resistance
Resistance means your body’s ability to protect you against disease. If you are infected with an influenza virus, your body produces antibodies against this virus. If you become reinfected with the same type of virus, these antibodies ensure that you are less ill, or even that you do not become ill at all.

Vaccine
A vaccine prevents someone from getting a certain disease. It can also ensure that the disease is less serious. The vaccine is usually injected hypodermically into the body (vaccination). An influenza vaccine is also known as a flu jab.
How does pandemic influenza originate?

Pandemic influenza originates as a result of a new influenza virus. Nobody has ever come into contact with this new virus as yet. This is why nobody has built up a resistance to this virus. Since the virus is unknown, there is no vaccine to protect people against it. Since there is no resistance or vaccine, the new virus will make large numbers of people ill or seriously ill.

The virus spreads through the air when people cough, sneeze or talk to each other. This is how people are able to infect one another easily. Since many people travel about, the new influenza virus can spread all over the world very quickly.

How does a new influenza virus originate?

A new influenza virus can originate in a number of ways. For instance, an influenza virus in animals can gradually mutate into a new human influenza virus. An influenza pandemic can only develop when the new virus is able to pass from person-to-person.

Infection

When an influenza virus is transmitted from one person to another, this is known as infection. This can occur if an infected person coughs or touches someone with his hands.
What’s the difference between seasonal flu and an influenza pandemic?

**Seasonal flu**
- Seasonal flu is caused by an existing influenza virus.
- Seasonal flu occurs each year, particularly in the winter months.
- A lot of people have already built up resistance to the virus.
- Every year about 1 out of every 100 people in the Netherlands contracts flu.
- The symptoms of seasonal flu are known. In the case of seasonal flu, **risk groups** have more chances of developing pneumonia or other incidental health problems.
- A vaccine (flu jab) against seasonal flu already exists.
- People from a risk group are inoculated against seasonal flu each year.
- Between 200 and 1000 people die of seasonal flu in the Netherlands each year, particularly elderly people.

**Influenza pandemic**
- An influenza pandemic is caused by a new and unknown influenza virus.
- An influenza pandemic occurs about once every 10 to 50 years.
- An influenza pandemic can break out at any time of the year.
- Nobody has yet built up any resistance to the new influenza virus.
- An estimated 1 out of every 3 people in the Netherlands will fall ill to the virus.
• We will not know the symptoms of this new virus until an influenza pandemic actually breaks out. These symptoms may differ from those of seasonal flu.
• People can become more seriously ill in the case of an influenza pandemic than in the case of seasonal flu.
• There is no vaccine at the moment that an influenza pandemic breaks out. This vaccine can only be made after the new influenza virus has become known.
• If you develop symptoms of the new influenza, your doctor will give you medicine to inhibit the virus.
• We cannot predict how many people will die as a result of the influenza pandemic.

Risk groups
Risk groups are groups of people who are more likely to become ill.
Examples of risk groups are elderly people and people with coronary or pulmonary diseases, diabetes, or low resistance.

Is an influenza pandemic certain to occur?

It is certain that an influenza pandemic will occur at some stage, although nobody knows exactly when this will be. It may happen in the near future, but it could also take years. An influenza pandemic occurs about once every 10 to 50 years. The last influenza pandemic was in 1968 (Hong Kong flu).
Various organisations are monitoring events to see whether a new influenza virus has come into being somewhere in the world. If a new influenza virus is discovered, these organisations try and prevent it from spreading.

**What preparations is the Netherlands making?**

The Netherlands is preparing itself for a possible influenza pandemic to the best of its ability. For instance, each region in the Netherlands has a preparedness plan all ready. This preparedness plan outlines what relief workers and hospitals should do if the Netherlands is hit by an influenza pandemic. All general practitioners also have a preparedness plan ready.

The Netherlands also has a sufficient supply of virus inhibitors ready to use. This medicine is intended for all people who develop influenza symptoms during an influenza pandemic.

**Radio, TV and newspapers**

If an influenza pandemic is likely to occur, it is most important that you follow the information given on the radio, TV and in the papers. You can then find out what measures you can and must take.

**Virus inhibitors**

Virus inhibitors are a type of antiviral medicine to stop the virus from spreading quickly. The inhibitors ensure that people with seasonal flu are ill for a shorter period and are less infectious. It is quite probable that virus inhibitors will also be effective in an influenza pandemic.
Question 7

What are the chances of my becoming infected?

Nobody is immune in the case of an influenza pandemic. This means that you run more risk of contracting influenza than you would with regard to “seasonal” flu.

Nobody can say beforehand how serious and infectious the new influenza virus will be. However, we estimate that about 1 out of every 3 people will fall ill to the virus. It is not certain whether risk groups have a greater chance of falling ill during an influenza pandemic.

Question 8

Are there medicines or a vaccine against an influenza pandemic?

Vaccine

There is as yet no vaccine to protect you against an influenza pandemic. A new vaccine can only be developed after the outbreak of an influenza pandemic, when the new influenza virus becomes known. Development of a vaccine takes at least 6 months. However, research is being carried out all over the world to try and reduce the amount of time needed.
Medicines
During an influenza pandemic, you must take medicines as soon as you develop flu symptoms in order to inhibit the virus. These medicines are virus inhibitors. Take the medicines as soon as possible after the first symptoms occur, within 48 hours at the very latest. You must also finish the prescribed course of treatment.

We anticipate that the virus inhibitors will ensure that you are ill for a shorter time and are also less infectious to others. We hope that this will result in the virus spreading less rapidly, so that less people will fall ill.

Until a vaccine (flu jab) becomes available, virus inhibitors are the most important measure for protecting people against the new influenza virus.

How do virus inhibitors work?
- Virus inhibitors reduce the period of actual illness by 1 or 2 days.
- They ensure that sick people are less infectious.
- They ensure that people are infectious for a shorter period of time.
- Virus inhibitors cannot entirely prevent other people from becoming infected.
- Although virus inhibitors are effective in the case of seasonal flu, they have not yet been tested during an influenza pandemic. It is probable, but not certain, that the medicines will be effective.
- Virus inhibitors can only be obtained on a doctor’s prescription.
How can I avoid becoming infected?

Although you can never entirely avoid infection, you can reduce the chances of becoming infected. The influenza virus primarily spreads through the air as a result of people coughing, sneezing or talking. You can become infected by breathing in the virus and by hand contact.

Measures you can take to avoid infection

- **Avoid contact with people who already have flu.**
  If you have to be in the vicinity of an influenza patient, keep the contact as short as possible and wash your hands after your visit.

- **Wash your hands frequently with soap and water.**
  If you touch something or shake hands with someone, you can get the virus on your hands. This is why you should wash your hands regularly. Dry your hands with paper towels or kitchen paper and throw the paper into the litterbin immediately after use.

- **Avoid hand contact with eyes, nose and mouth as much as possible.**
  If you touch something or shake hands with someone, you can get the virus on your hands. The virus can enter your eyes, nose or mouth through hand contact.

- **Use paper tissues when sneezing or coughing.**
  Use a paper tissue or paper towel to cover your nose and mouth when sneezing and coughing. Throw the tissue into the litterbin immediately after use.
• **Keep your home clean.**
  Clean hard surfaces and objects such as kitchen appliances and door handles regularly. Use a normal detergent for this.

• **Listen to the radio, watch TV and read the papers.**
  The radio, TV and newspapers will keep you informed on what else you can and must do to avoid infection.

**What should I do if I develop flu symptoms during an influenza pandemic?**

• **Take virus inhibitors within 48 hours.**
  Start taking virus inhibitors as soon as possible after the first flu symptoms develop. You should take this medicine **within 48 hours** in any case. Virus inhibitors can only be obtained on a doctor’s prescription.

• **Stay at home and keep away from other people.**
  The virus spreads through the air. You can infect other people by coughing, sneezing and talking. You can avoid infecting others by having as little contact as possible with other people.

• **Avoid hand contact with eyes, nose and mouth as much as possible.**
  If you touch your eyes, nose or mouth, you will get the virus on your hands. You can transmit the virus to objects or people through your hands.
• **Cover your nose and mouth when coughing or sneezing.**
  Use a tissue or paper towel once only and throw it in the litterbin immediately after use. Do the same when blowing your nose. Then wash your hands with soap and water.

• **Wash your hands frequently with soap and water.**
  You can transmit the influenza virus to others through e.g. an infected door handle. This is why you should wash your hands regularly. Dry your hands with paper towels or kitchen paper and throw the paper into the litterbin immediately after use.

• **Keep your home clean.**
  Clean hard surfaces and objects such as kitchen appliances and door handles regularly. Use a normal detergent for this.

• **Listen to the radio, watch TV and read the papers.**
  The radio, TV and newspapers will keep you informed on what you should do.
Website
www.postbus51.nl

Telephone number
For more information and questions, please contact the Postbus 51 staff. They are available on working days between 8.00 and 20.00 hours at the following free number: 0800 – 8051. To telephone from abroad: +31 – 70 – 308 1985.

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