PANDEMIC INFLUENZA

What you need to know, & how to protect yourself & your family
An influenza (flu) pandemic is being predicted by experts at the World Health Organisation (WHO).

This leaflet explains pandemic flu, what makes it different from the normal (seasonal flu) we see every winter and highlights why we need to be concerned about it.

You will find information for individuals and families to be better prepared if a pandemic occurs.
WHAT IS INFLUENZA?

Influenza is a viral respiratory disease affecting humans and some types of birds and animals. Normally, only human influenza viruses infect people and circulate around the world causing ‘seasonal’ or ‘normal’ influenza. The disease ranges from a mild non-specific illness to one with life-threatening complications such as pneumonia. Influenza is a different and often much more serious illness than a common cold.

REMEMBER: THERE ARE 3 TYPES OF INFLUENZA

**Seasonal influenza** - “normal” flu, a virus that is already circulating widely in human populations and is more common in the winter months

**Animal/Bird influenza** (e.g. bird flu, swine flu) – almost exclusively found in animal populations

**Pandemic influenza** – a new type of flu virus spreading quickly among humans, who have no pre-existing immunity
HOW ARE THE 3 TYPES OF INFLUENZA SPREAD?

*Seasonal flu*: Spread from person to person through virus-containing droplets produced by coughing or sneezing. The viruses that cause flu live mainly in the nose and throat and the droplets are sprayed into the air up to a metre in distance. Such droplets can also land on nearby surfaces such as door handles or keyboards, where the virus can survive for up to 48 hours. The influenza virus can also survive on the skin of your hands or face and so are easily spread by touch. For this reason, aside from vaccination, good personal hygiene and hand washing are the best forms of defence against the flu virus.

*Pandemic flu*: Known from the last 3 flu pandemics (1918, 1957 and 1968) to transmit in the same way as seasonal flu, but it spreads far more aggressively and produces more serious symptoms than seasonal flu, related to the lack of human immunity.

*Animal/Bird flu*: Spread to humans by close contact with infected animals or birds and their surroundings but for the moment cannot spread easily from one person to another.
A pandemic is an epidemic spreading rapidly around the world potentially affecting millions of people across many countries.

**WHAT IS PANDEMIC FLU?**

Bird or animal influenza viruses can mutate (change) and begin infecting people. Because this creates a new type of influenza there is little or no natural immunity in humans, allowing the new pandemic influenza to spread easily and rapidly from person to person.

As a result the virus is able to spread worldwide within weeks or months and this is then called an influenza pandemic. In this situation, all age groups are vulnerable to infection leading to severe illness, high levels of mortality and, as large numbers of people fall ill, disruption to all sectors of society. There were 3 pandemics in the 20th century, 1918, 1957 and 1968.

So far there has been no flu pandemic in the 21st century but history tells us it is only a matter of time before the next one. For this reason scientists worldwide are monitoring seasonal as well as avian flu closely to detect any changes, which may cause the next pandemic.
WHEN IS FLU LIKELY TO CAUSE A PANDEMIC?

Since 2003 there has been increasing concern that an avian influenza virus (bird flu virus) known as influenza A (H5N1) which is circulating widely among wild birds and in many domestic flocks, may gain the ability to spread easily from person to person and lead to the first influenza pandemic of the 21st Century. This is because H5N1 already meets the first 2 of the 3 prerequisites outlined below, needed to trigger a pandemic:

1. A new influenza strain must emerge
2. The new virus must be capable of causing disease in humans
3. The new virus must be capable of being passed easily and rapidly from person to person

In its current state however, the H5N1 avian influenza virus cannot cause a pandemic as it has not yet gained the capacity for efficient and sustained human-to-human transmission (prerequisite 3). The possibility that the H5N1 virus may in time be able to meet the 3rd prerequisite is still considered a real threat by the World Health Organisation.

Now, however, a new strain of Swine Flu (H1N1) has emerged in Mexico and the USA. This is currently being investigated in case it also could meet the 3 requisites above and cause the next influenza pandemic.

Every human case of animal or bird flu that occurs increases the risk of a mutation (changing) of the virus within that person, allowing the virus to potentially become easily transmissible to other humans.
WHAT ARE THE SYMPTOMS OF PANDEMIC FLU?

The first symptoms of pandemic flu will probably be similar to seasonal flu symptoms:

- Rapid onset of fever (> 38°C)
- Headache
- Aching muscles
- Fatigue
- Sore throat
- Runny or blocked nose
- Dry cough
- Loss of appetite

As the actual nature of the virus that will cause pandemic flu is unknown it is not possible to predict how it may be symptomatically different from seasonal flu.

Symptoms of vomiting, diarrhoea, abdominal pain (not usually seen in normal flu) may also occur.
HOW LIKELY AM I TO CATCH PANDEMIC FLU?

Once a flu pandemic has started you are more likely to catch it than seasonal flu, because it may spread rapidly. People will not have immunity and initially there may be no vaccine. Some groups of people may be more at risk than others, but until the virus starts spreading it is difficult to predict who those groups might be.

WILL THERE BE A VACCINE TO PREVENT PANDEMIC FLU?

Because the strain of influenza that may cause a pandemic has not yet emerged, there is no vaccine currently available. Research is being done to develop a human vaccine against the avian flu virus, H5N1 and now against swine flu, H1N1.

WILL HAVING THE SEASONAL FLU VACCINE HELP ME?

Of course, the seasonal flu vaccine is a very effective way of protecting against seasonal flu itself, but it may not give any protection at all against pandemic flu. Nonetheless, it will certainly prevent cases of seasonal flu that could cause confusion with pandemic flu. It will also reduce the risk of the creation of a new virus if two different strains of flu virus, such as H5N1 and seasonal flu, were to be present in the same patient at once.
WHAT ARE THE SIX PHASES OF PANDEMIC FLU?

The World Health Organisation (WHO) has set up 6 pandemic alert phases as part of its Global Pandemic Preparedness Plan.

Globally we are currently in phase 3 which means there have been some human cases affected with a new type of flu virus, (the avian flu H5N1 virus and the swine flu H1N1 virus) but so far with no or very limited human-to-human spread. WHO is currently reviewing if a move to phase 4 would be appropriate for the new “swine flu”.

Although there is international surveillance of the influenza virus, and particularly avian influenza, it is not possible to predict the timing of a flu pandemic as it may arise all over the world, where there is interaction between humans, animals and birds.

In the event of a flu pandemic what is certain however, is that we should expect large scale community, social and business disruption from illness and the imposition of public health (eg. social distancing and other emergency measures).

Therefore, preparedness planning cannot wait, especially as improving surveillance systems, research into virus behaviour and vaccine development all take time.

Any measures that could reduce the impact of a pandemic and be planned and set up in advance are best undertaken now, rather than during the inevitable confusion and disruption that a pandemic could bring.
WHAT CAN BE DONE NOW?

There are several measures that may be used to reduce the negative impact of pandemic flu and we should now in pandemic phase 3, be beginning to practice the following:

1. Practice Good Hygiene
2. Stay Home If You Are Sick
3. Good Organisation & Planning

1. Practise Good Hygiene:

*Personal hygiene:*

Wash your hands often with soap and water or an alcohol based hand gel.
Regular hand washing has been shown to significantly reduce the incidence of respiratory disease.
Always wash your hands after using the toilet and before eating.

Cover your mouth and nose every time you cough or sneeze.
Never cough in the direction of anyone else. Cough or sneeze into a tissue and throw it away. Ensure you have your own supply of tissues at work.

Don’t share anything that goes into the mouth.
This includes eating utensils, cups, straws, cigarettes, etc.
**Household hygiene:**

**Clean things that are touched often.**
Influenza viruses can live up to 2 days on hard surfaces such as desks, computers, telephones, door and refrigerator handles. There is no need to have special cleaning agents – just to ensure that your living environment is cleaned regularly with soap and hot water or an alcohol-based cleaner.

**Use covered bins with plastic bin-liners for contaminated tissues, masks or nappies etc.**
Any human excretion that could contain the virus might become airborne if left in an open container or not contained when the bin is emptied.

**Ensure that sick people’s laundry or eating utensils are not shared.**
Clean household items and linen belonging to infected person with soap and hot water. Infected person’s toiletries (e.g. toothbrush, comb, and towel) must be kept in their room; infected laundry and dishes may be washed together with the family laundry and dishes in dishwashers or washing machines at more than 60° C.

**Kitchen hygiene:**

**Wash hands with warm water and soap for at least 20 seconds before preparing food**

**Prevent cross-contamination by separating raw meat from cooked**

**Do not handle raw and then cooked foods, without washing your hands in between**

**After cutting raw meat, wash cutting board, knife, and countertops with hot, soapy water**
2. Stay Home If You Are Sick

Do **NOT** go to work or school if you are sick and avoid spreading influenza to others.

3. Good Organisation & Planning

Now is a good time to start thinking how you and your family would get organised if foodstuffs and other supplies became limited if supermarkets and other services were closed due to staff illness or other emergency measures during a pandemic.

Medical centres, hospitals and transport systems will have reduced capability as staff become sick. Having to care for sick family and relatives at home is likely to become a reality.

There may be specific needs for your family, such as medication for chronic illness or other medical supplies or equipment which may not be readily available in an emergency situation. You should also consider the needs of domestic helpers, relatives and pets.

At the moment (phase 3) it is the planning stage, but now is a good time to think how you plan to deal with some of these questions in the future.
Sample checklist to plan for a pandemic:

- Store at least a two weeks supply of water and food for family and pets. During a pandemic, if you cannot get to a shop, or if shops are out of supplies, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies, such as power cuts and disasters. Remember to stock up on “non-perishable” foodstuffs that have a long shelf-life.
- Have an adequate supply of soaps and cleaning agents for domestic and personal use.
- Have a thermometer for each member of your family (to avoid cross contamination if someone is ill). Have a basic medical kit with dressings and some non-prescription drugs such as pain and fever relievers.
- Periodically check your regular prescription drugs to ensure a continuous supply in your home.
- Think about what you would do if water and electricity supplies were cut – do you have torches, candles, a way to cook food and a radio to know what is happening?
- Ensure your passports, visas and other administrative documents are updated and valid for the future.
- Be aware of the work responsibilities that you may be asked to fulfill during a pandemic situation.
- Have your home and work telephone, fax and e-mail contact details easily available.
- Talk with family members and loved ones about how they would be cared for if they got sick, or what would be needed to care for them at home.
WHAT OTHER ACTION MAY BE TAKEN?

Social Distancing

Social distancing will be a key element, with the possibility of closure of schools, cinemas, offices and indeed any venue where people may meet in large numbers and close proximity.

In addition, transportation may be severely curtailed to avoid spread of the virus to new, unaffected areas as well as transmission during travel in crowded buses, trains or aeroplanes.

Medical screening, to ensure that only healthy people travel or attend certain venues, may be urgently implemented.

Significantly limiting the contact people have with each other could reduce the rapid spread and impact of the pandemic flu virus, allowing more time to develop a practical response, such as mass vaccination.

In particular, close contact should be avoided, especially physical contact, such as shaking hands or kissing as a greeting.

If you remain working at your workplace during a pandemic, you may be asked to work in a different way from normal in order to avoid meeting people face to face or it may be that you are asked to work different hours.

Each workplace will organise its own strategies and you will be notified of these in the event of a pandemic.
Anti-viral Medication

Anti-viral medication such as Tamiflu (oseltamivir) and Relenza (zanamivir) has the potential to be effective against avian influenza viral strains if administered early. How effective they will be is not known at present because, until the pandemic hits, the exact nature and sensitivity of the flu virus remains unknown.

Anti-viral drugs are prescription-only medicines and need to be used wisely as the safety profile for mass use, especially for young people and children, is unsure. Also, overuse could quickly lead to drug-resistance, making the drugs much less effective or even useless in the long-term.

At the moment, WHO is advising the stockpiling of oseltamivir by the nations of the world to have a stock available in case of a flu pandemic. In addition, WHO is holding a stock of oseltamivir, with which it could potentially try to “ring fence” any small outbreak by using the drug prophylactically to stop the outbreak from spreading.

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) such as gowns, gloves, masks may be required for any work-related tasks that might increase the risk of exposure to the flu virus (e.g. cleaners, medical or security staff etc.)

In addition simple face masks may be protective in certain circumstances and people are being encouraged to buy their own stocks if they want to ensure a good home supply for themselves and their families.
Communication & Planning

One of the main keys to effective management of a pandemic situation will be good communication and planning. People are being encouraged to discuss within their families, workplaces and communities, their ideas and plans for a flu pandemic scenario so that no one is completely unprepared.
USEFUL LINKS

ILO intranet site:
http://www.ilo.org/flu

WHO site:
http://www.who.html

CDC pandemic flu site:
http://www.pandemicflu.gov/

Swiss Government site:

French Government site:

General sanitary surveillance:
http://www.fao.org

Animal infection:
http://www.oie.int

BE AWARE, BE INFORMED, BE PREPARED
Washing Your Hands

1. Wet Hands under warm running water.
2. Add Soap to help kill germs.
3. Scrub for at least 15 seconds.
   - Scrub the front and back.
   - Scrub between your fingers.
   - Scrub your wrists.
4. Rinse well under warm running water.
5. Dry hands with a clean towel.

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