

## WORLD HEALTH ORGANIZATION

12<sup>th</sup> Floor, Building of the Ministry of Health & Medical Education,  
Simaye-Iran Street, Phase 5, Shahrak-e-Qods, Tehran-1467664961  
Islamic Republic of Iran

P.O.Box: 14665-1565  
Telephone: (+9821) 88363979, 88363980, 88363718  
Fax: (+9821) 88364100  
E-mail: whoteh@ira.emro.who.int



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## KEY FACTS ABOUT PANDEMIC FLU

### WHAT IS “BIRD FLU”<sup>i</sup>?

Avian influenza is an infectious disease of birds caused by type A strains of the influenza virus. The disease, which was first identified in Italy more than 100 years ago, occurs worldwide. Migratory waterfowl – most notably wild ducks – are the natural reservoir of avian influenza viruses, and these birds are also the most resistant to infection. Domestic poultry, including chickens and turkeys, are particularly susceptible to epidemics of rapidly fatal influenza.

Avian influenza viruses do not normally infect species other than birds and pigs. The first documented infection of humans with an avian influenza virus occurred in Hong Kong in 1997, when the H5N1 strain caused severe respiratory disease in 18 humans, of whom 6 died. The infection of humans coincided with an epidemic of highly pathogenic avian influenza, caused by the same strain, in Hong Kong’s poultry population.

### HOW DOES BIRD FLU SPREAD?

Infected birds shed flu virus in their saliva, nasal secretions, and feces. Susceptible birds become infected when they have contact with contaminated excretions or surfaces that are contaminated with excretions. It is believed that most cases of bird flu infection in humans have resulted from contact with infected poultry or contaminated surfaces. The spread of avian influenza viruses from one ill person to another has been reported very rarely, and transmission has not been observed to continue beyond one person/first generation of contacts.

### WHAT IS PANDEMIC FLU?

A pandemic is a rapidly-spreading, epidemic of a disease that affects most countries and regions of the world. The symptoms of pandemic influenza are similar to those of ‘ordinary’ flu but are usually more severe.

### HOW DOES FLU PANDEMIC START?

Flu viruses are constantly changing, producing new strains and varieties. Pandemics occur when a virus emerges that is so different from previously circulating strains that few, if any, people have any immunity to it. This allows it to spread widely and rapidly, affecting many hundreds of thousands of people. A new pandemic virus may be the result

of an animal – usually an avian (bird) – virus and a human virus mixing to produce a new strain.

## WHAT IS THE DIFFERENCE BETWEEN PANDEMIC FLU AND ORDINARY FLU?

ORDINARY FLU	PANDEMIC FLU
Occurs every year during the winter	Occurs about three times each century – at any time of the year
Affects up to about 10% of the Population	May affect around 25% of the population
For most people it is an unpleasant but not life threatening Infection	It is a more serious infection for everyone
The very old and people with certain chronic illnesses are most at risk of serious illness	People of every age may be at risk of serious illness
Annual vaccination is available for those at risk of serious illness	A vaccine won't be available to start with – when it does become available the aim will be to immunize the whole population as rapidly as possible as vaccine supplies come through
Antiviral drugs are available to treat those at special risk	Antiviral drugs are likely to be in limited supply and will have to be used to best effect according to how the disease develops.

## HOW LIKELY IS FLU PANDEMIC?

Three pandemics occurred in the last century. In the 20th century, the great influenza pandemic of 1918–1919, which caused an estimated 40 to 50 million deaths worldwide, was followed by pandemics in 1957–1958 and 1968–1969.

Scientists predict that another pandemic will happen, although they cannot say exactly when that will be. Infectious pathogens simply do not respect political borders. The world is becoming a small village and with the global network of airlines, travelers can spread influenza to almost all countries. The Eastern Mediterranean Region (EMR) is not an exception. The daily dynamic interaction with other countries in the world (expatriate workers, trade, religious visitors and tourism) could easily result in the introduction of influenza into the Region and further dissemination of influenza to the whole world. Migratory birds' flyways pass through the EMR on their way between Asia, Europe and Africa. The EMR is the nearest region to the current focus of unprecedented outbreaks of avian influenza than any other WHO region outside of Asia.

## SYMPTOMS OF FLU:

Symptoms of flu include:

- Fever (usually high)
- Headache
- Extreme tiredness
- Dry cough
- Sore throat
- Runny or stuffy nose
- Muscle aches
- Stomach symptoms, such as nausea, vomiting, and diarrhea, also can occur but are more common in children than adults.

## WHO IS AT RISK?

Groups at particular risk won't be known until the disease starts to circulate – they may be different from those in ordinary flu years. Once a flu pandemic starts everybody will be at risk of getting pandemic flu. Certain groups may be at greater risk than others:

- People 65 years and older;
- People who live in nursing homes and other long-term care facilities that house those with long-term illnesses;
- Adults and children 6 months and older with chronic heart or lung conditions, including asthma;
- Adults and children 6 months and older who needed regular medical care or were in a hospital during the previous year because of a metabolic disease (like diabetes), chronic kidney disease, or weakened immune system (including immune system problems caused by medicines or by infection with human immunodeficiency virus [HIV/AIDS]);
- Children 6 months to 18 years of age who are on long-term aspirin therapy. (Children given aspirin while they have influenza are at risk of Reye syndrome.);
- Women who will be pregnant during the influenza season;
- All children 6 to 23 months of age;
- People with any condition that can compromise respiratory function or the handling of respiratory secretions (that is, a condition that makes it hard to breathe or swallow, such as brain injury or disease, spinal cord injuries, seizure disorders, or other nerve or muscle disorders

## HOW CAN I PROTECT MYSELF AND MY FAMILY AGAINST CATCHING IT?

As the virus is spread through the air when people cough or sneeze, there are some basic measures that you can take to reduce the risk of infection. Facemasks will have little place in preventing the spread of the virus but you can:

- Maintain good hygiene – washing hands protects against picking the virus up from surfaces and passing it on;
- Cover your mouth and nose when coughing or sneezing

- Avoid large crowds of people whenever possible
- Avoid touching dead birds, hunting migratory birds and unnecessary visits to wet poultry markets

## IS THERE A VACCINE TO PROTECT AGAINST PANDEMIC FLU?

- There is no vaccine ready to protect against pandemic flu. The virus that causes pandemic flu will be new and a vaccine to protect against it cannot be made until the virus has been identified. Before a pandemic starts it is difficult, if not impossible, to predict what strain will cause it and even then, predictions may prove wrong, or the predicted virus may have changed enough for a pre-prepared vaccine to be ineffective. ‘Ordinary’ flu vaccines will not provide protection and having had a flu ‘jab’ in the recent past does not protect someone
- Medicines called antiviral can be used to treat pandemic flu but their effectiveness won’t be known until the pandemic virus is circulating

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### REFERENCES:

- *Ten things you need to know about pandemic influenza, WHO, OCTOBER 2005*
- *Avian influenza, Avian influenza ("bird flu") and the significance of its transmission to humans, WHO, JANUARY 2005*
- *Avian influenza frequently asked questions, UPDATE 19 October 2005, WHO*
- *Pandemic Flu: important information for you and your family, NHS, UK*
- *Pandemic Flu: Key facts, NHS, UK*
- *Key facts about Influenza and Influenza vaccine, Department of Health and Human Services, CDC, Atlanta, 28 September 2005*
- *Information Bulletin No. 3, Communicable Disease Surveillance, Forecasting and Response, WHO Regional Office for the Eastern Mediterranean, Monday, October 17, 2005*

- > Remove jewellery and cover abrasions



- > Wet hands with warm water, then apply soap



- > Lather for 10-15 seconds



- > Rinse hands under running water



- > Dry hands with clean towel



During the lather, pay particular attention also to backs of hands and fingers, fingernails, fingertips and the webbing between fingers

## > Cover your cough

- When coughing or sneezing, use a tissue to cover your nose and mouth
- Wear a surgical mask if possible
- Dispose of the tissue afterwards



## > Wash your hands

- After coughing, sneezing or blowing your nose, wash your hands with soap and water
- Use alcohol-based liquid, gels or wipes if you do not have access to soap and water



REMEMBER HAND WASHING IS THE SINGLE MOST EFFECTIVE WAY TO REDUCE THE SPREAD OF GERMS THAT CAUSE RESPIRATORY DISEASE