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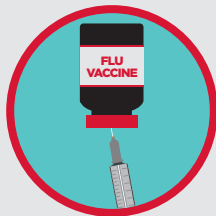
# INFLUENZA

WHAT YOU NEED TO KNOW

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ARE YOU SURE YOU USE THE RIGHT MEASURES  
TO PROTECT YOURSELF AGAINST THE FLU?

**GET INFORMED! GET VACCINATED! GET PROTECTED!**





# DID YOU KNOW THAT ABOUT THE FLU (INFLUENZA)?

- Every year the flu infects between 1 in 25 to 1 in 7 persons, during the winter months.
- Although for most people a flu infection is just a mild or unpleasant experience, for certain people at high risk it can lead to serious, even life-threatening complications.
- Influenza can be serious also for healthy children and adults who have no underlying disease.
- Studies have shown that health care workers just because of their work, have more than 3 times higher chance to catch the flu compared to other healthy adults.
- Up to 1 in 3 persons infected with the flu virus may have none or only mild symptoms, but they can still transmit the virus and infect others.

# THE DISEASE IN SHORT

## SYMPTOMS

Seasonal influenza is caused by human influenza viruses (type A and B), which infect the airways (nose, throat, bronchi and sometimes lungs).



A horizontal red bar represents the respiratory tract. It contains four teal circles with red borders, each containing a white label: NOSE, THROAT, BRONCHI, and LUNGS. The circles are connected by a red line. The LUNGS circle is positioned at the end of a red bar that extends to the right, with the text 'and sometimes' written in white above it.

**NOSE**

**THROAT**

**BRONCHI**

and sometimes

**LUNGS**

It is transmitted from person to person through coughing and sneezing or indirectly through touching objects contaminated with the virus (e.g. keyboards, telephones etc).

Symptoms usually present abruptly and include usually high fever ( $>38.5^{\circ}\text{C}$ ), sore throat, headache, runny nose, dry cough, joint and muscle aches and feeling very tired (fatigue). Some people may even have vomiting and diarrhea, though it is more common in children.

- However, a significant percent (up to 30%) of infected persons may not have symptoms but are still able to transmit the virus.
- Influenza can be very serious for certain patients.
- Elderly people and patients with chronic diseases may experience severe deterioration of their conditions, secondary infections or other severe lung complications. Flu can sometimes cause and/or worsen certain heart conditions which could then result in heart attacks and strokes.
- Sometimes even healthy persons without history of a chronic condition experience severe complications with influenza.

## TREATMENT

For most persons influenza may require only supportive care such as fever medication, fluids and rest. However, there are antiviral medicines that specifically fight influenza viruses. Antivirals should be prescribed by a doctor and are most effective when treatment starts very early after symptoms begin.

# WHO NEEDS AN INFLUENZA VACCINE?

**Healthcare workers** who come in contact with patients should be vaccinated every year to protect themselves and their patients.

- medical practices
- hospitals
- health centres
- nursing homes for the elderly

**Persons >60 years of age**

**Risk groups:**

- asthma and other respiratory diseases
- diabetes and other endocrine diseases
- heart diseases
- kidney diseases
- liver diseases
- metabolic diseases
- neurological diseases
- weakened immune system

# WHO CANNOT HAVE THE INFLUENZA VACCINE?

## Infants

<6 months old cannot get vaccinated.

## People

with severe life-threatening allergy to a flu shot in the past or to any of the ingredients of the vaccine (egg protein, gelatin and antibiotics) should consult their doctor.

## **WHEN AND HOW CAN I GET VACCINATED**

- Healthcare workers should get vaccinated every year usually in the autumn before the start of the influenza season.
- Ideally immunization should take place in the workplace.
- One shot is needed per year. Persons getting vaccinated for the first time in their lives for influenza should receive two doses at least 4 weeks apart.
- It takes about 15 days after vaccination to produce enough protective antibodies.

## **WHY DO I NEED A VACCINE EVERY YEAR?**

Flu viruses are constantly changing through mutations and it is not unusual for new flu viruses to circulate each year. Getting vaccinated each year is the single most effective prevention measure against seasonal influenza.

# EFFECTIVENESS OF THE FLU VACCINE

This depends each year on the similarity of the vaccine strains and the ones contained in the vaccine.



When this match is good, vaccine effectiveness is estimated around 50-60%.



However, studies have shown that the flu vaccine has various benefits such as reduction of flu-related hospitalizations for adults up to 61%.



Older people often have weaker immune response to the vaccine.

## COMPLICATIONS FROM INFLUENZA

### Common Complications

- Pneumonia
- Ear infection (otitis)
- Sinus infection
- Inflammation of the heart (myocarditis) or muscles (myositis)
- Pericarditis (Inflammation of the heart sac)
- Worsening of chronic medical condition (e.g. congestive heart failure or asthma attack)

### Rare complications

- Blood infection (sepsis)
- Inflammation of the brain (encephalitis)
- Multi-organ failure (e.g. respiratory and kidney failure)
- Death

## INFLUENZA VACCINE SIDE EFFECTS

### Common adverse events (1<100)

- Soreness/pain, redness and/or swelling around the injection site
- Short-term fever (1-2 days), may be high (>39.0 °C) in children
- Short-term fatigue (1-2 days)
- Muscle aches (1-2 days)
- Adverse reactions are more common in children not previously exposed to the vaccine or virus than in adults

### Rare adverse event (<1/1,000)

- Allergic reaction (urticaria)

### Very rare adverse events (<1/10,000)

- Severe allergic reaction (anaphylaxis)
- Feeling of tingling or burning in various parts of the body (paresthesias)
- Guillain-Barré syndrome (<1/1,000,000)



# WHERE CAN I FIND MORE INFORMATION?

1. BZgA, Germany: [www.impfen-info.de](http://www.impfen-info.de)
2. ECDC, Communication Toolkit for Healthcare workers, [http://ecdc.europa.eu/en/healthtopics/seasonal\\_influenza/communication\\_toolkit/Pages/communication\\_toolkit.aspx](http://ecdc.europa.eu/en/healthtopics/seasonal_influenza/communication_toolkit/Pages/communication_toolkit.aspx)
3. WHO Europe: Vaccines and immunization, [www.euro.who.int/en/health-topics/diseaseprevention/vaccines-and-immunization](http://www.euro.who.int/en/health-topics/diseaseprevention/vaccines-and-immunization)
4. CDC, USA: [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines)
5. NIH, USA: [www.vaccines.gov](http://www.vaccines.gov)
6. Immunization Action Coalition, USA: [www.immunize.org](http://www.immunize.org)
7. National Centre for Immunisation Research & Surveillance, Australia: [www.ncirs.edu.au](http://www.ncirs.edu.au)



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Promotion of Immunization for Health Professionals in Europe  
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Disclaimer: The consortium partners declare no relevant conflict of interest with direct bearing on the subject matter of the HproImmune project. This pertains to relationships with pharmaceutical companies, biomedical device manufacturers and other companies with relation to vaccines.



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