

# Influenza

Protect your patients!

Protect yourself!

Get vaccinated!



# Influenza

**Did you know that it is recommended to get vaccinated against influenza if you work in healthcare settings?**

Annual influenza vaccination amongst healthcare professionals is important to protect yourself, your colleagues and especially your at-risk patients. Influenza may be particularly serious for patients at higher risk of developing influenza-related complications.

**Influenza may be particularly serious for patients at higher risk of developing influenza-related complications.**

**Complications can occur in anyone but are far more common for patients in risk groups.**

Common complications are pneumonia, ear infection, sinus infection, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes. In elderly people, influenza can cause and/or worsen cardiovascular and cerebrovascular conditions (heart attacks and strokes). Complications may lead to hospitalisation (about 5%<sup>1</sup>) and premature death, especially in elderly people and individuals with underlying medical conditions.

**These risk groups comprise elderly people and those with chronic medical condition including:**

- asthma and other respiratory diseases
- cardiovascular diseases
- diabetes and other endocrine diseases
- liver diseases
- metabolic diseases
- neurological and neuromuscular diseases affecting respiratory functions
- renal diseases
- suppressed immune function



**Vaccination is the most tangible and measurable means to control the transmission of influenza viruses between staff and patients.**

Other preventive measures to limit the spread of influenza are:

- Wash your hands regularly with soap and water
- Cover your mouth and nose with a tissue when you sneeze
- Bin your used tissue
- If you do not have a tissue available: sneeze into your arm, covering totally your nose and mouth
- Stay at home when you are ill

## Who should get vaccinated?

All health and social care staff directly involved in the care of patients working in:

- general practices
- hospitals
- health centres
- residential care homes

This includes:

- administrative staff with patient contact
- ambulance drivers
- medical staff
- nurses
- other care staff
- other health professionals
- pharmacists

1. Comparison of clinical features and outcomes of medically attended influenza A and influenza B in a defined population over four seasons: 2004-2005 through 2007-2008. Irving et al., Influenza and Other Respiratory Viruses. 2012 Jan;6(1):37-43. doi: 10.1111/j.1750-2659.2011.00263.x. Epub 2011 May 25.



# Why should I get vaccinated?

Anyone can catch influenza. If you get infected, you can spread it to others even if you don't show any evident symptoms, as influenza can be mild or asymptomatic (up to 30%<sup>2</sup>). Infected healthy adults are known to be contagious one day before symptoms develop and up to five to seven days after becoming sick. Higher influenza vaccination levels among healthcare professionals can reduce influenza-related illness, and even deaths. This is particularly relevant in settings such as nursing homes where patients are more likely to develop influenza-related complications and may have a lower immune response to vaccines.

“Compared to adults working in non-healthcare settings, healthcare workers are at significantly higher risk of influenza.”<sup>3</sup>

“The reduction is equivalent to preventing five deaths, two admissions to hospital with influenza-like illness, seven general practitioner consultations for influenza-like illness and nine cases of influenza-like illness per 100 residents”<sup>4</sup>

## When should I get vaccinated?

Vaccination should ideally be undertaken from mid-Autumn each year. Influenza seasons are unpredictable, and can begin as early as October and last until May. It takes about two weeks after vaccination for antibodies to develop and provide protection.

## Why is an influenza vaccine required every year?

The influenza virus changes each year which is why a new influenza vaccine has to be given. The influenza vaccine is formulated to keep up with the influenza virus subtypes as they change.

## Seasonal influenza vaccines are safe

While there might be some risks associated with vaccination, the benefits of vaccination greatly overcome the risks. The effectiveness of the vaccine may vary from year to year depending on which viruses circulate each season.

Risks associated with influenza infection	Risks associated with influenza vaccination <sup>5</sup>
<p><b>Common symptoms</b></p> <ul style="list-style-type: none"><li>• Fever, sore throat, runny nose, dry cough, fatigue, headache, and muscle ache.</li><li>• Croup and bronchiolitis common in children.</li></ul> <p><b>Common Complications</b></p> <ul style="list-style-type: none"><li>• Pneumonia.</li><li>• Ear infection.</li><li>• Sinus infection.</li><li>• Myocarditis.</li><li>• Pericarditis.</li><li>• Worsening of chronic medical condition present before influenza illness (e.g. congestive heart failure).</li></ul> <p><b>Rare complications</b></p> <ul style="list-style-type: none"><li>• Septicaemia.</li><li>• Encephalopathy.</li><li>• Death.</li></ul>	<p><b>Common adverse events (&lt;1/100)</b></p> <ul style="list-style-type: none"><li>• Soreness/pain, redness and/or swelling around the injection site.</li><li>• Short-term fever (1–2 days), may be high (&gt;39.0 C°) in children.</li><li>• Short-term fatigue (1–2 days).</li><li>• Muscle ache (1–2 days).</li><li>• Adverse reactions are more common in children not previously exposed to the vaccine or virus than in adults.</li></ul> <p><b>Rare adverse event (&lt;1/1.000)</b></p> <ul style="list-style-type: none"><li>• Urticaria.</li></ul> <p><b>Very rare adverse events (&lt;1/10.000)</b></p> <ul style="list-style-type: none"><li>• Anaphylaxis.</li><li>• Paresthesias.</li><li>• Guillain-Barré syndrome (&lt;1/1.000.000).</li></ul>

2. H1N1 hemagglutinin-inhibition seroprevalence in Emergency Department Health Care workers after the first wave of the 2009 influenza pandemic. *Pediatr Emerg Care.* 2011 Sep;27(9):804-7. doi: 10.1097/PEC.0b013e31822c125e.

3. Incidence of Influenza in healthy adults and healthcare workers: a systematic review and meta-analysis - *PLoS One* 2011; 6 (10):e26239

4. Effectiveness of an influenza vaccine programme for care home staff to prevent death, morbidity and health service use among residents: cluster randomised controlled trial - *BMJ* 2006; 333:1241

5. Several types of vaccines are available on the European market. Reported risks refer to inactivated influenza vaccines commonly used in organised immunisation programmes in the European Union.

**The spread of influenza and its impact in Europe is constantly being monitored by the European Influenza Surveillance Network (EISN), coordinated by the European Centre for Disease Prevention and Control (ECDC).**

