

Catching the flu  
is *easy*

Flu protection  
is too



*Flu protection  
is too*

*Get vaccinated!*

**sanofi**

## The "real flu" – a profile

Sneezing, coughing, fever – a clear case of flu? Not everything that is commonly referred to as the flu is a "real flu" (influenza), but could also be a flu-like infection (cold).<sup>1-4</sup>

### What constitutes a real flu?

Here are some important characteristics:<sup>5,6</sup>

#### What?

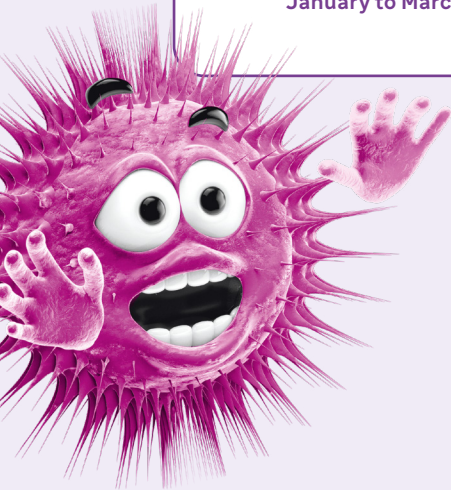
The pathogens are different types of influenza viruses

#### How?

Transmission mostly through droplet infection (e.g. when speaking, sneezing, coughing), rarely through direct contact (e.g. shaking hands)

#### When?

Occurs mainly in the flu season (October to May) and especially during the flu epidemic (usually January to March)



## A flu infection is often just the *beginning*

A real flu can lead to serious complications including hospitalization or death.<sup>5,6</sup> An infection with flu viruses, for example, can significantly increase the risk of serious illness and the associated long-term consequences:<sup>7,8</sup>

**10x**  
increased risk of  
myocardial  
infarction



**8x**  
increased risk of  
stroke



**23%**  
people lose their  
independence

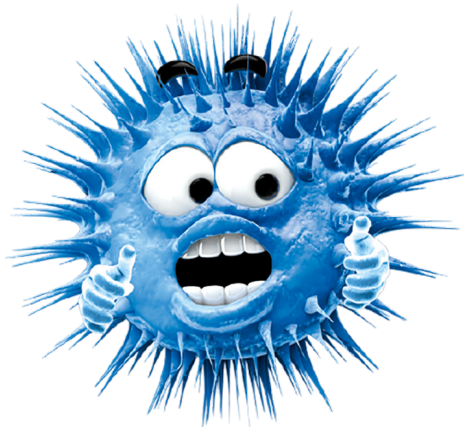


## Flu or flu-like infection – what is the difference?

The symptoms of real flu and a cold are very similar. However, there are some typical differences:<sup>1–6,9–11</sup>

	Real Flu (Influenza)	Cold (flu-like infection)
Onset of Symptoms	Suddenly	Gradually
Fever	Up to 41°C, shivering, sweating	Usually increase by only 0.5°C
Runny nose, sneezing	Rare	Frequent (blocked, runny nose)
Cough	Frequent, dry	Mild to moderate
Recovery time	Long recovery time after the end of the illness	Usually quick recovery after illness
How you feel	Fatigue, tiredness (from the beginning)	Normal
Complications	Possible, especially in risk groups	Rare
Pathogens	Influenza viruses types A and B	More than 200 different cold viruses, e.g. rhinoviruses

In order to identify the pathogen with certainty, a laboratory test is required for both diseases.<sup>1–4</sup>



## Flu vaccination is important for everyone

The STIKO examines for whom a particular vaccination makes sense and recommends that these groups get vaccinated against influenza every fall:<sup>12</sup>

**People aged 60 and over**  
(with a high-dose vaccine)

**Medical Staff**  
(and people in facilities with extensive public traffic)

**People with pre-existing conditions**  
(chronic respiratory, cardiovascular, liver and kidney diseases)

**People with diabetes mellitus**  
(and other metabolic disorders)

**Contact persons**  
(people who could be a potential source of infection for high-risk people living in the same household or being cared for by them)

**Pregnant Women**  
(in the 2nd trimester of pregnancy, in the case of chronic underlying diseases from the 1st trimester of pregnancy)

Vaccination is also recommended for the following groups of people:

- People aged 6 months and over with an increased health risk due to an underlying illness, e.g.:
  - chronic neurological diseases such as multiple sclerosis
  - congenital or acquired immune deficiency
  - HIV infection
- Residents of retirement or nursing homes

Read the full STIKO recommendation (available in English):



## Who is particularly at risk from the flu?

Some populations have an increased risk of complications if they contract the flu.<sup>5,6,13</sup>

### People aged 60 and over

Adults aged **60 and over** are particularly at risk of infection **influenza viruses**.<sup>14-16</sup>

They account for



in connection with the real flu.<sup>14</sup>

There are 2 main reasons for these complications.

#### As we age

- **the immune system weakens**.<sup>15,16</sup>
- **chronic illnesses become more frequent**.<sup>15,16</sup>

### Pregnant Women

The Permanent Vaccination Commission (STIKO) at the Robert Koch Institute recommends that all pregnant women get vaccinated against the flu.<sup>12,13,17</sup>

- Due to their altered immune system, pregnant women with the flu can develop complications. They have an increased risk of hospitalization and even death.
- Maternal antibodies against influenza viruses are transferred to the unborn baby via the placenta, which can later protect the unvaccinated newborn from influenza.

### People with *cardiovascular diseases*

Flu can have serious consequences for people with cardiovascular disease.

This is because flu viruses can attack both the heart and the blood vessels.<sup>18</sup>

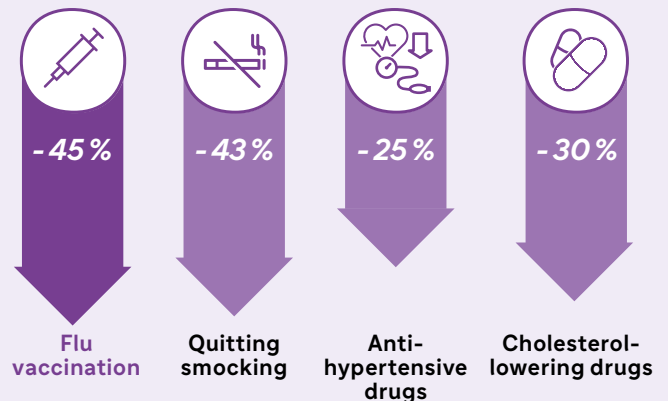
People with heart disease **aged 65 and over are particularly affected**. They have a **5x higher risk** of dying from the flu than people of the same age without heart disease.<sup>19</sup>

### When it comes to *heart health* a *prick* can also help.

The flu vaccination is the **most important protective measure** against the high health risks of the real flu.<sup>5</sup> This is especially true for people who have already had a serious cardiovascular disease such as a myocardial infarction.

Did you know that the flu vaccination is as effective as stopping to smoke in reducing the risk of a myocardial infarction?<sup>20-22</sup>

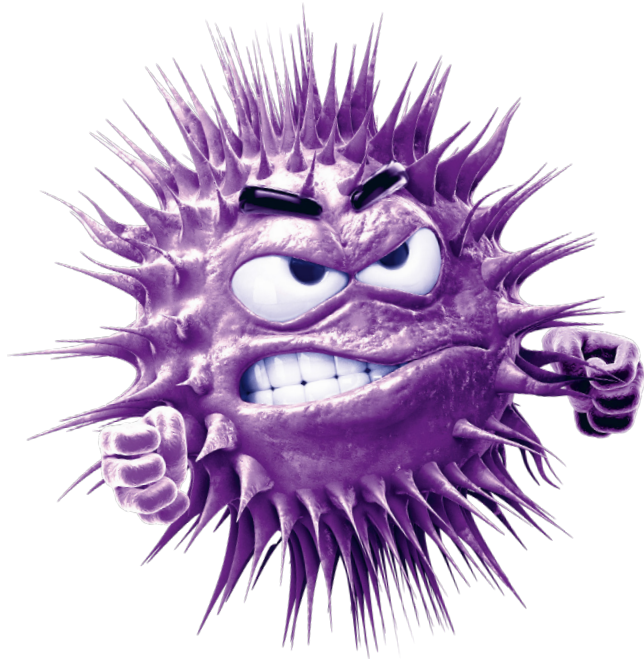
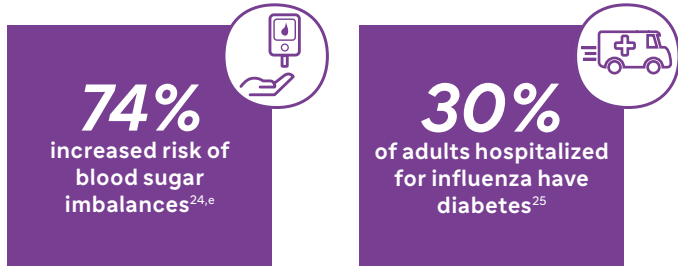
### Risk reduction for a serious cardiovascular event<sup>21,22,d</sup>



## People with *Diabetes* (sugar-disease)

People with diabetes have a double flu risk:

- Due to their weakened immune system, they are more easily infected with flu viruses.<sup>23</sup>
- Complications can occur more frequently with them – for example:<sup>24,25</sup>



## Flu vaccination: when, where and why every year?



**When** is the best time to get the flu vaccine?

From October, but it can also be useful during the flu epidemic (January - March).<sup>13</sup>



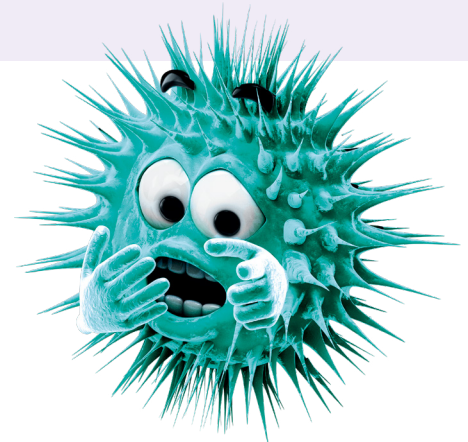
**Where** can I get vaccinated against the flu?

In general practitioners' and medical specialists' offices, as well as in many pharmacies. The best thing to do is to ask.<sup>26</sup>



**Why** do should we get vaccinated every year?

The flu is caused by different virus variants. The composition of these variants is constantly changing. Flu vaccines are therefore adapted to the circulating flu viruses every year.<sup>27</sup>



#### Footnotes:

- a In a self-controlled case-control study of adults aged 40 years and older, approx. 90% of whom were 50 years and older, and without a history of myocardial infarction or stroke.<sup>7</sup>
- b In the three days after a laboratory-confirmed influenza infection compared to the period before an influenza infection.<sup>7</sup>
- c In a protective cohort study of 925 patients aged 65 years and older who were hospitalized with laboratory-confirmed influenza and other acute respiratory diseases.<sup>8</sup>
- d The comparison is based on a systematic review of studies on primary and secondary prevention of myocardial infarction.
- e In a retrospective cohort analysis with 54,656 patients with type 2 diabetes mellitus and a control group of 113,016 people without diabetes mellitus; aged 18 and over. The data was collected during the 2016/17 influenza season.<sup>24</sup>

#### Sources:

1. Centers for Disease Control and Prevention. Cold Versus Flu. Stand: 29.09.2022. unter: <https://www.cdc.gov/flu/symptoms/coldflu.htm> (abgerufen: 31.05.2024)
2. Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (IQWiG). Erkältung. Stand: 31.10.2023. unter: <https://www.gesundheitsinformation.de/erkaeltung.html> (abgerufen: 31.05.2024)
3. Helmholtz Zentrum München. Deutsches Forschungszentrum für Gesundheit und Umwelt (GmbH). Was ist eine Erkältung? Stand: 22.02.2022. unter: <https://www.lungeninformationsdienst.de/krankheiten/virale-infekte/erkaeltung/grundlagen> (abgerufen: 31.05.2024)
4. Helmholtz Zentrum München. Deutsches Forschungszentrum für Gesundheit und Umwelt (GmbH). Grippe (Influenza): Diagnose. Stand: 04.08.2016. unter: <https://www.lungeninformationsdienst.de/krankheiten/virale-infekte/grippe/diagnose> (abgerufen: 31.05.2024)
5. Robert Koch-Institut (RKI). RKI-Ratgeber. Influenza (Teil 1): Erkrankungen durch saisonale Influenzaviren. Stand: 19.01.2018. unter: [https://www.rki.de/DE/Content/Infekt/EpidBull/Merkblaetter/Ratgeber\\_Influenza\\_saisonal.html](https://www.rki.de/DE/Content/Infekt/EpidBull/Merkblaetter/Ratgeber_Influenza_saisonal.html) (abgerufen: 31.05.2024)
6. Robert Koch-Institut (RKI). Häufig gestellte Fragen und Antworten zur Grippe. Gesamtstand: 27.12.2023. unter: [https://www.rki.de/SharedDocs/FAQ/Influenza/FAQ\\_Liste.html](https://www.rki.de/SharedDocs/FAQ/Influenza/FAQ_Liste.html) (abgerufen: 31.05.2024)
7. Warren-Gash C, et al. Laboratory-confirmed respiratory infections as triggers for acute myocardial infarction and stroke: a self-controlled case series analysis of national linked datasets from Scotland. *Eur Respir J*. 2018 Mar 29;51(3):1701794.
8. Andrew MK, et al. Persistent Functional Decline Following Hospitalization with Influenza or Acute Respiratory Illness. *J Am Geriatr Soc*. 2021 Mar;69(3):696-703.
9. Robert Koch-Institut (RKI). Virus und Erkrankung. Stand: 18.09.2023. unter: [https://www.rki.de/SharedDocs/FAQ/Influenza/FAQ\\_Liste\\_Virus.html](https://www.rki.de/SharedDocs/FAQ/Influenza/FAQ_Liste_Virus.html) (abgerufen: 31.05.2024)
10. Greenberg SB. Update on Human Rhinovirus and Coronavirus Infections. *Semin Respir Crit Care Med*. 2016 Aug;37(4):555-71.
11. Guertler LG. Influenza. *DoctorConsult - The Journal. Wissen für Klinik und Praxis*. 2010;1(2):e111-e115. doi:10.1016/j.dcjwkp.2010.06.009
12. Robert Koch-Institut (RKI). *Epid Bull* 2024;4:1- 72. unter: [https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2024/Ausgaben/04\\_24.pdf?\\_\\_blob=publicationFile](https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2024/Ausgaben/04_24.pdf?__blob=publicationFile) (abgerufen: 31.05.2024)
13. Robert Koch-Institut (RKI). Antworten auf häufig gestellte Fragen zur Schutzimpfung gegen Influenza. Gesamtstand: 25.01.2024. unter: [https://www.rki.de/SharedDocs/FAQ/Impfen/Influenza/FAQ\\_Uebersicht.html](https://www.rki.de/SharedDocs/FAQ/Impfen/Influenza/FAQ_Uebersicht.html) (abgerufen: 31.05.2024)
14. Centers for Disease Control and Prevention. Flu & People 65 Years and Older. Stand: 21.03.2024. unter: <https://www.cdc.gov/flu/highrisk/65over.htm#print> (abgerufen: 31.05.2024)
15. Amanna IJ. Balancing the Efficacy and Safety of Vaccines in the Elderly. *Open Longev Sci*. 2012 Jun 29;6(2012):64-72.
16. Robert Koch-Institut (RKI). *Epid Bull* 2021;1:3-25. unter: [https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2021/Ausgaben/01\\_21.pdf?\\_\\_blob=publicationFile](https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2021/Ausgaben/01_21.pdf?__blob=publicationFile) (abgerufen: 31.05.2024)

17. Robert Koch-Institut (RKI). *Epid Bull* 2010;31:299- 309. unter: [https://www.rki.de/DE/Content/Kommissionen/STIKO/Empfehlungen/Begrueundung/Influenza\\_aenderung.pdf?\\_\\_blob=publicationFile](https://www.rki.de/DE/Content/Kommissionen/STIKO/Empfehlungen/Begrueundung/Influenza_aenderung.pdf?__blob=publicationFile) (abgerufen: 31.05.2024)
18. Skaarup KG et al. Influenza and cardiovascular disease pathophysiology: strings attached. *Eur Heart J Suppl*. 2023 Feb 14;25(Suppl A):A5-A11.
19. Schanzer DL, et al. Co-morbidities associated with influenza-attributed mortality, 1994-2000, Canada. *Vaccine*. 2008 Aug 26;26(36):4697-703.
20. Behrouzi B, et al. Association of Influenza Vaccination With Cardiovascular Risk: A Meta-analysis. *JAMA Netw Open*. 2022 Apr 1;5(4):e228873.
21. MacIntyre CR, et al. Influenza vaccine as a coronary intervention for prevention of myocardial infarction. *Heart*. 2016 Dec 15;102(24):1953-1956.
22. Yedlapati SH, et al. Vaccines and cardiovascular outcomes: lessons learned from influenza epidemics. *Eur Heart J Suppl*. 2023 Feb 14;25(Suppl A):A17-A24.
23. Gupta S et al., Infections in diabetes mellitus and hyperglycemia. *Infect Dis Clin North Am*. 2007 Sep;21(3):617-38, vii
24. Samson SJ, et al. Quantifying the Impact of Influenza Among Persons With Type 2 Diabetes Mellitus: A New Approach to Determine Medical and Physical Activity Impact. *J Diabetes Sci Technol*. 2021 Jan;15(1):44-52.
25. Centers for Disease Control and Prevention. Flu & People with Diabetes. Stand: 20.03.2024. unter: <https://www.cdc.gov/flu/highrisk/diabetes.htm#print> (abgerufen: 31.05.2024)
26. ABDA. Faktenblatt. Gripeschutzimpfungen in Apotheken. Stand: Dezember 2022, unter: [https://www.abda.de/fileadmin/user\\_upload/assets/Faktenblaetter/Faktenblatt\\_Gripeschutzimpfung\\_in\\_Apotheken.pdf](https://www.abda.de/fileadmin/user_upload/assets/Faktenblaetter/Faktenblatt_Gripeschutzimpfung_in_Apotheken.pdf) (abgerufen: 31.05.2024)
27. Robert Koch-Institut (RKI). Kurz & Knapp – Faktenblätter zum Impfen. Influenza. Stand: September 2023. unter: [https://www.rki.de/DE/Content/Infekt/Impfen/Materialien/Faktenblaetter/Influenza.pdf?\\_\\_blob=publicationFile](https://www.rki.de/DE/Content/Infekt/Impfen/Materialien/Faktenblaetter/Influenza.pdf?__blob=publicationFile) (abgerufen: 31.05.2024)

Catching the flu  
is *easy*

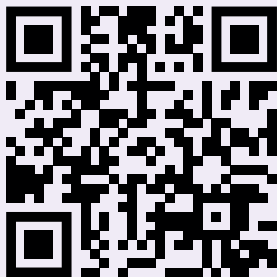
Flu protection  
is too

Speak with your doctor now and get vaccinated.

Check your vaccination record and make an appointment  
to get vaccinated.

More info. at

[impfen.sanofi.de/grippe](https://impfen.sanofi.de/grippe)



Sanofi-Aventis Deutschland GmbH  
Lützowstraße 107 | 10785 Berlin | [www.sanofi.de](http://www.sanofi.de)

**sanofi**