Children's Hospital
London Health Sciences Centre

# COVID-19 vaccines *for youth*

The **Pfizer-BioNTech COVID-19 vaccine** is approved for use by Health Canada in youth between the ages of

**12** *and* **17.**

The vaccine is the best way to **reduce the risk of getting and spreading COVID-19.**

**As of September 24, 2021**, over

***1.98 million***

Canadian youth between the ages of 12 and 17 have received at least one dose of the mRNA vaccine.

**Studies show the vaccine is**

**97%** effective in persons **over the age of 16**

**100%** effective in those between the **ages of 12 and 15.**

*Assessment of the effectiveness against new variants is ongoing.*

Studies are currently underway to determine the safety and effectiveness of the COVID-19 vaccine in children under the age of 12. **Until this data is available, children under the age of 12 are not yet approved to receive the vaccine.**

## What are the benefits of *youth vaccination?*

- The vaccine reduces the chances of getting COVID-19.
- It is highly effective in reducing the chance of getting hospitalized from COVID-19 or developing rare complications, if a vaccinated youth gets COVID-19.
- It may reduce the chance of spreading COVID-19 to family members, older people and other vulnerable people in the community.
- It may help to reduce the chance of school outbreaks.

*Last updated: September 24, 2021*

# Are the vaccines *safe?*

**Yes.** Millions of mRNA vaccines have been given **safely.**

The most common side effects are **soreness where the needle is injected** and **mild flu-like symptoms** in the first 2-4 days.

It's important to know that there have been a small number of cases of heart inflammation (myocarditis/pericarditis) in youth between the ages of 12 and 17 after receiving an mRNA vaccine:

- Male youth: No more than 69 cases per one million vaccine doses given. (CDC)
- Female youth: No more than 10 cases per one million vaccine doses given. (CDC)

## What do we know about *myocarditis/pericarditis cases?*

- This rare condition is treatable.
- Cases have been more commonly reported after the second dose.
- Symptoms typically appeared within several days after vaccination.
- Cases are mainly adolescents and young adults.
- Cases are more common in males compared to females.
- Most of those who have myocarditis/pericarditis have mild illness, such as shortness of breath, chest pain, or the feeling of a rapid or abnormal heart rhythm. Generally, youth respond well to conservative treatment and rest, and their symptoms improve quickly.

## If a patient has developed myocarditis/pericarditis after the first dose of the COVID-19 vaccine, *should they be receiving a second dose?*

The National Advisory Committee on Immunization (NACI) has recommended deferring the second dose of an mRNA COVID-19 vaccine in children who experience myocarditis or pericarditis following the first dose until more information is available. Patients with confirmed myocarditis or pericarditis can also be referred to the Paediatric Infectious Diseases Special Immunization Clinic at Children's Hospital at London Health Sciences Centre for assessment and further guidance.

## Summary:

The Public Health Agency of Canada (PHAC), Health Canada and Public Health Ontario (PHO) are closely monitoring rare reports of potential myocarditis/pericarditis following a COVID-19 mRNA vaccine, including those among youth. At this point, no conclusive association has been established between myocarditis/pericarditis and mRNA vaccines.

The benefits of the mRNA vaccines outweigh the risks. There are clear benefits of mRNA vaccines in reducing deaths and hospitalizations due to COVID-19 infections throughout our community.

**REFERENCES:**

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