MRNA COVID-19 VACCINES AND MYOCARDITIS

- On July 2, 2021, the Public Health Agency of Canada released updated advice from the National Advisory Committee on Immunization (NACI) on the use of mRNA COVID-19 vaccines. These recommendations are based on current scientific evidence and NACI's expert opinion.

- On June 30, 2021, Health Canada updated the product monographs, the documents that provide information for health care providers on the use of the vaccines, for the mRNA COVID-19 vaccines (Pfizer-BioNTech, Moderna) to include very rare reports of myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the tissue surrounding the heart) following vaccination.

- In light of these changes, NACI is providing updated advice on second doses for individuals who experienced myocarditis and/or pericarditis after receiving a first dose of an mRNA vaccine.

- NACI continues to strongly recommend that a complete series with an mRNA vaccine should be offered to all eligible individuals without contraindications, including those 12 years of age and older. The Pfizer-BioNTech vaccine is approved for use in people 12 years and over and the Moderna vaccine is approved for use in people 18 years of age and over.

NACI is now also recommending the following:

- Informed consent for people receiving an mRNA vaccine should include a discussion about the very rare risk of myocarditis and/or pericarditis following immunization.

- As a precaution, NACI recommends that individuals who experienced myocarditis and/or pericarditis after a first dose of an mRNA vaccine should wait to get their second dose until more information is available.

To see the full update, please visit NACI Recommendations on the use of COVID-19 Vaccines.

WHAT YOU NEED TO KNOW

- Myocarditis is inflammation of the heart muscle and pericarditis is inflammation of the lining around the heart. There are many potential causes of myocarditis and pericarditis, including viral infections. It can also occur as a complication in people who are infected with SARS-CoV-2, the COVID-19 virus.

- A small number of cases of myocarditis and/or pericarditis following immunization with mRNA COVID-19 vaccines have been reported in Canada and internationally. Internationally, cases have been reported more frequently in adolescents and younger adults under 30 years of age, more often in males than in females, and more frequently

WHAT YOU NEED TO KNOW
after a second dose. The majority of cases have been mild and individuals have recovered quickly.

- NACI continues to strongly recommend that a complete series with an mRNA vaccine should be offered to all eligible individuals, including those 12 years of age and older. mRNA COVID-19 vaccines provide very good protection against SARS-CoV-2 infection and symptomatic COVID-19 disease, including severe illness, hospitalization and death.

- People who are offered an mRNA COVID-19 vaccine should be informed of the very rare risk of myocarditis and/or pericarditis following immunization and should be advised to seek immediate medical attention if they develop symptoms, which may include chest pain, shortness of breath, or the feeling of a fast, pounding or fluttering heartbeat. Cases typically occur within a week after the receipt of an mRNA vaccine dose, more commonly after a second dose. Any potential cases should be investigated with medical assessment regardless of timing from vaccination to onset.

- As a precaution, NACI recommends that individuals who experienced myocarditis and/or pericarditis after a first dose of an mRNA COVID-19 vaccine should wait to receive a second dose until more information is available.

- The evidence on this safety signal and investigations into an association between myocarditis and/or pericarditis and the mRNA COVID-19 vaccines continue to evolve. NACI will continue to monitor the evidence and will update recommendations as needed.

QUOTES

“We continue to see risk from COVID-19 in our communities, and although adult vaccine coverage is growing daily, there have been recent outbreaks among adolescents in Canada and internationally. It is important for adolescents to continue getting vaccinated, particularly in the context of the Delta variant emerging in Canada.”

“We have been closely monitoring the evolving situation of rare cases of myocarditis or pericarditis following mRNA vaccination among younger people. NACI is encouraged to see that the clinical presentations appear mild, and resolve quickly. The benefits of the COVID-19 immunization program continue to outweigh the relatively small risk for all people including adolescents. It will be important for informed consent to include a discussion about what to watch for after vaccination and to seek medical care if symptoms develop. As a precaution, anyone who experiences myocarditis or pericarditis after the first dose should wait for us to learn more before getting a second dose.”

- Dr. Shelley Deeks, NACI Chair

“There have been a small number of cases of myocarditis and pericarditis reported in Canada after vaccination. Evidence is evolving, and Canadian and international investigations into an association between myocarditis/pericarditis and mRNA vaccines continue. I want to let
Canadians know that the benefits of mRNA COVID-19 vaccines continue to outweigh their potential risks. It is important that everyone gets their second vaccine dose to provide the best protection. The Government of Canada encourages people to get vaccinated and complete their vaccine series as soon as they are eligible.”

- Dr. Theresa Tam, Chief Public Health Officer

NACI FORWARD AGENDA

NACI continues to actively review emerging evidence on COVID-19 vaccines. Upcoming recommendation may include new advice on:

- Recommendation on the use of the Moderna mRNA COVID-19 vaccine in adolescents (pending a regulatory decision by Health Canada)
- Optimal number of doses for people who have been previously infected with SARS-CoV-2 (expected in summer 2021)
- Advice for individuals who received a partial or complete COVID-19 vaccine series with a vaccine not authorized in Canada (expected in summer 2021)