

# Manitoba Health & Seniors Care Immunizer Continuing Education

Please note: This presentation is not intended for further distribution. The information therein is accurate as of the date listed below.

June 1, 2021



**COVID-19 VACCINE**

The background features abstract, overlapping geometric shapes in various shades of blue, primarily on the right side of the frame. The shapes include triangles and polygons, creating a modern, layered effect. The text is positioned on the left side of the white background.

# COVID-19 Virus & Immunization Updates:

# Variants of concern (VOC):

- ▶ Virus like the one that causes COVID-19 are constantly changing through mutation. New variants occur over time; sometimes, the variants emerge and disappear, while others last.
- ▶ COVID-19 VOC are those with a mutation in the SARS-CoV-2 genome where there is convincing evidence that it will have an impact on public health and the health care system.
- ▶ Currently, we have different VOC circulating in Manitoba (and globally).
  - ▶ B.1.1.7 originally identified in the United Kingdom
  - ▶ B.1.351 identified in South Africa
  - ▶ P.1 identified in Brazil
- ▶ VOC may:
  - ▶ Spread more quickly in the population compared to the current strain.
  - ▶ Cause more severe disease.
  - ▶ Compromise natural or vaccine induced immunity.
- ▶ Our best defense against COVID-19 and VOC is to vaccinate Manitoba's population, in addition to following public health orders and following the fundamentals.

# Covid-19 Vaccine Consent

Eligibility criteria has recently expanded to include Manitobans 12- 17 years of age. Consent process considerations for this population are as follows:

- ▶ Consent must be voluntary, obtained by the immunization team, and must be documented appropriately. When consent is not received or immunization is declined, this should be indicated on the consent form/charting system.
- ▶ Clients 16 years to less than 18 years of age:
  - ▶ If client presents without a parent or legal decision maker (or without a consent form signed by their parent or legal decision maker) - provide immunization if you believe the minor is able to understand the nature and effects of the information and/or is able to appreciate the consequences of a decision.
- ▶ Clients under 16 years of age:
  - ▶ If client presents without a parent or legal decision maker (or without a consent form signed by their parent or legal decision maker) - Immunizer should first attempt to obtain consent from parent/legal decision maker.
  - ▶ If informed consent can not be obtained from a parent or legal decision maker - the Immunizer will assess the minor's ability to provide informed consent as a "mature minor" (has the capacity to understand the risks/benefits/outcomes of the vaccine and has been assessed to have the ability to consent on their own).
- ▶ For minors under the care of Child and Family Services:
  - ▶ Consent from the child welfare agency is required if informed consent can not be achieved directly from the minor as described above. Some minors may present to the clinic with a signed letter from the agency indicating consent - this letter is an acceptable form of consent.

# Second Dose Eligibility Changes

- ▶ Manitoba Health has announced that anyone who received a first dose of AstraZeneca/Covishield is now eligible to receive a second dose of any mRNA vaccine (Pfizer or Moderna), provided they meet provincial eligibility criteria for their second dose.
- ▶ A minimum of 28 days between first dose of AstraZeneca and second dose of a mRNA vaccine (Pfizer or Moderna) is required.
- ▶ Please visit Manitoba Health website for more details:

<https://manitoba.ca/covid19/vaccine/eligibility-criteria.html#second-dose>

# Resource Documents

As new information emerges about COVID-19 and COVID-19 vaccines, it is important to ensure you are using the most up to date version of the following documents.

## Product Monographs

- ▶ [Pfizer-BioNTech COVID-19 Product Monograph](#)
- ▶ [Moderna COVID-19 Product Monograph](#)
- ▶ [AstraZeneca COVID-19 Vaccine Product Monograph](#)
- ▶ [COVISHIELD COVID-19 Vaccine Product Monograph](#)

## Fact Sheets

- ▶ [COVID-19 mRNA Vaccine \(Pfizer-BioNTech and Moderna\) - Public Health Factsheet](#)
- ▶ [COVID-19 Viral Vector Vaccine - Public Health Factsheet](#)
- ▶ [After Care Fact Sheet](#)
- ▶ [COVID-19 Vaccine: Information for Pregnant and Breastfeeding Individuals](#)
- ▶ [COVID-19 Vaccine: Information for Individuals who are Immunosuppressed and/or have an Autoimmune Condition](#)

## Clinical Practice Guidelines

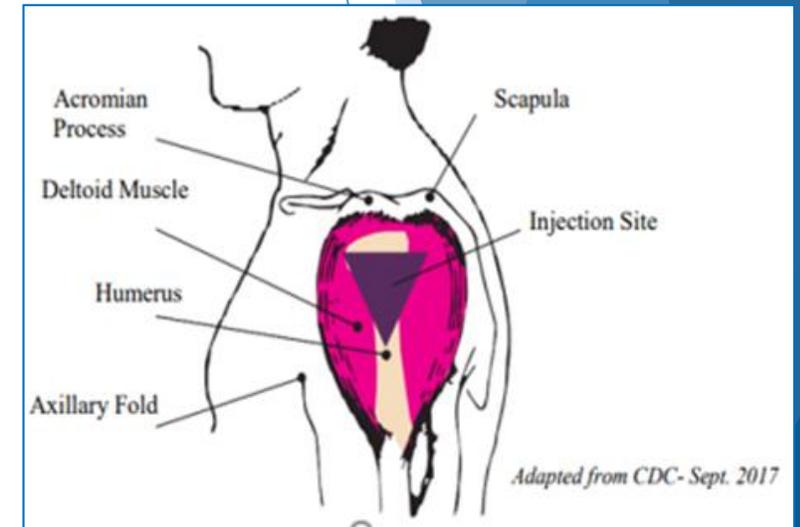
- ▶ [Clinical Practice Guidelines for Immunizers and Health Care Providers](#)

# Vaccination

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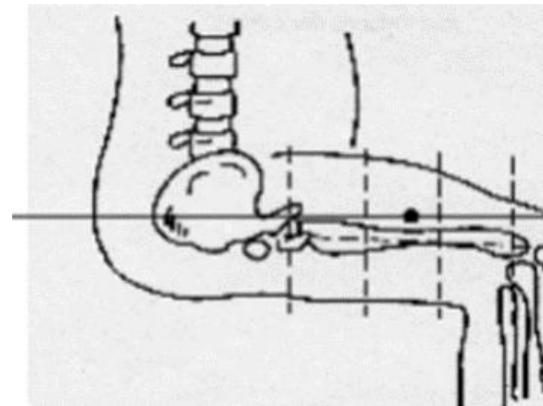
# Landmarking for Deltoid Muscle

- ▶ For the majority of clients presenting to our immunization clinics, the deltoid will be the most appropriate site for immunization.
- ▶ Advise adolescents and adults to sit in a straight-back chair and position their arm in a manner that exposes the deltoid muscle and relaxes the arm.
- ▶ Encourage the client to place their forearms and hands in a relaxed position on their upper thigh.
- ▶ Expose the shoulder completely.
- ▶ Identify the injection site by drawing an imaginary triangle with its base at the lower edge of the acromion process and its peak above the level of the axillary fold. The injection site is in the center of the triangle - the central and thickest portion of the deltoid muscle.
- ▶ The target zone for injection is 4 cm below the acromion process for adults. In children 3-18 years of age, injections should be given 3-5 cm below the acromion. To avoid causing injury, do not inject too high (near the acromion process) or too low.



# Landmarking for Vastus Lateralis (Anterolateral Thigh)

- ▶ If, upon assessment, the deltoid is deemed inadequate for injection, immunization may be injected into the vastus lateralis (anterolateral thigh).
- ▶ Position client in a seated, supine, or side lying position.
- ▶ Define the site by dividing the space between the trochanter major (greater trochanter) of the femur and the top of the knee into three parts; draw a horizontal median line along the outer surface of the thigh.
- ▶ The injection site is in the middle third, just above the horizontal line.



# Selecting Needle Size

- ▶ For intramuscular injection (IM) select a needle size that is long enough to reach the largest part of the muscle, but not so long to reach the underlying bone. This helps to prevent the vaccine from being deposited into the subcutaneous (fat) tissue which:
  - ▶ decreases the chance of local adverse effects (less redness and swelling at the injection site).
  - ▶ Ensures efficacy.
- ▶ For most clients, a 1” needle is usually used. Needle length may need to be adjusted based on the clinician’s assessment of muscle size and subcutaneous tissue present.
- ▶ 1 ½” needle may be considered for individuals who are assessed as having larger muscle mass and a larger amount of subcutaneous tissue, such as well-developed or muscular individuals or individuals considered obese.
- ▶ 5/8” needle may be considered for individuals assessed as having less muscle mass and less subcutaneous tissue such as a younger child or elderly with under-developed or smaller amounts of muscle mass.

# Reducing Immunization Injection Pain & Anxiety

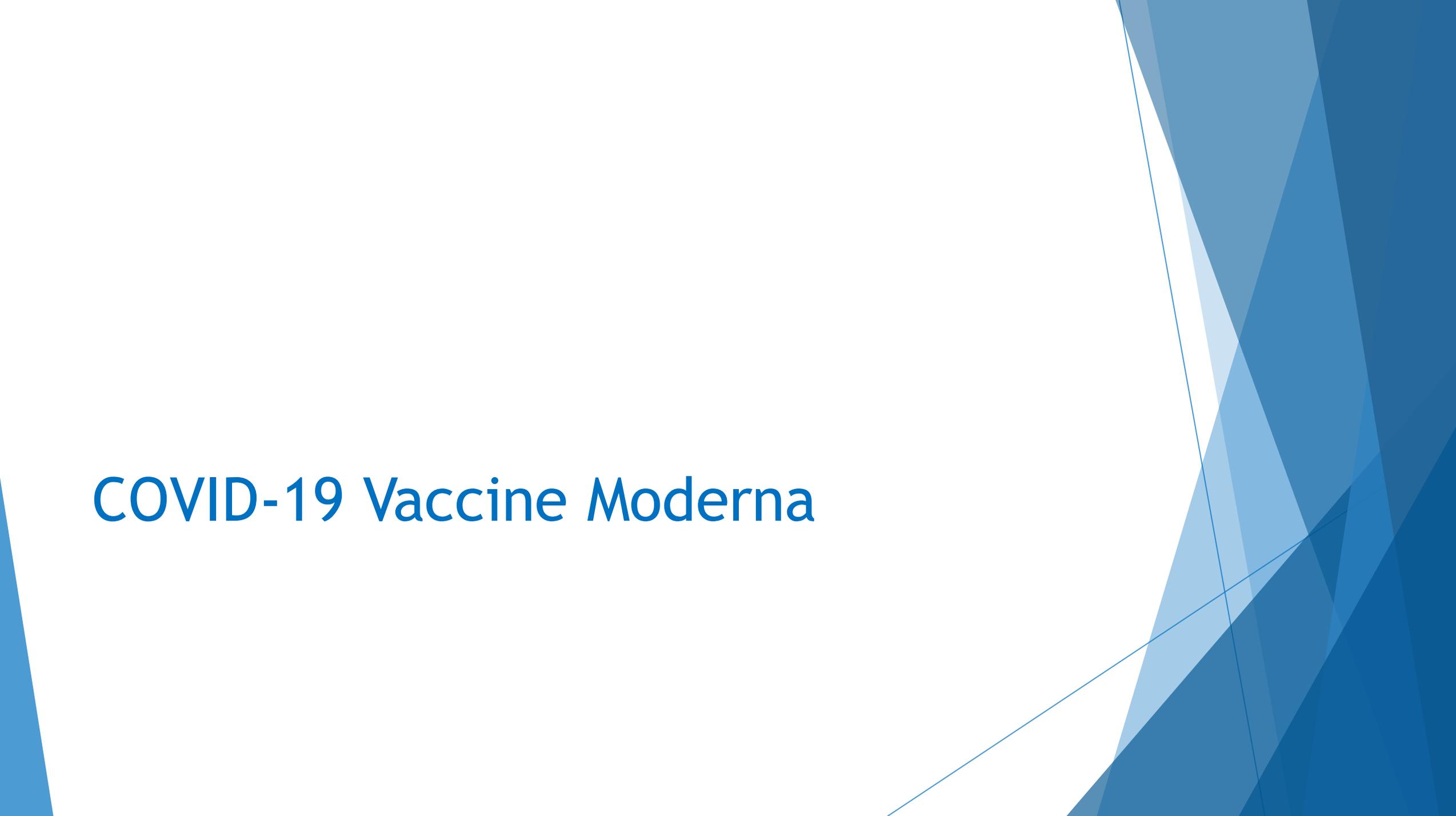
- ▶ Encourage comfort and relaxation
  - ▶ Encourage slow deep breathing.
  - ▶ Some clients may benefit from being vaccinated in a private room and with a support person attending the appointment with them.
  - ▶ If client reports a history of fainting with needles or feeling dizzy, ensure they are lying down when receiving the injection and remain lying down for a few minutes post immunization.
- ▶ Distraction
  - ▶ Redirect the client's attention away from the needle. Talk with them or ask them questions about a subject other than immunization, encourage them to read, play a video game, watch a video on their phone, play music , practice slow deep breathing or rub their arm.
- ▶ Topical Anesthetics
  - ▶ Clients may attend an immunization clinic with a numbing cream, patch, spray or other agent that has been applied prior to arriving at the clinic. These agents numb the surface of the skin so the individual will feel little to no pain with the injection. Whenever a topical anesthetic is applied, it must be removed before proceeding with the immunization.

# Reducing Immunization Injection Pain & Anxiety cont.

## ▶ Language

- ▶ Immunizers should stay calm and speak in a normal tone of voice.
- ▶ When preparing to do the immunization, describe what you plan to do. This demonstrates respect for a client's right to know, confidence in their ability to manage and your interest in dealing with their concerns.
- ▶ Describe how it will feel using words such as, “poke”, “squeeze”, or “pressure”. Refrain from using words such as “pain”, “hurt”, or “sting”.
- ▶ Acknowledge the client's concerns and refrain from providing false reassurance. For example, refrain from saying, “it won't hurt”. Use honest statements such as “there may be a pinch and some pressure that will last a few seconds”.
- ▶ Have a positive attitude and use praise for positive coping to help the client feel good about themselves and increase self-esteem. For example, use phrases such as, “I knew you could do it!”, “You were so brave!”, and “I'm so glad you got the vaccine!”

# COVID-19 Vaccine Moderna

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light to dark, creating a modern and professional aesthetic.

# COVID-19 Vaccine Moderna Dosing

- ▶ COVID-19 Vaccine Moderna should be administered intramuscularly, as two (2) 0.5 mL doses, 4 weeks apart (authorized interval). Please refer to Manitoba Health guidelines for current dosing interval practice.
- ▶ Interruption of a vaccine series resulting in a greater than recommended interval between doses does not require restarting the series.
- ▶ This vaccine **MUST NOT** be reconstituted, mixed with other medicinal products, or diluted.
- ▶ Efficacy: 14 days after dose 2 was 94.1% effective in the short-term in preventing people from getting lab-confirmed COVID-19. In participants 65 years of age and older, efficacy was 86.4%.

# Administration of COVID-19 Vaccine Moderna

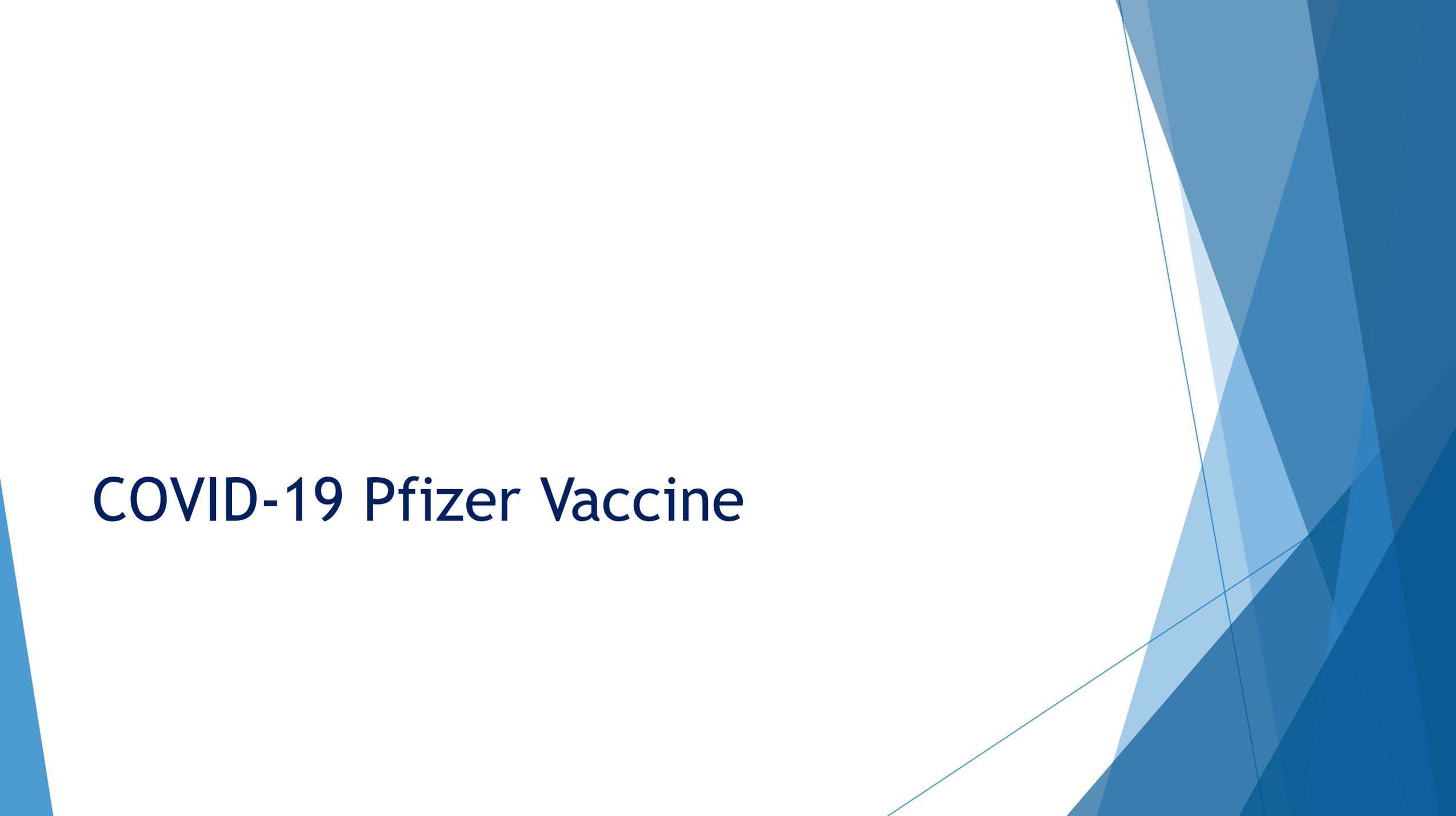
- ▶ Thawing vial prior to use:
  - ▶ Vial must be thawed prior to use.
  - ▶ Thaw in refrigerated conditions between 2°C to 8°C for 2 hours and 30 minutes (after thawing let vial stand at room temperature for 15 minutes before administration).
  - ▶ Alternatively, thaw at room temperature between 15°C and 25°C for 1 hour.
- ▶ Administration/Route:
  - ▶ No reconstitution.
  - ▶ Inspect vial. COVID-19 Vaccine Moderna is a white to off-white dispersion. It may contain white or translucent product-related particulates. If any foreign particulate matter and/or discolouration is noted prior to administration- vaccine should not be administered.
  - ▶ Swirl vial gently after thawing and between each withdrawal. Do NOT shake.
  - ▶ Cleanse the vial stopper with a single use antiseptic swab and allow to dry.
  - ▶ Withdrawal 0.5 mL vaccine.
  - ▶ Administer immediately - 0.5 mL. The preferred site is the deltoid muscle of the upper arm.

# Administration of COVID-19 Vaccine Moderna

## ▶ Handling Instructions:

- ▶ Moderna vaccine must not be mixed with other medicinal products or be diluted.
- ▶ Any unused vaccine or waste material should be disposed of in accordance with local requirements.
- ▶ Used vials should have their labels removed and be discarded with medical waste. Labels should be shredded or ripped up. Vaccine packaging (boxes) should have the producer's label removed from the box and shredded or ripped up.

# COVID-19 Pfizer Vaccine

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# COVID-19 Pfizer Vaccine Dosing

- ▶ COVID-19 Pfizer Vaccine should be administered intramuscularly, as two (2) 0.3 mL doses, 21 days apart (authorized interval). Please refer to Manitoba Health guidelines for current dosing interval practice.
- ▶ Interruption of a vaccine series resulting in a greater than recommended interval between doses does not require restarting the series.
- ▶ Efficacy: 95% - 7 days after second dose in the short-term in preventing people from getting lab-confirmed COVID-19.

# COVID-19 Pfizer Vaccine

## ▶ Prior to dilution:

- ▶ Vials must reach room temperature prior to dilution and must be diluted within 2 hours of exposure to room temperature.

## ▶ Dilution:

- ▶ Gently invert the vaccine vial 10 times (DO NOT SHAKE).
- ▶ Wipe the vial stoppers for the vaccine and diluent with a single use alcohol swab and allow to dry.
- ▶ Using aseptic technique and a 21 G or narrower needle, inject 1.8 mL of air into the 0.9% Sodium Chloride Injection, UPS.
- ▶ DO NOT use bacteriostatic 0.9% Sodium Chloride Injection or any other diluent.
- ▶ Draw up 1.8 mL of the diluent and inject into the Pfizer vaccine vial.
- ▶ With needle still inserted into the vial, allow equal amount of air back into the syringe to equalize the pressure.
- ▶ Remove diluent needle from the vial, discard the needle, syringe and remaining diluent into a sharps container. Do NOT USE again for dilution of another vial.
- ▶ Gently invert the vaccine vial 10 times (DO NOT SHAKE).

# COVID-19 Pfizer Vaccine

- ▶ After dilution:
  - ▶ Vaccine vials can be handled in room light conditions.
  - ▶ Record the date and time of dilution on vaccine vial label.
- ▶ Drawing up Pfizer Vaccine:
  - ▶ Inspect vial. Diluted vaccine is off-white suspension. Confirm no particulates/ discolouration.
  - ▶ Cleanse the vial stopper with a single use antiseptic swab and allow to dry.
  - ▶ Using aseptic technique, a new needle, and a 1 mL syringe (preferable), inject 0.3 mL of air into the vaccine vial - avoid injecting air directly into the liquid as it can cause bubbles.
  - ▶ Draw up slightly more vaccine than 0.3 mL - use a slow smooth motion to avoid pulling in air bubbles into the syringe.

# COVID-19 Pfizer Vaccine

- ▶ With the needle still in the vaccine vial, push any air out of the syringe.
- ▶ Observe the volume measurement numbers on the syringe carefully to ensure the volume within the syringe is correct.
- ▶ Remove needle from vial and recap.
- ▶ Use same needle to withdraw and to administer vaccine.
- ▶ If a discrepancy in the expected doses have been drawn from a vaccine vial (less than or more than 6 doses), vaccine can be administered provided:
  - ▶ the full dose can be drawn from one vial (do not pool vaccine from multiple vials)
  - ▶ dilution has occurred as per manufactures requirements
  - ▶ all infection control practices have been maintained, and
  - ▶ inventory is updated accordingly.
- ▶ Video on how to prepare Pfizer-BioNTec Vaccine: <https://youtu.be/zRHWRRnVXo>  
Video credit: Eastern Ontario Health Unit
- ▶ Handling Instructions
  - ▶ Pfizer vaccine must not be mixed with other medicinal products.
  - ▶ Any unused vaccine or waste material should be disposed of in accordance with local requirements.
  - ▶ Used vials should have their labels removed and be discarded with medical waste. Labels should be shredded or ripped up. Vaccine packaging (boxes) should have the producer's label removed from the box and shredded or ripped up.

AtraZeneca/COVIDSHIELD

# AstraZeneca/COVIDSHIELD Vaccine Dosing

- ▶ AstraZeneca should be administered intramuscularly, as two (2) 0.5 mL doses, 4 to 12 weeks apart (authorized interval). Please refer to Manitoba Health guidelines for current dosing interval practice.
- ▶ Interruption of a vaccine series resulting in a greater than recommended interval between doses does not require restarting the series.
- ▶ This vaccine **MUST NOT** be reconstituted, mixed with other medicinal products, or diluted.

# Administration of AstraZeneca/COVIDSHIELD

## ▶ Administration/Route:

- ▶ No reconstitution.
- ▶ Inspect vial. AstraZeneca/COVIDSHIELD COVID-19 vaccine is a colourless to slightly brown, clear to slightly opaque solution. Discard the vial if the solution is discoloured or visible particles are observed.
- ▶ Cleanse the vial stopper with a single use antiseptic swab and allow to dry.
- ▶ Withdraw 0.5 mL vaccine
- ▶ Administer immediately - 0.5 mL. The preferred site is the deltoid muscle of the upper arm.
- ▶ Use separate sterile needle and syringe for each client.
- ▶ It is normal for liquid to remain in the vial after withdrawing the final dose.

## ▶ Handling Instructions

- ▶ Any unused vaccine or waste material should be disposed of in accordance with local requirements.
- ▶ Used vials should have their labels removed and be discarded with medical waste. Labels should be shredded or ripped up. Vaccine packaging (boxes) should have the producer's label removed from the box and shredded or ripped up.

# Information Review Form

- ▶ Please click on the link below to complete the form

[Information Review Form](#)

**Thank you for completing this portion  
of your training. We are so happy to  
have you on board for this very  
important initiative!**