



# Pfizer COVID-19 Vaccine: Dilution of Multidose Vials and Preparation of 0.3mL Dose Syringes

30 April 2021

**OFFICIAL**

## Purpose

This document explains the process of preparing dose syringes from the COVID-19 Pfizer multi-dose vials (MDV). This includes the consumables required and step-by-step directions accompanied by photographs.

## Important Information

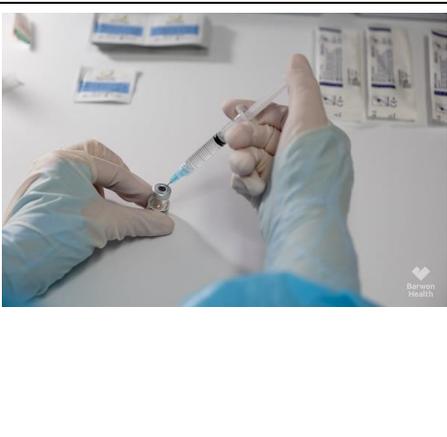
- ATAGI has released guidance on the use of COVID-19 vaccines in multidose vials. It is up to vaccination providers to use the most appropriate method for each setting/situation. Routine practice involves drawing up and injecting with separate needles however an acceptable alternative recommended by ATAGI involves drawing up and injecting with the **same** needle. This is recommended by the Victorian Department of Health (DH) for the preparation of the Pfizer COVID-19 vaccine to avoid the risk of under-dosing, and is outlined in this document. (note: this risk does not apply to administration of the AstraZeneca COVID-19 vaccine)
- Use a new, sterile 23G or 25G 25mm length needle (or 23G/25G 38mm needle for people who are obese) and 1 mL syringe to draw up each new 0.3 mL dose by re-puncturing the bung.
- Ensure each re-puncture occurs at a different site on the bung.
- Recap the clean needle using either a single-handed technique, forceps, or a suitable protective guard designed for re-sheathing. The needle must be properly recapped, and the sheath must not be held in the fingers.
- In the event of a needle stick injury during recapping, the needle and syringe must be discarded and incident recorded.

## Consumable Required for Each Pfizer MDV Prepared

- 1x sodium chloride 0.9% 10mL ampoule
- 1x 3mL syringe
- 7x single use 70% alcohol swabs
- 6x 1mL (syringe
- 7x 23G or 25G 25mm length needle (or 23G/25G 38mm needle for people who are obese)

Throughout the procedure, continue to perform a visual check of the solution and check for contamination. Quarantine the vial and dose syringes if particulates or discolouration are present.

# Recommended Step-by-Step Process

<p><b>1</b></p>		<p><b>Initial set up for aseptic prep space.</b> Required consumables and vial with 'use by' marked</p> <ul style="list-style-type: none"> <li>• Performed hand hygiene and don appropriate PPE.</li> <li>• Prepare aseptic workspace and assemble required consumables.</li> <li>• Mark dilution / use by date and time – this is to be done prior to the vial being handed to the technician for preparation Suggestion to add small vial label with “Dilutant added Date___ Time____. Discard 6hrs after dilution 6-30°C”</li> </ul>
<p><b>2</b></p>		<p><b>Concentrated vial being inverted</b></p> <ul style="list-style-type: none"> <li>• Slowly invert the vial 10 times to thoroughly mix the concentrate suspension, <b>DO NOT SHAKE.</b></li> </ul>
<p><b>3</b></p>		<p><b>Vial bung being wiped</b></p> <ul style="list-style-type: none"> <li>• Wipe the vial stopper with a single use 70% alcohol swab and allow to dry.</li> </ul>
<p><b>4</b></p>		<p><b>3mL syringe attached to sodium chloride polyamp</b></p> <ul style="list-style-type: none"> <li>• Draw up 1.8 mL of sodium chloride 0.9% into a 3mL syringe by attaching syringe directly to polyamp. Attach and prime a needle.</li> </ul>
<p><b>5</b></p>		<p><b>3mL syringe puncturing vial</b></p> <ul style="list-style-type: none"> <li>• Slowly add the 1.8mL of sodium chloride 0.9% down the side of the vial ensuring entire contents transferred.</li> <li>• Equalise vial pressure by withdrawing 1.8 mL of air into empty diluent syringe before removing the needle from the vial.</li> <li>• Place diluent ampoule and 3mL syringe in injection tray for checking.</li> <li>• <b>The diluted vaccine, in the vial can be stored or transported at room temperatures of up to 30°C for up to 6 hours.*</b></li> </ul> <p><small>*Therapeutic Goods Administration &lt;<a href="https://www.tga.gov.au/media-release/wider-storage-and-transportation-conditions-pfizer-covid-19-vaccine-now-approved">https://www.tga.gov.au/media-release/wider-storage-and-transportation-conditions-pfizer-covid-19-vaccine-now-approved</a>&gt;</small></p>

6		<p><b>Diluted vial being inverted</b></p> <ul style="list-style-type: none"> <li>Slowly invert the vial 10 times to mix contents thoroughly, <b>DO NOT SHAKE.</b></li> </ul>
7		<p><b>Vial bung being wiped</b></p> <ul style="list-style-type: none"> <li>Wipe the diluted vial stopper with a single use 70% alcohol swab and allow to dry.</li> </ul>
8		<p><b>1mL syringe with needle attached</b></p> <ul style="list-style-type: none"> <li>Firmly attach a needle to a 1mL syringe, draw up 0.3mL of air.</li> </ul>
9		<p><b>1mL syringe/ needle puncturing vial</b></p> <ul style="list-style-type: none"> <li>Puncture the bung of the diluted vial, equalising pressure by injecting the air into the vial.</li> </ul>
10		<p><b>Inverted vial + 1mL syringe / needle withdrawing dose</b></p> <ul style="list-style-type: none"> <li>Draw up 0.3 mL of the diluted vaccine into the 1mL syringe</li> <li>Adjust to remove air bubbles.</li> <li>Check volume withdrawn is 0.3mL.</li> </ul>

## More Information and Resources

- Victorian Department of Health COVID-19 Vaccination Guidelines: <https://www.coronavirus.vic.gov.au/victorian-covid-19-vaccination-guidelines>
- Public Health Emergency Order (PHEOs) and Secretary's Approval: <http://www.gazette.vic.gov.au/gazette/Gazettes2021/GG2021S080.pdf>

- Commonwealth Department of Health COVID-19 information: [health.gov.au/covid19-vaccines](https://health.gov.au/covid19-vaccines)
- Victorian Department of Health COVID-19 vaccine information: [coronavirus.vic.gov.au/vaccine](https://coronavirus.vic.gov.au/vaccine)

## Contact Us

For more information on the rollout of the COVID-19 vaccines in Victoria, contact the Victorian Department of Health COVID-19 Vaccination Preparedness Unit by emailing [COVIDvaccination@dhhs.vic.gov.au](mailto:COVIDvaccination@dhhs.vic.gov.au) <COVIDvaccination@dhhs.vic.gov.au>.

To receive this document in another format, phone 1300 651 160, using the National Relay Service 13 36 77 if required, or email [COVIDvaccination@dhhs.vic.gov.au](mailto:COVIDvaccination@dhhs.vic.gov.au)

Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

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