



Technical Bulletin



Date: April 19, 2021
Topic: Storage and Handling of COVID-19 Vaccines
Contact: Karissa Loper, Health Bureau Chief, Child, Family & Community Wellness
To: All Health Care Providers and Facilities, Local Health Authorities, and Pharmacists

Storage and Handling of COVID-19 Vaccines

As more data is amassed regarding the stability of the COVID-19 vaccines, updated vaccine storage and handling guidelines have been approved by the Food and Drug Administration (FDA) and Centers for Disease Control and Prevention (CDC). All vaccines must be stored and handled appropriately to ensure their safety and potency. A summary of the storage and handling requirements of each currently authorized COVID-19 vaccine is outlined below.

Pfizer COVID-19 Vaccine

The storage and handling instructions begin on page two (2) of the Pfizer Emergency Use Authorization (EUA). The Pfizer COVID-19 vaccine arrives in a thermal shipper at ultracold temperatures. The vaccine can be stored in the shipper if the dry ice is recharged every five (5) days. Refer to the instructions included in the shipper. Alternately, the vaccine may be transferred to one of the three storage units listed below for the time listed:

- Ultra-low freezer (-80° to -60°C or -112° to -76°F) until expiry date printed on the label
- Freezer (-25° to -15°C or -13° to +5°F) for a maximum of two (2) weeks
- Refrigerator (2° to 8°C or 36° to 46°F) for five (5) days (120 hours)

Additional storage instructions:

- Minimize exposure to room light and avoid exposures to direct sunlight and ultraviolet light
- **Do not refreeze thawed vials**
- Store vials in their original cartons
- Vials stored at -25° to -15°C or -13° to +5°F for up to two (2) weeks may be returned **one time** to the ultra-low freezer. Total cumulative time the vials are stored at -25° to -15°C or -13° to +5°F should be tracked and should not exceed (2) weeks.

To thaw vials:

- 2-3 hours in the refrigerator
- 30 minutes at room temperature

Other Important Information:

- Vials must reach room temperature before dilution.
- Undiluted vials may be stored at room temperature for no more than two (2) hours.
- After vaccine receipt empty shippers must be returned to the manufacturer. Return shipping labels can be found on the inside of the shipper.

After dilution:

- Each multidose vial of Pfizer vaccine contains six (6) 0.3 mL doses.
- **Store vials between 2°C to 25°C (35°F to 77°F) and use within six (6) hours from the time of dilution.**
- During storage, minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light.
- **Any vaccine remaining in vials must be discarded after six (6) hours.**
- **Do not refreeze.**

[Moderna COVID-19 Vaccine](#)

The storage and handling instructions begin on page one (1) of the Moderna EUA. Moderna vaccine arrives frozen. The vaccine can be stored as follows:

- Freezer -50° to -15°C (-58° to +5°F) until expiry date printed on the label
- Refrigerator 2° to 8°C (36° to 46°F) for a maximum of 30 days

Additional storage information:

- Store vials in their original carton to protect from light
- Never store on dry ice or below -50°C or -58°F
- Do not refreeze once thawed
- **Unpunctured vials may be stored at 8° to 25°C (46° to 77°F) for a maximum of 24 hours**
- **Punctured vials may be stored at 2° to 25°C (36° to 77°F) for a maximum of 12 hours**
- **Vials should be discarded 12 hours after the first puncture**

To thaw vials:

- 2-3 hours in the refrigerator
- 1 hour at room temperature

[Janssen \(Johnson & Johnson\) COVID-19 Vaccine](#)

CURRENTLY ON PAUSE. DO NOT USE. AWAITING GUIDANCE

The storage and handling instructions begin on page one (1) of the Janssen EUA.

Janssen COVID-19 vaccine should be placed in the refrigerator at 2° to 8°C (36° to 46°F) when it arrives until the expiration date. Protect vaccine vials from light exposure – store in their original carton. **Do not freeze.**

Unpunctured vials may be stored at room temperature between 9° to 25°C (47° to 77°F) for a maximum of 12 hours.

After puncturing the multidose vial seal:

- Store vaccine in the refrigerator between 2° to 8°C (36° to 46°F) for a maximum of six (6) hours OR
- At room temperature (up to 25°C or 77°F) for two (2) hours.

Resources

- Pfizer Emergency Use Authorization: <http://labeling.pfizer.com/ShowLabeling.aspx?id=14471&format=pdf&#page=24>
- Moderna Emergency Use Authorization: <https://www.fda.gov/media/144637/download>
- Janssen (Johnson & Johnson) Emergency Use Authorization: <https://www.fda.gov/media/146304/download>

Questions:

For updated guidance, please review the [DPBH Technical Bulletin website](#) and [Nevada's Health Response website](#) regularly. Email DPBH-AVARS@health.nv.gov with questions.



Lisa Sherych, Administrator
Division of Public and Behavioral Health



Ihsan Azzam, Ph.D., M.D.
Chief Medical Officer