

Storage & Handling: At a Glance

Refer to the [EUA fact sheets or product inserts for vaccine-specific storage and handling and administration guidance](#). This guide outlines requirements in CDC’s COVID-19 Vaccination Program Provider Agreement and [Vaccine Storage & Handling Toolkit](#).

Resources will be posted to [COVID-19 BioNTech Vaccine Resources](#) as they become available.

Topic	Requirements & Guidance	Resource
Vaccine Storage Units	<p>Vaccination providers must have proper storage units to meet the specific needs of any COVID-19 vaccine products stored in their inventory. Purpose-built (also referred to as “pharmaceutical-grade”) units are preferred and designed specifically for storage of biologics, including vaccines. However, household-grade units can be an acceptable alternative in some situations. (Refer to CDC’s Vaccine Storage and Handling Toolkit for details.)</p> <p>Ultra-cold freezers: Most standard freezer units do not meet ultra-cold freezer requirements for storing vaccine from -60 to -80°C. However, at this time, CDC does not recommend COVID-19 vaccination providers purchase ultra-cold storage units because vaccines requiring these storage conditions are expected to be shipped in containers that can maintain ultra-cold temperatures for an extended period.</p>	
Data Loggers	<p>Each vaccine storage unit must have a temperature monitoring device. CDC recommends using a digital data logger. This device provides the most accurate storage unit temperature information, including details on how long a unit has been operating outside the recommended temperature range (called a temperature excursion).</p> <p>Backup devices: Providers must have at least one backup data logger in case a primary device breaks or malfunctions, and for transporting vaccines during vaccine redistribution and transfer or off-site clinics.</p> <p>Setup: Configure key settings for primary and backup digital data loggers, including device name, low and high temperature alarm limits, and a 30-minute logging interval.</p> <p>Ultra-cold devices: For accurate ultra-cold temperature monitoring, it is essential to use an air probe or a probe designed specifically for ultra-cold temperatures with the data logger.</p> <p>Certificates of Calibration: Always use data loggers with a current and valid Certificate of Calibration testing. To determine if a Certificate of Calibration Testing or Report of Calibration was issued by an appropriate entity, refer to CDC’s Vaccine Storage and Handling Toolkit.</p>	Data Logger Setup & Use

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<p>Storage</p>	<p><i>Organization must store and handle COVID-19 vaccine under proper conditions, including maintaining cold chain conditions and chain of custody at all times in accordance with the manufacturer’s package insert and CDC guidance in CDC’s Vaccine Storage and Handling Toolkit, which will be updated to include specific information related to COVID-19 vaccine. (CDC Provider Agreement #7a.)</i></p> <p><i>Organization must comply with all applicable requirements as set forth by the U.S. Food and Drug Administration, including but not limited to requirements in any EUA that covers COVID-19 vaccine. (P.A. #12a)</i></p> <p>Pfizer: Refrigerator 2°C to 8°C (36°F to 46°F), ULT Freezer -80°C to -60°C (-112°F and -76°F)</p> <p>Pfizer in thermal shippers: Doses may be stored temporarily in thermal shippers with a Beyond Use Date of up to 30 days from delivery (if dry ice recharged within 24 hours and every 5 days after initial icing). Transfer unused doses to refrigerator with revised BUD of 5 days/120 hours from date first transferred to refrigerated temperatures.</p> <p>Moderna vaccine: Refrigerator 2°C to 8°C (36°F to 46°F), Freezer -25°C to -15°C (-13°F to 5°F). Freezer temperature settings will require adjustment if storing this vaccine with varicella-containing vaccines. The temperature range for this vaccine is limited compared to varicella-containing vaccines.</p> <p>EUA Fact Sheets: Because COVID-19 vaccines may initially be authorized for use under an Emergency Use Authorization (EUA), providers should refer to the EUA Fact Sheet for Healthcare Providers and manufacturer information for detailed storage and handling information for each vaccine.</p> <p>Pfizer EUA Website: cvdvaccine.com was developed to provide specific information for HCPs and Fact Sheets for consumers. Will go live and materials will be posted after EUA is granted to Pfizer by FDA. Vial trays in thermal shippers have a QR code used to access this website.</p>	<p>Pfizer-BioNTech COVID-19 Vaccine Storage and Handling Summary</p> <p>Dry Ice Safety for Healthcare Professionals</p> <p>Pfizer-BioNTech COVID-19 Vaccine Delivery Checklist</p>

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<p>Temperature Monitoring</p>	<p><i>Organization must monitor vaccine storage unit temperatures at all times using equipment and practices that comply with guidance in CDC’s Vaccine Storage and Handling Toolkit. (P.A. #7b)</i></p> <p>Pfizer Thermal Shippers: Check data logger each time thermal shippers are opened as shipper should not be opened more than 2 times a day, and shouldn’t be opened for more than 3 minutes at a time.</p> <p>For satellite, temporary and off-site clinics: Monitor transport container temperatures using a data logger. Record temperatures hourly and check data loggers whenever containers are opened. (See hourly temperature log.)</p>	<p>How to Record Temperatures</p> <p>COVID-19 Temperature Log</p> <p>Hourly Temperature Log</p>
<p>Reporting Temperature Excursions</p>	<p><i>Organization must comply with each relevant jurisdiction’s immunization program guidance for dealing with temperature excursions. (P.A. #7c)</i></p> <p>For satellite, temporary and off-site clinics: In the event of a temperature excursion, mark vaccines “Do Not Use” and email the completed Report Storage Incident Resolution Form to covidcallcenter@cdph.ca.gov at the end of the day.</p>	<p>Reporting Temperature Excursions</p> <p>Storage Incident Resolution Form</p>
<p>Vaccine Expiration Dates</p>	<p><i>Organization must monitor and comply with COVID-19 vaccine expiration dates. (P.A. #7d)</i></p> <p>EUA vaccine labels may not include expiration dates. To help providers track expiration dates and beyond use dates (BUDs), CDC will post a COVID-19 Vaccine Expiration Date Tracking Tool on its website once vaccine is available. Also note that expiration dates may change as additional stability data become available.</p> <p>Pfizer: Doses stored in ULT freezer expire in 6 months. Scan QR code on vial trays to determine expiration date and lot numbers.</p> <p>Moderna: Doses stored in freezer expire in 6 months. Guidance to follow.</p>	<p>CDC’s Vaccine Expiration Date Tracking Tool</p>

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<p>Beyond Use Dates (BUD)</p>	<p>Manufacturer-shortened expiration dates may apply when vaccine is exposed to certain storage conditions. The BUD replaces the manufacturer’s expiration date and should be noted on the label along with the initials of the person making the calculation.</p> <p>Pfizer BUD: Frozen doses moved to refrigerated temperatures have reduced Beyond Use Date. Label vaccines with Beyond Use Date of 5 days/120 hours from date first transferred to refrigerated temperatures.</p> <p>Pfizer thermal shippers BUD: Doses stored temporarily in thermal shippers have a BUD of 30 days from delivery (if dry ice recharged upon delivery and every 5 days as needed). Transfer unused doses to refrigerator with revised BUD of 5 days/120 hours from date first transferred to refrigerated temperatures.</p> <p>Moderna BUD: Frozen doses moved to refrigerated temperatures have reduced Beyond Use Date. Label vaccines with Beyond Use Date of 30 days from date first transferred to refrigerated temperatures.</p>	<p>Pfizer-BioNTECH COVID-19 Beyond Use Date (BUD) Tracking Label (Refrigerator)</p>
<p>Record Keeping</p>	<p><i>Organization must preserve all records related to COVID-19 vaccine management for a minimum of 3 years, or longer if required by state, local, or territorial law. (P.A. #7e)</i></p>	
<p>Off-Site Clinic Considerations</p>	<p>Satellite temporary, and, off-site clinics in collaboration with community or mobile vaccinators may assist jurisdictions in providing equitable access for COVID-19 vaccination. However, these situations require additional oversight and enhanced storage and handling practices. Refer to resource links for guidance.</p> <p>CDC resources:</p> <ul style="list-style-type: none"> • Infection Control Guidance for Healthcare Professionals about Coronavirus, • Interim Guidance for Routine and Influenza Immunization Services during the Pandemic, • Guidance for Planning Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations, • Checklist of Best Practices for Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations 	<p>Guidance for Satellite, Temporary and Off-Site Clinics</p>