

Description:

Kashiwa Kousei General Hospital has been involved in supporting Covid-19 vaccinations efforts using PHCbi freezers. Here, we interview the Pharmacy Director of the hospital.



Case Study—Kashiwa Kousei General Hospital, Department of Pharmacy (Chiba, Japan)

Efficient and safe vaccinations enabled by PHCbi freezers

Kashiwa Kousei General Hospital, located in Kashiwa City, Chiba Prefecture, has a long history of providing high-quality, patient-centered medical care. For 24 hours a day, 365 days a year, the hospital provides emergency care and is actively introducing highly advanced medical treatments such as robotic surgery and cryotherapy for malignant tumors. The hospital also focuses on preventive medicine and appropriate management of chronic diseases, and is highly trusted by local residents and patients nationwide.

As a core regional hospital, it has continued to make every effort to ensure the safety and security of people throughout the Covid-19 pandemic. One of its efforts focuses on the large-scale vaccination of patients using the Covid-19 vaccine. The PHCbi MDF-C8V1 ultra-low temperature freezer made this possible. We interviewed Mr. Matsuki, Director of the Hospital's Pharmacy, about the background and use of the freezers.



Ultra-low temperature chest freezers that do not easily change temperature when being loaded or unloaded

"We decided to install the PHCbi ultra-low-temperature freezers in order to facilitate the large-scale and efficient administration of the Covid-19 vaccine," says Pharmacy Director Matsuki.



Pfizer's Covid-19 vaccine can only be stored in a regular freezer for up to 14 days. If stored longer than that, it must be maintained at -75°C. This requires an ultra-low temperature freezer such as the MDF-C8V1, which can cool products to between -65 to -85°C.

The MDF-C8V1 is a chest freezer with a lid on top. Its features include low leakage of cold air when the door is opened and closed, and a stable internal temperature environment suitable for long-term storage of sensitive products.



https://youtu.be/OhuJIQxMrVE



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"The vaccine arrives from Pfizer in a shipping box with dry ice keeping it at an ultra-low temperature. When you open the box, there is dry ice all around with the vaccine in the center."

There are 195 vials in each box. Each vial provides six doses, which works out as 1,170 doses. The vaccines are removed from the box and quickly transferred directly into the ultra-low temperature freezer. In the freezer, vaccines can be stored for up to their expiration date (approximately 9 months after being manufactured overseas). In this sense, the MDF-C8V1 has been well received for how easy it is to use.



▲ MDF-C8V1-PJ

Ease of removal: Convenient pharmaceutical refrigerators for thawing vaccines

"When we use the vaccine, we defrost it in the refrigerator before we use it," continued Matsuki.

The vaccine is defrosted in the PHCbi MPR-S300H/ MPR-514 pharmaceutical refrigerators. Their glass doors make it easy to see the contents, making them suitable for storing vaccines that need to be taken in and out within a short period of time.

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"We administer vaccines only after a reservation is made, so we thaw the vaccines according to the number of reservations. We first dilute the vaccines with a saline solution and then administer them, but they must be administered within 6 hours after dilution. Therefore, we plan by only storing the morning doses in the pharmaceutical refrigerator, then store more in the afternoon, and so on, in small portions depending on the administration times."

The hospital began its large-scale Covid-19 vaccinations in May 2021. It reached an average of about 5,500 vaccinations per week in late June, about twice the target of Kashiwa's large-scale vaccination center. The implementation of the MPR-S300H/MPR-514 pharmaceutical refrigerators supported the efficient rollout.

From March 2022, the hospital also began accepting reservations for the 3rd vaccine dose for those 12 years of age and older, as well as for the 1st and 2nd doses for children. Kashiwa Kousei General Hospital will continue to provide medical care for its community.

▲ MPR-S300H-PJ







▲ MPR-S300H-PJ

Delivered to

Kashiwa kousei general hospital 617 Shikoda, Kashiwa-shi, Chiba-ken 277-8551, Japan

https://www.kashiwakousei.or.jp/en/

Product delivered

Ultra-Low Temperature Freezer: MDF-C8V1-PJ Pharmaceutical Refrigerators: MPR-S312DCN-PJ x 2

MPR-514R-PJ MPR-S300H-PJ

Live cell metabolic analyzer: RINkS

Automatic tablet packaging machine: ATC-256GR1-PJ

Counting dispensing audit system
Powdered drug audit system: AIC-PKS



▲ATC-256GR1-PJ



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