

Keeping the 'Cold Chain' on song

While the Little River band once sang about a 'Cool Change', the team at the Timaru Hospital pharmacy have the 'Cold Chain' humming along – ensuring that the flow of the all-important COVID-19 vaccines to the South Canterbury region is kept on song.

It has been a busy time for the three pharmacists, Carolyn Coulter, Olivia Hayman and Lich Vu overseeing the requirements for the COVID-19 vaccine cold chain – in this case the Pfizer vaccine and ensuring it is safely stored, transported and delivered – on top of their normal pharmacy roles.

Cold chain refers to the system of transporting and storing vaccines within the recommended temperature range, from the place of manufacture to the point of vaccine administration. All immunisation providers, such as the Timaru Hospital pharmacy, must maintain the cold chain at all times.

It all starts in Auckland – NZ's central storage facility for the COVID-19 vaccine – where nine, large -70°C freezers can store more than 1.5 million doses of vaccine at the required ultra-low temperatures. The vaccines are then distributed from the Auckland-based central storage facility to the country's cold chain network nationwide – including to the Timaru Hospital pharmacy here in South Canterbury.

Hospital pharmacy manager Carolyn explains that the vaccine is flown down from Auckland to Christchurch and then delivered to the Timaru Hospital pharmacy via courier – all the while needing to be kept at the all-important 2 to 8°C temperature range.

"Once delivered, the vaccine is transferred and stored in the pharmacy refrigerator, until it is needed for dispatching to the various vaccination clinics around the region," she adds.

Meanwhile, pharmacist Olivia says when the vaccine is needed for the various vaccination clinics around the region, it is removed from the pharmacy fridge and put into the temperature-controlled transport chilly bins – these maintain the 2-8°C temperature range – and then it is taken to the vaccination sites.

"Once on site, the vaccinators will remove the number of vials required from the chilly bin and let them sit for 10-20mins to come up to room temperature," she explains.

"The vaccine can be exposed to room temperature for up to a maximum of two hours. Once you reconstitute (dilute) the vaccine prior to administration you gain an additional six hours of time at room temperature (i.e. once the vaccine has been reconstituted you have 6 hours to administer the vaccine after which time it needs to be discarded)."

While the process is now running like a well-oiled machine, both Carolyn and Olivia concede that it was a pretty fast learning curve for them when the first vaccines arrived in South Canterbury on March 1.

"At that time, the vaccine only had a 120 hour (five day) expiry period – which made things very pressurised," Carolyn adds. "As we did not want to waste any doses."

Olivia says this meant a lot of early starts and long days to ensure they were on the ground to accept the vaccines and then have them all ready for the clinics to use.

Carolyn adds, "It was really busy – it felt like I was eating breakfast, lunch and dinner here."

However, Olivia says it was a real 'game changer' when in early June the Ministry of Health (MoH) extended the vaccine's expiry period to 31 days.

"That has really taken the pressure off, with deliveries coming twice a week now instead of three to four times a week."

Carolyn says they are now spending around two hours a day dealing with the vaccine cold chain process, giving them more time to do their usual work at the pharmacy.

However, all the pharmacists are continuing to keep themselves up-to-date with the latest MoH cold chain guidelines – which currently runs at 53 pages – to ensure that the South Canterbury region's delivery and storage of our COVID-19 vaccine continues to hum along.



Pharmacists Olivia Hayman and Carolyn Coulter help keep the COVID-19 vaccine rollout flowing

South Canterbury DHB: COVID-19 Vaccine Update



First dose



Second dose

Total: 19,733
as at 4 July 2021.

COVID-19 Vaccination When will I be offered a vaccine?

AIM: The aim is to vaccinate the South Canterbury population over 16 years by the end of the year. This is roughly 48,500 people.

Group 1 – currently being vaccinated

Border and managed isolation and quarantine (MIQ) workers

Group 2 – currently being vaccinated

High-risk frontline workers and people living in high-risk places

Group 3 – currently being vaccinated – everyone will be contacted by the 23 July 2021

People aged 65 and over, and people with a disability or a relevant underlying health condition

Group 4 – vaccination bookings open from 28 July

All people aged 60 plus can book their vaccinations from 28 July. Then, two weeks later, people who are 55 plus. From here, new age bands will be opened up every 2-3 weeks based on confirmed deliveries of the vaccine and the speed of rollout to earlier groups.

For general information about the COVID-19 vaccine, or the national rollout, please visit the Unite Against COVID-19 website.

www.covid19.govt.nz



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