

Use of vaccine booster shots has increased due to the many variants of the virus

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The hope that more vaccinated people will return for a second Pfizer Covid vaccine dose or booster was behind the Health Department's decision to halve the waiting period between first and second doses (from 42 to 21 days) and second doses and boosters (from 180 days to 90 days), according to the department's Nicholas Crisp, who heads up the vaccine roll-out.

According to the department, 18.93% people vaccinated with the Pfizer vaccine don't return for their second dose within 42 days. This is twice as high as the US, where data from the Centers for Disease Control shows that about 9% of people who got their first dose of Pfizer didn't go back for a second jab. The US and most European countries use a 21-day interval between the Pfizer doses. Crisp says South Africa now has significantly more vaccines than it had in May 2021 when South Africa's roll-

out started, so it no longer needs to save second doses to get as many people as possible vaccinated with an initial dose. Over the past six months, SA's vaccine uptake has dropped from an average of 157,309 daily doses in October to 54,013 in February.

The decrease in uptake could lead to some of the country's Covid vaccine doses expiring before they're used, Crisp says. "We have time to pick up pace," he said.

Will a shorter gap increase uptake?

Immunisation programmes with one-dose jabs (such as the J&J Covid vaccine) are usually more successful than programmes that require multiple doses.

Although some research shows shortening the gap between doses can improve how many people show up for subsequent shots slightly, the health department's truncated timelines are unlikely to make a huge difference on their own.

Educational messages and reminders (in print, via SMS or telephone call) re-

main the best way to get people to return for any type of vaccination, a Cochrane review of 75 studies found.

In SA, sending SMS reminders were interrupted between December and February because of cost – the SMSes cost the department 16¢ per message, Crisp says.

A vaccine hesitancy survey published this month, which was conducted by the University of Johannesburg and the Human Sciences Research Council, shows that SMS messages may not be enough.

The survey found that the main reason why people in South Africa who want to get vaccinated against Covid, but don't, is because they don't know where to go.

The cost of transport and the perceived inaccessibility of vaccine sites also played a role. People who belong to a medical scheme were much more likely to get vaccinated than people who don't. Those who live in informal settlements were also less inclined to be vaccinated than people living in suburbs.

What is a booster shot?

Booster doses are additional jabs given to people who are already fully immunised.

The Health Department announced this week that people can now "mix and match" boosters – so you can get a Pfizer booster after being vaccinated with a J&J Covid vaccine, or a J&J booster after two Pfizer shots.

The waiting period between a second Pfizer shot and booster has been reduced from 180 to 90 days. J&J boosters are taken two months after one J&J jab.

Each variant that appears and begins to drive new infections comes with its own set of mutations that reduce how well vaccines can fight the new variant off. How well a jab can protect you depends on the variant and its mutations. As more data has come out about immunity and with new variants appearing, the use of boosters has become widespread across the world. In SA, the South African Health Products Authority has approved boosters for everyone aged 18 years and older.

Should you 'mix and match'?

Some data shows that taking a mix-and-match approach may be more beneficial in terms of your body's response.

A January study published in the *New England Journal of Medicine* showed that, overall, taking a booster that was different from the vaccine someone originally got vaccinated with helped their bodies to protect them better against Covid-19 than if they had taken the same shot.

Vaccines work in different ways and don't all provide the same types of protection at the same levels.

A December 2021 review by the European Medicines Agency found that a mix-and-match approach to boosters was equally or more beneficial than getting the same shot. It recommended mixing jabs if it allowed more flexibility with the supply and uptake of vaccines. **DM168**

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