

Highly Vaccinated Israel Is Seeing A Dramatic Surge In New COVID Cases. Here's Why



Medics in Jerusalem transfer a COVID-19 patient to Hadassah Hospital Ein Kerem. Many hospitals in Israel are at full capacity following a sharp increase in coronavirus infections. Menahem Kahana/AFP via Getty Images

Israel was the first country on Earth to fully vaccinate a majority of its citizens against COVID-19. Now it has one of the world's highest daily infection rates — an average of nearly 7,500 confirmed cases a day, double what it was two weeks ago. Nearly one in every 150 people in Israel today has the virus.

What happened, and what can be learned about the vaccine's impact on a highly vaccinated country? Here are six lessons learned — and one looming question for the future of the pandemic.

1. Immunity from the vaccine dips over time.

Israel had fully vaccinated slightly over half its population by March 25. Infections waned, venues reopened to the vaccinated and the prime minister told Israelis to go out and have fun. By June, all restrictions, including indoor masking, were abolished.

But Israel paid a price for the early rollout. Health officials, and then Pfizer, said their data showed a dip in the vaccine's protection around six months after receiving the second shot.

2. The delta variant broke through the vaccine's waning protection.

It was a perfect storm: The vaccine's waning protection came around the same time the more infectious delta variant arrived in Israel this summer. Delta accounts for nearly all infections in Israel today.

"The most influential event was so many people who went abroad in the summer — vacations — and brought the delta variant very, very quickly to Israel," said Siegal Sadetzki, a former public health director in Israel's Health Ministry.

3. If you get infected, being vaccinated helps.

The good news is that among Israel's serious infections on Thursday of this week, according to Health Ministry data, the rate of serious cases among unvaccinated people over age 60 (178.7 per 100,000) was nine times more than the rate among fully vaccinated people of the same age category, and the rate of serious cases among unvaccinated people in the under-60 crowd (3.2 per 100,000) was a little more than double the rate among vaccinated people in that age bracket.

The bad news, doctors say, is that half of Israel's seriously ill patients who are currently hospitalized were fully vaccinated at least five months ago. Most of them are over 60 years old and have comorbidities. The seriously ill patients who are unvaccinated are mostly young, healthy people whose condition deteriorated quickly.

Israel's daily average number of infections has nearly doubled in the past two

weeks and has increased around tenfold since mid-July, approaching the numbers during Israel's peak in the winter. Deaths increased from five in June to at least 248 so far this month. Health officials say that currently 600 seriously ill patients are hospitalized, and they warn they cannot handle more than 1,000 serious infections at the same time.

4. Israel's high vaccination rate isn't high enough.

The country jumped out ahead of all other countries on vaccines, and 78% of eligible Israelis over 12 years old are vaccinated.

But Israel has a young population, with many under the eligible age for vaccination, and about 1.1 million eligible Israelis, largely between the ages of 12 and 20, have declined to take even one dose of the vaccine.

That means only 58% of Israel's total citizenry is fully vaccinated. Experts say that's not nearly high enough.

"We have a very large fraction of our population who are paying the price for a small fraction of the population who did not go to get the vaccine," said Eran Segal of the Weizmann Institute of Science, who advises the Israeli government on COVID-19.

Unvaccinated people helped fuel the rapid spread of the virus while the country remained open for business in recent months with few serious restrictions.

"That will lead to mass infection, which is exactly what we are seeing now," said Segal.

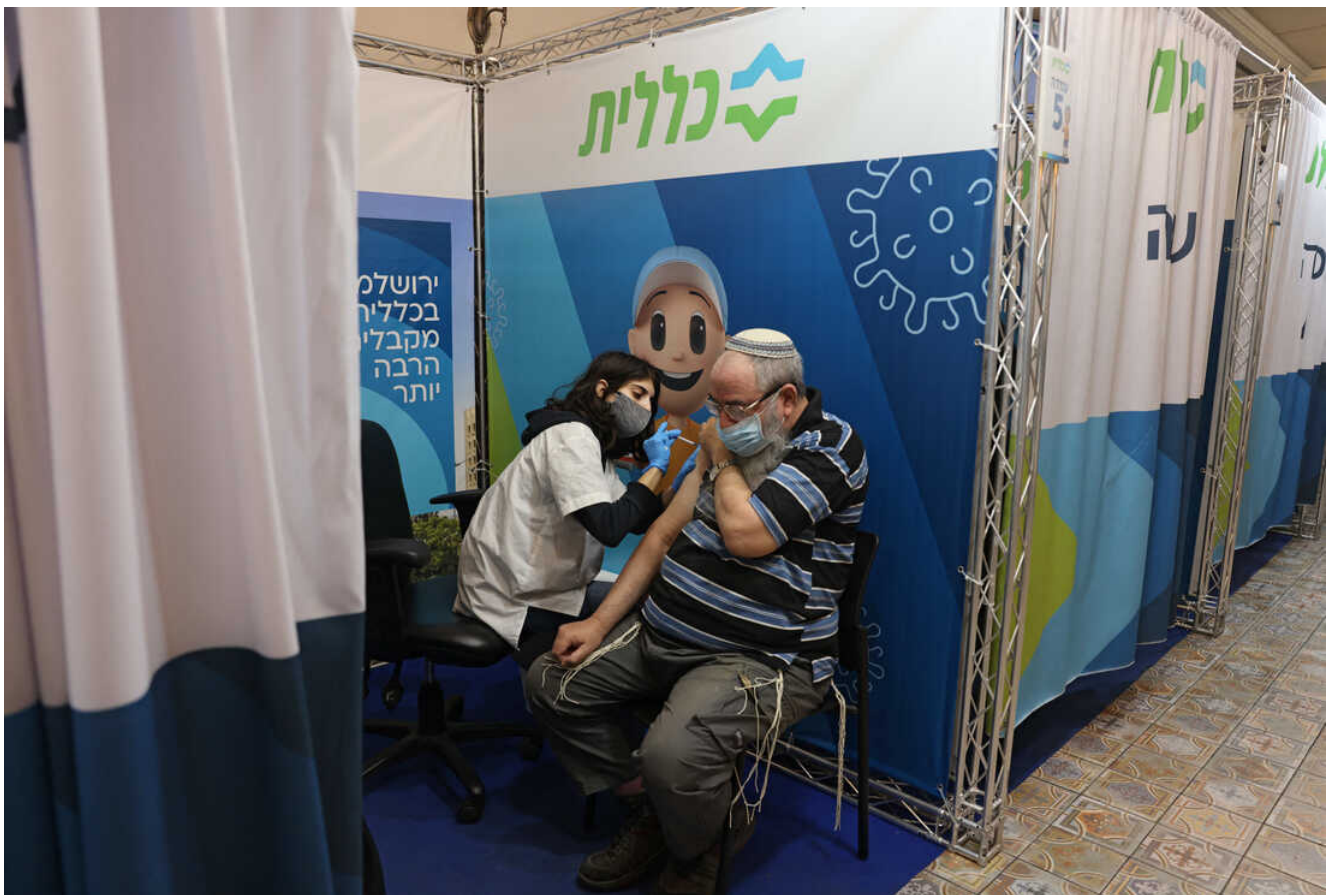
5. Vaccinations are key, but they are not enough.

Israel is trying to slow the wave without resorting to a new lockdown, which Prime Minister Naftali Bennett says would take an economic toll and "destroy the future of the country." The country is placing caps on gatherings, increasing hospital staff and pleading for unvaccinated people to get immunized.

On Israel's doorstep, the vaccination rate is much lower in the Israeli-occupied West Bank and the Gaza Strip. Only around 8% of Palestinians have been fully

vaccinated. Palestinians are wary of certain brands of vaccine in ample supply, like AstraZeneca's, while Pfizer-BioNTech's vaccine is in shorter supply for Palestinians. But the Palestinian population is not a source of transmission in Israel. Only vaccinated Palestinians are given permits to enter Israel and Israeli settlements.

As for the low rate of vaccination in the West Bank and the Gaza Strip, "we don't have a shortage of vaccine. It is the hesitancy," said Randa Abu Rabe, a local World Health Organization official working in the Palestinian territories.



An Israeli health worker administers a third dose of the Pfizer-BioNTech vaccine at a vaccination center in Jerusalem. Israel is the first country to launch a national booster campaign for the Pfizer vaccine. Menahem Kahana/AFP via Getty Images

6. Booster shots offer more protection — if you are one of the world's lucky few to get them.

Israel is the first country to offer a third shot of the Pfizer vaccine in a nationwide

booster campaign. Preliminary research in Israel suggests booster shots significantly increase protection against the coronavirus a week after a person receives the third dose.

Israeli national HMO Maccabi Healthcare Services, which conducted the preliminary study of 149,144 Israelis who received three Pfizer shots, said for Israelis above age 60, a Pfizer booster shot reduced the chances of infection by 86% and reduced the chances of severe infection by 92%.

The early data reflects studies by vaccine-makers Pfizer and Moderna and provides a glimpse at boosters' effects in a real-world setting.

After reviewing data on breakthrough infections in Israel, the U.S. announced a booster shot campaign beginning in late September for anyone eight months after their second shot. The U.K. has promised boosters soon, and Turkey is offering Pfizer shots to those immunized with the Sinovac vaccine to help citizens planning to travel, since some countries will not recognize the Chinese vaccine.

Israel has lowered the minimum age for boosters to 40. "The triple dose is the solution to curbing the current infection outbreak," Anat Ekka Zohar of Maccabi said in a statement.

Boosters are not being offered in the Palestinian territories yet, and the World Health Organization has called on countries to stop giving COVID-19 booster shots in order to help poorer countries get vaccinated.

"Israel very much respects the World Health Organization but acts according to local considerations and the interests of Israeli citizens. We help the world a lot," an Israeli health official told NPR, speaking on condition of anonymity because he was not authorized to speak publicly about the issue. "If the U.N. didn't secure enough vaccines for Chad, Mali, Myanmar and Guatemala, that doesn't mean that Israel shouldn't seek to prevent a pandemic from happening here."

Experts warn if countries do not vaccinate their populations, more variants will develop, threatening even vaccinated nations.

Looming question: Will we need COVID-19 vaccines every several months? We don't know.

The Cinema City movie theater complex in Jerusalem teems with young children and parents, but steps from the box office is a makeshift vaccination station where dozens of mostly older residents wait their turn to get booster shots.

More than a million Israelis have received a Pfizer booster shot in the last several weeks. They are being watched around the world, as Israel is the first nation to give a third dose of Pfizer on a mass scale, just as it was ahead of the curve on the first round of shots.

"They make the test of us," said Etti Ben Yaakov, sitting in a vaccination booth with her brother as he got a booster shot. "But in the first [round], it was the same. So I don't feel it's something wrong. I think it's good."

She predicts the coronavirus, like the flu, will mean shots every year. "We will have to live with the corona," she said.

Ido Hadari, of HMO Maccabi, which led the preliminary booster shot study, questioned whether regular shots will become the norm.

"I don't know of any disease where we are vaccinated every six months, and to be honest, I don't think the public will come to get vaccinated every six months," Hadari said. "But you cannot predict anything with this disease."

Correction - Aug. 20, 2021

An earlier version of this story misspelled the Weizmann Institute of Science as the Weitzmann Institute of Science.

Source:

<https://www.npr.org/sections/goatsandsoda/2021/08/20/1029628471/highly-vaccinated-israel-is-seeing-a-dramatic-surge-in-new-covid-cases-heres-why>

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