

Considerations for your fall booster

Katelyn Jetelina
2 hr ago

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This fall, everyone should get a bivalent COVID-19 booster. And, really, that's all you need to know: Get a vaccine. Any bivalent vaccine. This fall.

But, yes, we can use scientific data to optimize timing and, thus, protection.

How long after infection/last vaccine should you booster?

The aspect of timing is, to me, the most tricky part. It really depends on your last infection and/or vaccine and risk tolerance.

Infection: If you've been previously infected, the "official" CDC guidance says you can get your vaccine immediately following recovery from symptoms or, at maximum, defer up to 3 months after infection. We do not *have* to wait 3 months after infection. We won't "exhaust" or "overwhelm" our immune system, but by delaying we get the biggest bang for our vaccine buck.

This week a really great [preprint](#) found a booster doesn't add much benefit within 2 months (60 days) of infection. While it increases neutralizing antibodies (our body's first line of defense that prevents infection and transmission), it will not broaden the memory of B cells (our second line of defense and long term-memory). So wait at least 2 months.

Unfortunately, beyond that, we don't know the optimal timing.

The same is true with *previous vaccination*. The "official" guidance says to wait 2 months after last vaccine. And that makes sense given this latest preprint. However, we may benefit from a longer delay. It's not random that the UK recommends 12 weeks (3 months) between doses.

How much longer to delay should take into account: individual risk (age, comorbidities); degree in which you don't want to miss an event (because you're sick) or an event is high risk (wedding, family vacation); and/or not wanting to be sick in general (for example, if someone depends on you). I recommend the following:

- **<2-3 months since infection/vaccination:** Wait.
- **3-4 months since infection/vaccination:** Consider a booster if you're high risk, or have an event. (Get your booster 2 weeks before this event for optimal protection).
- **4-6 months since infection/vaccination:** Get your booster at some point.
- **6+ months since infection/vaccination:** Get your booster ASAP. This includes me—I haven't been infected, and I had my booster last November.

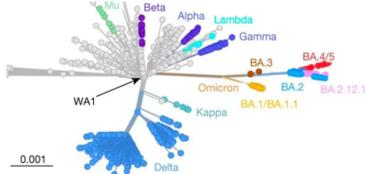
Does it matter if you had a BA.1, BA.2, or BA.5 infection?

A previous Omicron infection (BA.1 or BA.2) *does* protect well against BA.5. By now we have real world data from [Portugal](#), [Qatar](#), and [Denmark](#). But, regardless, everyone will benefit from a bivalent booster in one way or another.

First, a booster will increase neutralizing antibodies, at least temporarily, to help prevent infection and transmission. It's not perfect, but we hope this will last for 6 months.

Second, a booster will help your secondary line of defense differently, depending on type of previous infection:

- **BA.1 infection:** An infection during the first Omicron wave (December, January, February) means you likely had a BA.1 infection. In the Omicron family, BA.1 is farthest from BA.5 (see tree below). This means your B-cells can be updated to remember BA.5.



- **BA.2 infection:** BA.2 is closer to BA.5. This means your B cells looks more like BA.5 than, for example, BA.1. Because it's close, the booster will solidify BA.2 immunity *and* widen protection to other BA.2 variants. The booster will also provide immunity to BA.5 for future protection.
- **BA.5 infection:** A booster will reactivate your B cells. This will theoretically ensure longer term protection against BA.5.

Mixing and matching

If you've only had an entire Moderna series, you may see marginal benefit from getting a Pfizer bivalent booster (and vice versa). But, to be honest, the science is mixed and isn't very strong. So, my official recommendation is to just get the vaccine that is most easily accessible.

There is one case in which I think it *does* matter: If you're a male and under the age of 30, your risk of myocarditis is higher. I would go for a Pfizer, as it has less RNA than the Moderna vaccine and will theoretically decrease risk.

What about a Novavax booster?

About 14,000 Americans have gotten the Novavax primary series, thus far. Novavax says that their bivalent booster should be authorized for emergency use soon. The Novavax series works great. But, I wouldn't necessarily wait for it. As I've [written before](#), mixing your mRNA primary series with Novavax just doesn't show the additional benefit we hoped it would.

Kids under 12

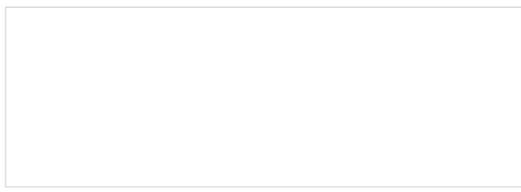
For those 5-11 years old, the bivalent vaccine should be coming by the end of the year. If your child is eligible now for their third dose, I personally wouldn't wait for the bivalent. I would get them up-to-date now so they are fully protected in school. They can get the updated booster once it's available.

For those under 5, the plan is not clear. We're still waiting on dose 3 data for Moderna (I am expecting this any day), but this data will be for BA.1 dose 3 (not a BA.5 bivalent vaccine). No word yet on a fall booster after the primary Pfizer series (which would equate to dose 4). As a parent, I will keep tabs on this.

What about mixing with other vaccines, like the flu vaccine?

You can get the flu vaccine (and other routine vaccines) and bivalent booster at the same visit. It's recommended to administer in different arms.

There have been [studies](#) on the safety and effectiveness of the co-administration of these two vaccines. In one database, about 454,000 people got the flu and COVID-19 vaccines during the 2021-2022 flu season. Both vaccines worked great if they are co-administered. Generally, the rate of side effects was the same or a little higher; however, no specific safety concerns were identified.



The CDC [recommends](#) spacing the COVID-19 booster with Jynneos (monkeypox vaccine), especially in young men, 4 weeks apart. If there is need for Jynneos in terms of an outbreak, don't wait! But consider delaying the booster after Jynneos. This is based on the fact that myocarditis is higher among the second generation monkeypox vaccine (called ACAM2000), and we don't know why. We haven't seen these safety signals with Jynneos (third generation monkeypox vaccine), but we are proceeding with caution.

Bottom line

I'll be in line for my booster soon. And I couldn't be more excited. Be sure you get yours in the coming months, too. It will help in one way or another.

Love, YLE

In case you missed it:

- [Fall boosters ACIP meeting: Cliff notes](#)
- [Fall boosters: An update](#)

"Your Local Epidemiologist (YLE)" is written by Dr. Katelyn Jetelina, MPH PhD—an epidemiologist, biostatistician, wife, and mom of two little girls. During the day she works at a nonpartisan health policy think tank, and at night she writes this newsletter. Her main goal is to "translate" the ever-evolving public health science so that people will be well equipped to make evidence-based decisions. This newsletter is free thanks to the generous support of fellow YLE community members.

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10 Comments

- SLSRPH** 34 min ago
You didn't mention old folks like my husband and me (ages 75 & 77). Our most recent boosters were about 5 months ago. We both have comorbidities. I'm thinking we should get the new vaccination ASAP, rather than (I forget your words) pretty soon. Correct?
- Michael Sweney** 1 hr ago
I've been in the ER and ICU 6 out of the last 10 nights. All because of heart problems brought on by CV19. People should, in my estimation, fear this virus enormously. I am getting the booster as soon as possible. Hospital food isn't all that great.

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