

Flu Tdap and COVID-19 vaccines



Why these vaccines matter in pregnancy

Pregnancy alters respiratory physiology, immune signaling, and cardiovascular demand, which can make some infections harder to tolerate. That is one reason influenza and COVID-19 prevention are emphasized in prenatal care. Tdap matters for a different but equally important reason: it helps protect newborns from pertussis, also called whooping cough, during the vulnerable early months before infant vaccination is complete.

These vaccines are not only about preventing severe maternal illness. They also support passive antibody transfer across the placenta, which gives the newborn some early protection after delivery. In practical terms, that means the timing of vaccination can affect both immediate maternal benefit and infant immune defense. Public health guidance therefore treats pregnancy as a time when routine vaccination is often especially valuable rather than something to delay indefinitely.

Coverage data from the United States show that uptake has improved in some settings, but it remains uneven. The fact that many pregnant people still miss one or more recommended vaccines is part of why these discussions stay so important in prenatal care.

What current guidance says about flu, Tdap, and updated COVID-19 vaccination

CDC guidance is straightforward but easy to misremember because each vaccine has its own timing window. The seasonal influenza vaccine can be given at any time during pregnancy, so there is no need to wait for a specific trimester if flu season is underway. Tdap is recommended during each pregnancy, ideally between 27 and 36 weeks of gestation, because that is the period when maternal antibody transfer to the fetus is particularly useful. Updated COVID-19 vaccination is recommended for pregnant people, as well as for those breastfeeding or trying to conceive.

That last point matters because some people assume vaccination should be deferred until after pregnancy. For these three vaccines, the public health approach is the opposite: protect earlier when possible, unless a specific medical issue changes the plan. If you are planning pregnancy, an influenza vaccine before conception can also be a reasonable way to enter pregnancy with less vulnerability to seasonal infection.

Clinicians may individualize timing if you have had recent vaccination, a current febrile illness, a history of allergy, or a complex medical condition. Even then, the default is usually to keep protection on schedule rather than postponing for convenience.

Safety, expected side effects, and what they mean

For most pregnant people, the common side effects of these vaccines are short-lived and mild: injection-site soreness, fatigue, low-grade fever, headache, or muscle aches. Those reactions reflect immune activation and generally settle within a day or two. They are not the same as infection, although symptom overlap can feel confusing if you are already feeling run down in pregnancy.

From an immunology standpoint, it also helps to remember that the routine flu vaccine and Tdap used in pregnancy are non-live vaccines. That is one of the reasons they are used in prenatal care. Updated COVID-19 vaccines are likewise used in pregnancy based on current recommendations and ongoing safety monitoring. The decision is still individualized, but the overall risk-benefit

profile has supported their use in pregnant populations.

As with any medical product, rare serious reactions can occur. Seek urgent care for breathing difficulty, facial swelling, widespread hives, fainting, or other signs of a severe allergic reaction. If you are unsure whether a symptom is expected, call your obstetric team rather than trying to interpret it alone. A clinician can distinguish a routine post-vaccine reaction from something that needs evaluation.

Timing details, missed doses, and special situations

Timing is one of the most important parts of vaccine planning in pregnancy. Influenza vaccine is flexible because it can be administered any time during pregnancy. Tdap is less flexible because the goal is to maximize antibody transfer before delivery, so the 27 to 36 week window is preferred. If that window passes, vaccination may still be considered, but it is best to discuss the exact situation with a clinician rather than assuming it is no longer useful.

Some people worry that a missed vaccine means they failed prenatal prevention. That is not how prenatal care should feel. If your first trimester was dominated by nausea, if you changed providers, or if appointments were disrupted, you can still recover the plan and discuss the best next step. What matters is moving toward protection, not blaming yourself for a delayed schedule.

Special situations deserve extra attention: a prior severe vaccine allergy, an immunocompromising condition, recent COVID-19 infection, a current febrile illness, or complex pregnancy complications. In those settings, your clinician may recommend a more careful pregnancy medication risk-benefit assessment to decide on timing, observation, or additional follow-up.

Hesitancy, misinformation, and why coverage remains uneven

Research on pregnancy vaccination during and after the COVID-19 pandemic shows a consistent pattern: Tdap uptake was relatively more resilient than influenza vaccination, but overall rates remained suboptimal. Hesitancy and misinformation continue to shape decisions, even among people who are otherwise

highly engaged in prenatal care. That matters because prenatal vaccination is often influenced by trust, not just by knowledge.

Some of the hesitancy comes from a desire to avoid any intervention during pregnancy, while some comes from confusing messages online about ingredients, timing, or theoretical fetal risk. The evidence-based response is not to minimize those concerns, but to address them directly. A calm review of what the vaccine is, what it is not, and what the expected benefit looks like for both parent and baby is usually more useful than a one-size-fits-all reassurance.

Public health reports from 2023 and 2024 also show that coverage varies by vaccine type and population group. In other words, low uptake is not proof that a vaccine is unimportant; it often reflects structural barriers, access issues, and incomplete counseling. This is why repeated, nonjudgmental discussion during prenatal visits can make a real difference.

How to make a practical vaccine plan

A good pregnancy vaccine plan is usually simple, specific, and written down somewhere visible in your prenatal records or phone notes. Start by checking what you already received before pregnancy, then ask whether any doses are still due. If you are early in pregnancy, you can usually plan influenza vaccination as soon as it is available. If you are approaching the third trimester, ask when your Tdap dose should be scheduled so it falls in the recommended window. For COVID-19 vaccination, ask whether the updated formulation is due now based on the current guidance and your vaccination history.

It can also help to frame the decision as part of viral infection prevention in pregnancy rather than as an isolated vaccine choice. That mindset makes it easier to talk about household exposure, workplace risk, school-aged children, travel, and the timing of respiratory-virus season. If a fever, cough, or shortness of breath develops, seek pregnancy-safe infection evaluation rather than assuming it is only a vaccine reaction.

Finally, keep in mind that this is a conversation, not a test. Your clinician can help balance timing, prior vaccine history, current illness, and your

preferences. The best plan is the one you understand and can realistically follow.