COVID-19 vaccines, including 1st, 2nd and booster doses, are strongly recommended in pregnancy. On 16 December 2021, the Joint Committee on Vaccination and Immunisation (JCVI) announced that pregnant women are considered a 'vulnerable' group within the COVID-19 vaccination programme, emphasising the urgency of them receiving COVID-19 vaccination and booster doses.

Vaccination is strongly recommended in pregnancy, but the decision whether to have the vaccine is your choice. The information below will help you make an informed choice about whether to get your COVID-19 vaccines if you are pregnant or trying to get pregnant.

COVID-19 vaccines are safe and effective in pregnancy

Catching COVID-19 during pregnancy can cause severe illness

What are the benefits of vaccination?

📍 COVID-19 may be more dangerous in pregnancy
- Hospital admission and severe illness are more common in pregnant women compared to those not pregnant
- Stillbirth and preterm birth is more likely compared to pregnant women without COVID-19
- Pregnant women with underlying medical conditions are at higher risk of severe illness

📍 Vaccination is effective in preventing severe illness from COVID-19 infection

📍 You cannot get COVID-19 from vaccination
- COVID-19 vaccines do NOT contain live coronavirus
- Vaccines do NOT contain any additional ingredients that are harmful to pregnant women or their babies
- Other non-live vaccines (whooping cough, influenza) are safe for pregnant women and their unborn babies
What are the risks of vaccination?

There are no known risks of COVID-19 vaccination in pregnancy

- COVID-19 vaccines have been given to large numbers of people to ensure they meet stringent standards of effectiveness and safety
- Data from the UK and the USA, where in total nearly 350,000 pregnant women have had a COVID-19 vaccine (mostly Pfizer/BioNTech or Moderna/Spikevax) have not found any adverse effects of vaccination on pregnancies
- There has not been any evidence to suggest safety concerns with COVID-19 vaccination in pregnancy so far

Side-effects from the vaccine are common, and usually mild. These do not affect pregnancy, but may include:

- injection site reactions (sore arm)
- fatigue
- headache
- muscle pain
- fever, chills
- joint pain

Extremely rare but serious side-effects involving thrombosis (blood clots) have been reported for the AstraZeneca vaccine, but this does not seem to be more likely in pregnant than in non-pregnant people. The Pfizer or Moderna vaccines should be offered to pregnant women where available as most of the safety monitoring data in pregnancy from the United States and the UK relates to these two vaccines.

You may wish to discuss COVID-19 vaccination in more detail with your doctor or midwife

If you decide to have a COVID-19 vaccine, please tell the vaccination team that you are pregnant so that this can be recorded

Scan here to stay updated with the latest version of the information sheet and decision aid
How to decide: COVID-19 vaccination advice for women who are, or may be, pregnant

This leaflet is designed to help you make an informed choice about whether to have the COVID-19 vaccine in pregnancy. We know that catching COVID-19 during pregnancy can cause severe illness in a pregnant woman, which is why COVID-19 vaccination in pregnancy is so strongly recommended. There is considerable emerging evidence on the safety of COVID-19 vaccines in pregnancy, and no evidence that the vaccines can cause harm to you or your baby.

What should I do to help me decide?

- Make sure you know as much as you can about the vaccine and the risks of COVID-19 in pregnancy. You can ask your midwife, doctor or an immunisation nurse for information.
- Look up the information on the UK Health Security Agency (formerly Public Health England) or professional websites. Available evidence on the safety of vaccines in pregnancy is published by UKTIS.
- Look at the information below and think about your risk of catching and becoming seriously unwell from COVID-19. Are you able to reduce your chance of being exposed to COVID-19?

What is known about COVID-19 in pregnancy?

About two-thirds of women who test positive for COVID-19 in pregnancy have no symptoms at all. In the UK, data shows that approximately one in 100 pregnant women who have been admitted to hospital test positive for COVID-19 (although this will change during the stages of the pandemic). One in ten women admitted to hospital with COVID-19 require intensive care. Pregnant women have a higher chance of becoming seriously unwell with COVID-19. If you have COVID-19 in pregnancy, you are twice as likely to have a stillbirth, and it is twice as likely that your baby will be born prematurely, which can affect their long term-health. Having the vaccine makes it much less likely that hospital admission will be required - 96% of pregnant women admitted to hospital with symptomatic COVID-19 since 1 February 2021 had not received a vaccine.
### What is known about the effects of COVID-19 vaccination in pregnant women?

Data from the US and the UK, where nearly 350,000 pregnant women have had a COVID-19 vaccine, has not raised any safety concerns. The initial trials which showed that these vaccines are safe and effective did not include pregnant women – as often happens in clinical trials. This means there was limited information about the effects of COVID-19 vaccination in pregnant women at the start of the vaccination programme, but we have a lot more real-time data now.

As these are new vaccines, there are no studies yet on the long-term effects on babies born to women who had a COVID-19 vaccine during pregnancy. But as COVID-19 vaccines are not 'live' vaccines they cannot cause infection, and other non-live vaccines have been given to women in pregnancy for many years without any safety concerns. Protective antibodies from COVID-19 vaccination can be passed from mother to baby through cord blood and breast milk, helping with the baby’s immunity to COVID-19 as well.

Research from 16 studies in five countries, involving more than 185,000 people who are pregnant, shows that having the vaccine does not increase the risk of miscarriage, preterm birth, or stillbirth. Nor does it increase the risk of having a small-for-gestational age baby, or the risk of congenital abnormalities.

COVID-19 vaccines do not contain ingredients that are known to be harmful to pregnant women or to a developing baby. Studies of the vaccines in animals to look at the effects on pregnancy have shown no evidence that the vaccine causes harm to the pregnancy or fertility. The COVID-19 vaccines that we are using in the UK are not 'live' vaccines and so cannot cause COVID-19 infection in you or your baby.

Pregnant women should be offered the Pfizer BioNTech or Moderna Spikevax vaccines, as most of the safety monitoring data from the US and UK relates to these two vaccines.

Pregnant women who have had one dose of AstraZeneca (before they became pregnant or earlier on in pregnancy), can have AstraZeneca for their second dose or one of the mRNA vaccines (Pfizer or Moderna). Evidence suggests that those who receive mixed schedules make a good immune response.
The vaccine is considered to be safe and effective at any stage of pregnancy. There’s no evidence that delaying until after the first 12 weeks is necessary.

One dose of COVID-19 vaccination gave you good protection against the original Alpha variant, but with the Delta variant of the virus, two doses are needed to give a good level of immunity. Second doses are given 8 weeks after the first dose. A booster (third dose) is recommended to provide the best protection against the Omicron variant.

Do pregnant women need a COVID-19 booster vaccine?

COVID-19 booster vaccination is strongly recommended as it provides the best protection against the virus for pregnant women and their babies. Booster vaccines can be given 3 months (91 days) after your 2nd dose.

Pregnant women who have specific high-risk underlying medical conditions causing immunosuppression may be offered an additional ‘spring booster’ in 2022, 6 months from their last dose. If you are in this group it is particularly important to book your booster vaccine.

The JCVI also advised that people can have both the COVID-19 booster vaccine and the flu jab at the same time.
The information below will help you to think about your decision to have the vaccine if you are pregnant and are eligible for vaccination

You are at higher risk of catching COVID-19 if:

- You or someone in your household is a health or social care worker or works in a care home
- Your community has a high or increasing rate of COVID-19 infections
- You have frequent contact with people outside your home
- You live in a crowded household
- You are of Black or Asian ethnicity, or from another minority ethnicity background

You are at higher risk of becoming unwell with COVID-19 if:

- You have underlying medical conditions such as immune problems, diabetes, high blood pressure, heart disease or asthma
- You are overweight (your BMI is 25 or over)
- You are over the age of 35
- You are in your third trimester of pregnancy (over 28 weeks)

What are the recommendations?

- COVID-19 vaccines are strongly recommended in pregnancy. Vaccination is the best way to protect against the known risks of COVID-19 in pregnancy for both women and babies
- Vaccination is recommended to all pregnant women but especially if you are at higher risk of becoming seriously unwell if you do catch COVID-19
- You may wish to discuss the risks and benefits of vaccination, including possible side-effects, with a healthcare professional before making your final decision.

Information, Q&As, and the latest version of this leaflet, are available at rco.org.uk/covid-vaccine