# Paper Summary

SARS-CoV-2 infection and COVID-19 vaccination rates in pregnant women in Scotland

Stock SJ, Carruthers J, Calvert C, et al (2022).

#### WHY DID WE DO THIS RESEARCH?

- We wanted to know how many pregnant women in Scotland have had COVID-19 or been vaccinated.
- We also wanted to understand how having COVID-19, and getting vaccinated, changes the risk of a mother or baby becoming very ill during pregnancy.
- This research helps to create evidence-based guidance for pregnant women and the people who support them

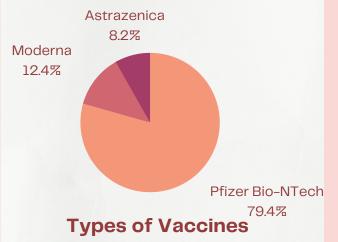


### WHAT DID WE FIND?

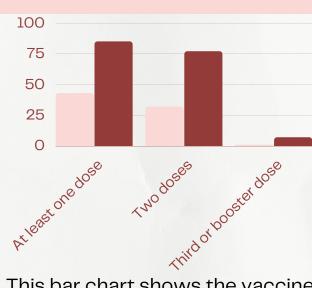
From 1 December 2020 to 31 October 2021, there were just under 5,000 confirmed SARS-CoV-2 infections in pregnant women.

SARS-CoV-2 is the infection that causes covid19





Up to 31 October 2021, just under 26,000 vaccinations were given to women in Scotland during 18,399 pregnancies. This pie chart shows the types of vaccines given to pregnant women



This bar chart shows the vaccine uptake across Scotland (%), comparing pregnant women (pink) with

all women aged 18-44 (red)
\*up to end of October 2021



The bar chart above shows vaccine uptake was much lower for pregnant women than women of child-bearing age in the general population. It was lowest in pregnant women who are younger or living in deprived areas of Scotland.

From 1 December 2020 to 31 October 2021, there were just under 5,000 confirmed infections in pregnant women.

## CONFIRMED CASES





#### **INFECTION PEAKS**

Infection rates were similar to the general population

Rates reached a peak in October 2020, January 2021 and September 2021.

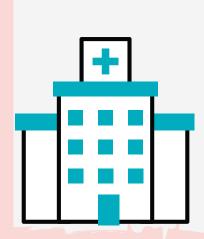
#### **HOSPITAL ADMISSIONS**



Overall, 17% of pregnant women with infections were admitted to hospital with COVID-19

Of the 823 pregnant women admitted to hospital, **104 needed critical care** 





#### **During pregnancy:**

9 in 10 infections linked to hospital admission, and almost all (98%) linked to critical care admission, were in **unvaccinated women.** 

#### IMPACT OF COVID-19 ON BABIES

There were **2,364 babies** born to women who had COVID-19 during their pregnancy.

Sadly 11 of these babies were stillborn and of the remaining births, 10.2% of babies were born premature. The rate of stillbirths and neonatal deaths was slightly lower for vaccinated women than in women who have never had COVID-19.



#### WHY IS THIS RESEARCH IMPORTANT?

In this research, we confirmed that vaccination uptake is **much lower in pregnant women** than in the general population.

We have shown that unvaccinated women and their babies are much more likely to become **very unwell** with COVID-19 during pregnancy.

We also found that there is **no evidence of increased risk of stillbirth or neonatal death following vaccination,**compared to women who have never had COVID-19.



Our data support the importance of women being vaccinated during pregnancy.



#### If you have been affected by the themes in this infographic:

Sands is the leading stillbirth and neonatal death charity in the UK. Sands exists to reduce the number of babies dying, and to ensure that anyone affected by the death of a baby receives the best possible care and support for as long as they need it.

Sands offers support in a range of different ways. To find out more:

- Visit sands.org.uk/support-you/how-we-offer-support
- Call the helpline on 0808 164 3332