

# Cystic Fibrosis Research News

**Title:**

Association Between Unplanned Pregnancies and Maternal Exacerbations in Cystic Fibrosis

**Lay Title:**

Impact of unplanned pregnancies in cystic fibrosis

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**What was your research question?**

Are pregnancies that are unexpected or unplanned more harmful on the health of a woman with CF than planned pregnancies?

**Why is this important?**

More and more females with CF are experiencing pregnancies. Highly effective CFTR modulators that are now available to the majority of people with CF has potentially improved fertility in females with CF, so unexpected pregnancies may become more common. It is therefore important for us to understand and counsel females on the potential impacts of an unplanned pregnancy.



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## **What did you do?**

We collected previous pregnancy data from January 2010-December 2020 from 11 US adult CF programs. We assessed whether lung function, body mass index (BMI) or pulmonary exacerbations (flare-ups) changed over the 2 years from 1 year before pregnancy to 1 year after pregnancy and whether the pregnancy was planned or unplanned. Our analysis included 163 females with 226 pregnancies.

## **What did you find?**

We observed more pulmonary exacerbations in the females with unplanned pregnancies than planned pregnancies, but no difference in lung function or BMI. In a subset of people with available infant data, we found that more infants were born preterm births and had intensive care unit stays when the pregnancy was unplanned relative to the planned pregnancies.

## **What does this mean and reasons for caution?**

We should advise people with CF on the potential for more pulmonary exacerbations after a pregnancy that is unplanned and encourage them to discuss pregnancy or contraception with their providers and consider planning pregnancies.

## **What's next?**

We intend to evaluate other factors that may impact the health of pregnant females with CF including CFTR modulator use. More detailed data about pregnancy will be obtained from an ongoing study of pregnancy in CF (MAYFLOWERS study – NCT04828382).

## **Original manuscript citation in PubMed**

<https://pubmed.ncbi.nlm.nih.gov/37029015/>