

# Cystic Fibrosis Research News

**Title:**

Incidence and risk factors of cancer in individuals with cystic fibrosis in the UK; a case-control study

**Lay Title:**

Cancer cases in the UK Cystic Fibrosis Population

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**What was your research question?**

What types of cancer occur in people with cystic fibrosis? What factors might make some people more at risk of cancer than others?

**Why is this important?**

For several years there has been concern that people with cystic fibrosis may be of higher risk for cancer. Knowing if this is correct and then establishing which types of cancer might be occurring more frequently will allow people with CF to look out for signs of cancer, allow clinicians to screen for higher risk cancers early and allow scientists to research ways of preventing or treating these cancers.

**What did you do?**

We looked at data from the UK Cystic Fibrosis Registry from 1999 to 2017 to try and find out how many people had reported any type of cancer during those 19 years. The UK CF Registry is one of the most complete in the world and 12,886 people with CF had consented to have their anonymised data stored for researchers to study during that period. We matched each person who had cancer with up to four others that had not to try to find if there were any obvious risk factors making some more likely to get cancer than others.



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## **What did you find?**

Cancer was reported in 146 individuals, which is just over 1%. Those found most frequently were in the gut, three quarters of these were in the lower bowel. Skin and breast cancer were the second and third most common sites to have cancer reported. It appeared that individuals with the added complication of CF related diabetes or who were post a solid organ transplant may be at higher risk for cancer.

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

This study shows that cancer is as varied in CF as the general population. Although 1% seems small, most of the CF population is young so these cancers appear to be occurring earlier than in the general population. Some cases may not have been reported in the earlier years of the registry, so the true number may be higher.

## **What's next?**

Linking to cancer registries may help tell us if people with CF are getting cancer younger than the general population. With about 20 new cases being reported to the UK Registry each year, time will tell if this is increasing as the average age goes up. Importantly, centres and researchers are more alert to the risk and focusing on catching early signs of cancer which will lead to more successful treatment.

## **Original manuscript citation in PubMed**

<https://pubmed.ncbi.nlm.nih.gov/34348871/>