

Cystic Fibrosis Research News

Title:

A multinational report to characterise SARS-CoV-2 infection in people with cystic fibrosis

Authors:

Rebecca Cosgriff^a, Susannah Ahern^b, Scott C. Bell^c, Keith Brownlee^a, Pierre-Régis Burgel^d, Cass Byrnes^e, Harriet Corvol^f, Stephanie Y. Cheng^g, Alexander Elbert^h, Albert Faro^h, Christopher H. Gossⁱ, Vincent Gulmans^j, Bruce C. Marshall^h, Edward McKone^k, Peter G. Middleton^l, Rasa Ruseckaite^b, Anne L. Stephenson^{fm}, Siobhán B Carrⁿ

Affiliations:

^a Cystic Fibrosis Trust, London, UK;

^b Monash University, Melbourne, Australia;

^c The Prince Charles Hospital, Brisbane, Australia;

^d Université de Paris, Inserm U1016, Institut Cochin and Cochin Hospital, Assistance Publique Hôpitaux de Paris (APHP);

^e University of Auckland, Auckland, New Zealand;

^f Trousseau Hospital, Sorbonne Université, Paris, France;

^g Cystic Fibrosis Canada, Toronto, Canada;

^h Cystic Fibrosis Foundation, Bethesda, US;

ⁱ University of Washington, Seattle, US;

^j Dutch CF Foundation NCFs, Baarn, Netherlands;

^k St Vincent's University Hospital, Dublin, Ireland;

^l Westmead Hospital, Sydney, Australia;

^m Toronto Adult Cystic Fibrosis Centre, St. Michael's Hospital, Toronto, Canada;

ⁿ Royal Brompton Hospital and Imperial College London, UK

What was your research question?

We wanted to describe how SARS-CoV-2, known as 'COVID-19' or 'Novel Coronavirus' affects people with cystic fibrosis (CF).

Why is this important?

People with CF have been identified as vulnerable to COVID-19 by most countries. The global COVID-19 pandemic is changing very quickly. It is important that CF clinical teams have timely information on what COVID-19 means for people with CF so they can give the best advice and medical care.

Cystic Fibrosis Research News

What did you do?

Representatives from eight countries (Australia, Canada, France, Ireland, the Netherlands, New Zealand, the UK, and the US) worked together to gather and analyse data submitted to each country's CF Registry on people with CF who had tested positive for COVID-19 up until 13 April 2020.

What did you find?

40 people with CF were reported as testing positive for COVID-19. 78% of these had typical symptoms, 22% did not. 11 of the 40 people had previously received a lung transplant. The group were between 15 and 59 years old, with only one person under 16 years old. 38% of the group had CF-related diabetes, and 70% had a long-term bacterial lung infection.

13 people in the group were given oxygen, and four were admitted to intensive care with one needing invasive ventilation. 28 of the 40 people have recovered from COVID-19. 12 cases are ongoing. No one in the group died.

What does this mean and reasons for caution?

These are early reports, and we cannot be sure we have recorded all cases of COVID-19 in people with CF in the eight countries. Several countries who are known to have cases of COVID-19 in their CF population were not able to take part.

The data suggest that people with CF following guidance to stay at home and avoid face-to-face interactions with people outside their household has been effective at protecting them from COVID-19. The medium- and long-term impact of COVID-19 on people with CF is not known.

What's next?

We will continue to collect data from the eight participating countries, and additional countries will be invited to take part. We hope to publish more information in the future, including follow up of these 40 people, and any more cases of COVID-19 in the CF population.

Original manuscript citation in PubMed

<https://pubmed.ncbi.nlm.nih.gov/32376098/>