

Press Release

Social and economic costs of Long COVID and ME/CFS in Germany severely underestimated - €63 billion in 2024 alone

Hamburg, 12 May 2025

To mark International ME/CFS Day on 12 May, the ME/CFS Research Foundation and the risk modelling company Risklayer have published a joint study that for the first time provides up-to-date data on the incidence and costs of Long COVID and ME/CFS in Germany. The team behind the report incorporated patient and policy perspectives, and included experts from Karlsruhe Institute of Technology, the Australian National University, and the University of Adelaide.

The results are significant: the study finds that between 2020 and 2024, Long COVID and ME/CFS cost Germany more than 250 billion Euros. The annual cost in 2024 alone amounted to 63.1 billion Euros, corresponding to around 1.5% of GDP.

Over 1.5 million patients in Germany

According to the study, there were around 871,000 active Long COVID and 650,000 ME/CFS cases in Germany in December 2024. In total, more than 1.5 million people in Germany are affected by these severe, chronic multisystemic diseases, for which there is currently no effective treatment or cure. Both diseases often lead to permanent functional limitations and incapacity to work.

Personal impact and economic burden

Long COVID and ME/CFS result in the loss of everyday life function, work and social participation for many patients. Young people are often no longer able to continue their education. Family carers take on a large part of the care under great strain, all while travelling long distances to seek diagnosis and treatment.

At a societal level, there are also considerable costs: for medical care, nursing care, loss of work, social benefits and lost tax revenue. Companies suffer productivity losses and purchasing power is lost.

Infection incidence underestimated - diseases continue to increase

Although the pandemic is considered to be over, the report uses innovative measurement methods and data collection to show that SARS-CoV-2 continued to circulate in several waves of infection in 2024. This "hidden" infection pattern has continued to contribute to the emergence of new Long COVID and ME/CFS cases. A decline in the number of cases is not foreseeable.

Research expenditure disproportionate to the damage

Joerg Heydecke, Managing Director of the ME/CFS Research Foundation and co-author of the study, warns:

"The calculated damage of 63 billion Euros is currently offset by only 15-20 million Euros a year in public funding for diagnostics and therapy research. This is neither medically nor economically justifiable. A targeted and sustainable expansion of biomedical research could avoid considerable costs in just a few years - and give hundreds of thousands of patients new prospects for life and work."

Aim of the study: initiate debate, improve care

With the report and the specially-developed data model, the ME/CFS Research Foundation and Risklayer want to initiate a broad debate on the occasion of International ME/CFS Day: How can the healthcare system, how can policymakers respond appropriately to the growing scale of post-infectious diseases? One thing is clear: the investments made to date are far from sufficient.

Call from the scientific community: strengthen clinical research now

Prof. Dr Carmen Scheibenbogen (Charité University Medicine Berlin) emphasises:

"These figures show how high the social damage caused by Long COVID and ME/CFS is. Without effective therapies, the costs will remain high in the long term. However, current research results already show initial therapeutic successes and prospects. Further therapeutic approaches should be clinically trialled as soon as possible. We urgently need more financial support for this, all the more urgently as the USA is unfortunately trying to stop most research approaches and planned therapy studies. Determined investment in biomedical research, especially clinical research, would probably make real prospects of a cure possible for some of the patients in a few years' time."

About the methodology of the study

The study combines data from emergency departments (DGINA), intensive care units (DIVI register), wastewater measurements (AMELAG) and international research findings. The model developed calculates societal damage on the basis of proven methods for disaster impact assessment - including economic, medical and social effects at various levels.

Healthcare emergency for ME/CFS: an untenable situation

ME/CFS has been recognised by the WHO since 1969, but is still largely ignored in Germany. Diagnosis is complex, effective therapies are lacking, symptomatic medication is rarely prescribed and hardly ever reimbursed.

In 2024, there were only two specialised outpatient clinics in Germany. Many patients are permanently unable to work or in need of care. Their medical care and social security is often precarious.

Press contact: Petra Dohrendorf, Tel: 0179 / 14 19 112
presse@mecfs-research.com

Further information on ME/CFS, the foundation and current media coverage can be found in the press section of our website: <https://mecfs-research.org>

Donation info: <https://mecfs-research.org/spenden/>

Donation account: DE35 2004 0000 0628 5316 00 (Commerzbank)

The ME/CFS Research Foundation is a non-profit limited liability company and fulfils the statutory requirements in accordance with Sections 51, 59, 60 and 61 of the German Tax Code (AO). It is authorised to issue donation receipts within the meaning of Section 10b of the German Income Tax Act.

Complete study: The study and the complete data model are available on the website of the ME/CFS Research Foundation. Risklayer makes the data used available for public scrutiny.

About the ME/CFS Research Foundation

<https://mecfs-research.org>

The ME/CFS Research Foundation, based in Hamburg, promotes biomedical research into the clinical picture of ME/CFS (myalgic encephalomyelitis/chronic fatigue syndrome). The aim is to develop diagnostics and therapeutic approaches in order to improve the dramatic care situation. The foundation works closely with ME/CFS patient organisations and aims to expand its work across Europe in the future.

About Risklayer

<https://www.risklayer.com>

Risklayer is a Karlsruhe-based consultancy for risk analysis and risk management with many years of experience in modelling critical events and natural disasters (e.g. geophysical and meteorological events, conflicts). Its clients include many governments, NGOs and companies worldwide.

During the COVID-19 pandemic, it provided researchers, the media and authorities with independent, data-based analyses - including daily infection figures in Germany.

In addition to causing acute illness and global disruption, the COVID-19 pandemic triggered a growing wave of long-term health conditions that continue to affect millions of people, resulting in rising socio-economic costs.

Among the most significant of these is Long COVID, a post-infection syndrome that is life-altering for affected individuals. Long COVID has also brought renewed attention to the chronic condition ME/CFS (Myalgic Encephalomyelitis/Chronic Fatigue Syndrome), which shares many overlapping symptoms and may in some cases develop as a consequence of SARS-CoV-2 infection. Although ME/CFS has been recognised for decades, the scale of infection-associated chronic illness has expanded dramatically in the wake of the pandemic.

Both Long COVID and ME/CFS are associated with substantial disability, reduced quality of life, increased demand for medical care, and prolonged absence from work and social life. To date, no official data about the burden and cost of Long COVID and ME/CFS is available for Germany. Our work here fills this data gap.

We apply a state-of-the-art modelling and damage assessment technique to publicly-available data about the two diseases, providing a robust and comprehensive estimate of the cost of Long COVID and ME/CFS to German society.

The results are significant: between 2020 and 2024, Long COVID and ME/CFS cost Germany more than €250 billion. In 2024 alone, Long COVID and ME/CFS cost Germany €63.1 billion, equating to 1.5% of the nation's GDP.

Our findings are in line with comparable studies from other countries, and have been strengthened by the many expert contributions from which we benefited while carrying out this work.

The modelling approach was created and validated by Risklayer GmbH, a company that has provided

public risk analytics and management solutions on crisis and catastrophe risk to multilateral organisations and governments around the world for over a decade. Among its wide-ranging work, Risklayer provided independent, comprehensive data collection and analysis to the Federal Government and media outlets of Germany during the COVID-19 pandemic.

To inform the assumptions used in the model, the ME/CFS Research Foundation contributed expertise and literature reviews on Long COVID and ME/CFS, as well as advice from its extensive network.

We are indebted to researchers and colleagues who responded to an invitation to review an early version of the model and report. Their input significantly strengthened the work. In particular, we thank Alexander Haering (RWI - Leibniz Institute for Economic Research, Germany) and Marco Leitzke (University of Leipzig Medical Centre, Germany), as well as the many anonymous reviewers who commented on particular aspects of the model. We also thank Martin Hechler, Rutger Verbeek, Stefan Neefischer and Harald Dormann for their work modelling and publishing the caseload of SARS-CoV-2-infections in Germany for 2020-2024, an important parameter used in the analysis.

As SARS-CoV-2 continues to circulate widely, the number of people affected by Long COVID and ME/CFS is expected to rise further, resulting in growing costs to healthcare systems, labour markets, and the wider economy. The disease burden calculated in this comprehensive report will help policy makers develop and prioritise policy measures across biomedical research, public health, medical care, and social welfare in order to reduce costs and improve outcomes for German society.

James Daniell, Johannes Brand, Dirk Paessler, Joerg Heydecke, Simon Schoening, Amy McLennan

Karlsruhe & Hamburg, May 2025

Version

1.0, May 2025

from the report

Authors

James Daniell^{1,5,6}, Johannes Brand¹, Dirk Paessler², Joerg Heydecke³, Simon Schoening³, and Amy McLennan^{4,6}

¹Risklayer GmbH

²Carbon Drawdown Initiative GmbH

³ME/CFS Research Foundation gGmbH

⁴Australian National University

⁵Center for Disaster Management and Risk Reduction Technology, Karlsruhe Institute of Technology

⁶University of Adelaide

Editor

Lauren Goshen

Graphic Design

Christoph Zamaitat

Report released by

Risklayer GmbH

Bismarckstraße 59

76133 Karlsruhe

Germany

risklayer.com

and

ME/CFS Research Foundation gGmbH

Ballindamm 27

20095 Hamburg

Germany

mecfs-research.org

Correspondence

Please direct general questions regarding the report and its recommendations, as well as press enquiries, to Joerg Heydecke at the ME/CFS Research Foundation gGmbH: contact@mecfs-research.org

Questions specifically about the data and model can be sent to Johannes Brand at Risklayer GmbH:

johannes@risklayer.com

Data availability

This modelling study is based on secondary data obtained from multiple publicly-accessible sources. The specific data sources used are referenced within the text (including in the Annexes) and included in the reference list wherever possible.

All data are publicly available for verification and further research, via Johannes Brand. A copy of the model can be found on GitHub at <https://github.com/risklayer>.

Conflict of interest

All authors declare that they have no competing financial and non-financial conflicts of interest.

Suggested citation

Daniell J, Brand J, Paessler D, Heydecke J, Schoening S, McLennan AK. 2025. The rising cost of Long COVID and ME/CFS in Germany. Hamburg and Karlsruhe: ME/CFS Research Foundation and Risklayer.