

# Updated analysis of multiple COVID-19-diabetes studies shows the risks associated with diabetes

October 1 2021

---

The latest update to a large and continuing review and meta-analysis of studies of COVID-19 and diabetes confirms that patients with a more advanced course of diabetes have a higher risk of death when infected with SARS-CoV-2. The new data are being presented at this year's annual meeting of the European Association for the Study of Diabetes (EASD).

The updated analysis includes 60 studies (40 on COVID-19-related death) and 44 509 people from 18 countries and is led by Dr. Sabrina Schlesinger, German Diabetes Center, Leibniz Center for Diabetes Research at Heinrich Heine University Düsseldorf, Germany, and colleagues.

This is the second edition of a 'living' systematic review and meta-analysis on [observational studies](#) investigating individuals with diabetes and COVID-19-related death and severity, which the authors will update periodically as new studies on diabetes and COVID-19 are published. The first analysis was published in the journal *Diabetologia* in July 2021 (see link below).

The review found that associations with COVID-19 related death in people with diabetes were similar to those found in the general population without diabetes. Men with diabetes were 39% more likely to die with COVID-19 than women with diabetes (from 21 studies), and

people aged over 65 with diabetes were more than three times more likely to die than those aged under 65 with diabetes (from eight studies). With each 1-year increase in age, the relative risk for COVID-19 related death in people living with diabetes increased by 5% (from 14 studies). People with obesity (a body mass index [BMI] of 30 kg/m<sup>2</sup>) and diabetes were found to have a 47% increased risk of COVID-19-related death compared with people of normal weight (BMI 18.5—24.9kg/m<sup>2</sup>) with diabetes.

Only a few studies investigated diabetes-specific factors related to COVID-19, and the authors call for more studies into these factors to improve the strength of the evidence. The strongest associations were observed for [blood glucose levels](#) ≥11 mmol/l at admission and death (with a 3.7 times increased risk of death compared to

Citation: Updated analysis of multiple COVID-19-diabetes studies shows the risks associated with diabetes (2021, October 1) retrieved 24 April 2024 from <https://medicalxpress.com/news/2021-10-analysis-multiple-covid-diabetes-diabetes.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.