

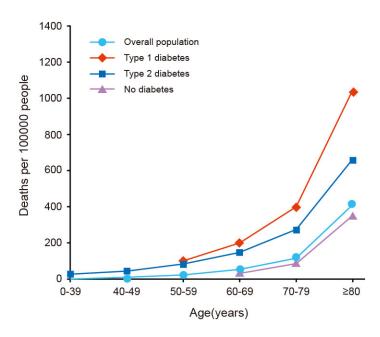
Prevention and Management of COVID-19 among Patients with Diabetes



Diabetes and COVID-19 are healthcare challenges that spread globally. If you have diabetes, regardless of what type you have, you are no more likely to catch coronavirus than anyone else. However people with diabetes, including type 1, type 2, gestational and other types, are more likely to develop a severe illness if they do get coronavirus, and the way coronavirus affects you can vary from person to person.

COVID-19 can worse the health condition of people with diabetes

COVID-19 patients with diabetes experience worsening complications and high mortality rates. Current research suggests that COVID-19 patients with comorbid diabetes commonly experience diabetic kidney disease, ischemic heart disease, and pneumonia, which can lead to kidney or heart failure. Meanwhile COVID-19 patients with diabetes are also at increased risk for intensive care unit (ICU) admission (17.6% vs. 7.8) and higher mortality rate (20.3% vs. 10.5) compared with COVID-19 patients without diabetes. Hospitalized COVID-19 patients with diabetes have a higher probability of developing acute respiratory distress syndrome (ARDS), a condition specific to severe COVID-19 cases that can lead to respiratory failure and death, and requires mechanical ventilation for treatment. Several recent studies report that mortality is higher in subjects with diabetes with COVID-19, varying from 22% to 31% of all COVID-19 patients.[2]



Unadjusted in-hospital COVID-19 mortality rates in England, March 1 to May 11, 2020, by diabetes status $^{[3]}$

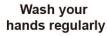
Evidence growing COVID-19 may trigger onset of diabetes

There is growing evidence to suggest that the **interaction between Diabetes and COVID-19 could be bi-directional**, as SARS-CoV-2 infection may potentially deteriorate the preexisting diabetes and even predispose to frank diabetes in non-Diabetes patients.^[1] However there is no clear conclusion as to whether COVID-19 can cause diabetes, so further research are needed.

COVID-19 Prevention Measures

COVID-19 Prevention Measures







Keep social distance



Wear a properly fitted mask



Clean and disinfect



Get vaccinated

The most important way people living with diabetes can lower their risk of becoming seriously ill from coronavirus is to avoid catching the virus in the first place. A vaccine is the most effective way to prevent infection and that's why we strongly encourage you to get vaccinated.

How to manage diabetes during the COVID-19 pandemic [2]

- Wearing a mask helps keep you and others safe and is a simple way to reduce the risk to clinically extremely vulnerable people as they go about their lives.
- · Prepare in case you get ill.
- Make sure you have all relevant contact details to hand in case you need them.
- If you do show flu-like symptoms (raised temperature, cough, difficulty breathing), it is important to consult a healthcare professional. If you are coughing up phlegm, this may indicate an infection so you should seek medical support and treatment immediately.
- Any infection is going to raise your glucose levels and increase your need for fluids, so make sure you can access a sufficient supply of water.
- Make sure you have a good supply of the diabetes medications you need. Think what you would need if you had to quarantine yourself for a few weeks.
- · Make sure you have access to enough food.
- Make sure you will be able to correct the situation if your blood glucose drops suddenly.
- If you live alone, make sure someone you can rely on knows you have diabetes as you may require assistance if you get ill.
- Keep a regular schedule, avoiding overwork and having a good night's sleep.
- Glucose control is very important for people with diabetes during COVID-19.

Clinical study has shown that well-controlled BG (glycemic variability within 3.9 to 10.0 mmol/L) [4] was associated with markedly lower mortality compared to individuals with poorly controlled BG during hospitalization. These findings provide clinical evidence correlating improved glycemic control with better outcomes in patients with COVID-19 and preexisting T2D. Therefore, monitoring your blood glucose in time to keep your glucose under control is the most important thing you need to do.

Since COVID-19 is a new coronavirus, introduction above is just general information of it. The situation of COVID-19 is not fully clear at this point, so please keep yourself informed about the latest developments. Look out for updates and advice from your government, national diabetes association and other reliable sources.

Reference:

- [1] Diabetes Journals 2021
- [2] www.diabetes.org.uk
- [3] Abdi A, Jalilian M, Sarbarzeh PA, Vlaisavljevic Z. Diabetes and COVID-19: A systematic review on the current evidences. Diabetes Res Clin Pract. 2020;166:108347. doi:10.1016/j.diabres.2020.108347
- [4] Barron E, Bakhai C, Kar P, et al. Associations of type 1 and type 2 diabetes with COVID-19-related mortality in England: a whole-population study. Lancet Diabetes Endocrinol. 2020;8(10):813-822. doi:10.1016/S2213-8587(20)30272-2

