

# COVID-19 and diabetes

The vast majority of people who contract COVID-19 will experience only mild symptoms and make a full recovery. However, people with diabetes and/or other long-term conditions are more likely to experience symptoms of greater severity. Some of these may need admission to hospital for supported care and more intensive intervention. Currently, the spectrum of disease suggests that 81% of cases will be *mild*, 14% *severe* and 5% *critical*. The risk does appear to increase in people aged over 70 years, particularly those with comorbid heart disease, diabetes or respiratory disease (Wu and McGoogan, 2020).

## A time of unprecedented change

This situation is rapidly evolving and guidance may be subject to change. The following is intended as an aide-mémoire and we have linked you to the currently available advice and guidance. Readers are advised to continue checking the links below for updates

## Useful links

- NHS England: <https://www.nhs.uk/conditions/coronavirus-covid-19>
- Public Health England: [www.gov.uk/government/collections/coronavirus-covid-19-list-of-guidance](http://www.gov.uk/government/collections/coronavirus-covid-19-list-of-guidance)
- Patient information for at-risk groups: <https://t.co/MvuVWEKv8v>
- Diabetes UK: [https://www.diabetes.org.uk/about\\_us/news/coronavirus](https://www.diabetes.org.uk/about_us/news/coronavirus)
- JDRF: <https://jdrf.org.uk/coronavirus-covid-19-information-for-people-living-with-type-1-diabetes>
- How to advise on sick day rules: <https://bit.ly/2yNUt7X>
- Using SGLT2 inhibitors safely during illness: <https://bit.ly/2waxZzY>

## Prescribing considerations

Be very aware that people with diabetes, in addition to the expected respiratory symptoms of COVID-19, are also at increased risk of metabolic decompensation whilst trying to self-manage their diabetes at home.

- Ensure patients have adequate supplies of medication
- Ensure patients have an increased supply of monitoring equipment at this time. This is especially important for those who require ketone monitoring equipment

## Mental health impact

People with diabetes are likely to have increased anxiety at this time. Prolonged self-isolation could have severe consequences on their mental health, especially if they are already known to have anxiety or depression. Consideration needs to be given as to how this can be addressed within the community

## Things to consider – managing demand while still delivering routine care

- BMJ: What should primary care be doing to prepare? <https://bit.ly/2vpMlqg>
- BMJ: Video consultations: <https://doi.org/10.1136/bmj.m998>

Table 1. General advice for managing diabetes during intercurrent illness

<b>S</b> (Sugar)	<ul style="list-style-type: none"> <li>● Blood glucose levels can rise during illness even if the person is not eating</li> <li>● Advise to increase blood glucose monitoring if the person has access to it</li> <li>● Diabetes medications (sulfonylureas and insulin doses) may need to be increased temporarily during illness to manage these raised glucose levels</li> </ul>
<b>I</b> (Insulin)	<ul style="list-style-type: none"> <li>● <b>NEVER</b> stop insulin or oral diabetes medications*</li> <li>● Insulin doses may need to be increased during illness, especially if ketones are present</li> <li>● Specific advice for people on insulin therapy is available overleaf</li> </ul>
<b>C</b> (Carbohydrate)	<ul style="list-style-type: none"> <li>● Ensure the person maintains hydration and carbohydrate intake</li> <li>● If the person is not able to eat or is vomiting, advise to replace meals with sugary fluids</li> <li>● If blood glucose levels are high, maintain fluid intake with sugar-free fluids</li> <li>● If blood glucose levels are low, encourage regular intake of sugary fluids</li> </ul>
<b>K</b> (Ketones)	<ul style="list-style-type: none"> <li>● In type 1 diabetes, advise to check for ketones every 2–4 hours</li> <li>● Give <b>extra rapid-acting insulin doses</b> (in addition to regular doses) based on total daily insulin dose if ketones are present – see insulin algorithm overleaf</li> <li>● Advise to drink plenty of water to maintain hydration and flush through ketones</li> </ul>

\*Metformin and SGLT2 inhibitors may need to be temporarily stopped if at risk of dehydration.

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**Reference:** Wu Z, McGoogan JM (2020) Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: summary of a report of 72 314 cases from the Chinese Center for Disease Control and Prevention. *JAMA* 24 Feb [Epub ahead of print]. <https://doi.org/10.1001/jama.2020.2648>

