



FACT SHEET 1

Risk factors for poor outcomes with COVID-19

As more data becomes available from countries that have experienced a high rate of COVID-19, we are getting a clearer picture of which patients may be at heightened risk of poor outcomes if they contract COVID-19. We have identified risk factors from emerging observational data and epidemiological reports from China, Italy, Spain and the USA.

These data suggest patients aged 60 years or over, especially men, with one or more chronic conditions may be at heightened risk of severe or fatal outcomes if they contract COVID-19.

Risk factors

➤ Older age

To date, all available evidence suggests that illness severity increases with age.¹⁻⁷ In all studies, people who have died from COVID-19 or who have had more severe symptoms were older than people with less severe symptoms. In Europe, the rate of hospitalisation increased markedly with age over 60 years.² The proportion of people diagnosed with COVID-19 who died followed a similar pattern, with deaths higher in those aged over 60 years and markedly higher in those aged over 80 years.²

➤ Male gender

Current evidence from Italy² and China⁷ indicates that a higher proportion of men than women die from COVID-19.

➤ Current smoker

Evidence suggests that current smokers may be at an increased risk of severe illness if they contract COVID-19.^{2,8}

➤ Multiple chronic conditions

To date, people with severe or fatal COVID-19 have had more chronic conditions than people who have experienced less severe COVID-19.^{1,3,5,7,9} In Italy, 49% of people who died from COVID-19 had three or more chronic conditions.¹ In the USA, 78% of people admitted to intensive care with COVID-19 had at least one chronic condition, compared to only 27% of people with COVID-19 who were not admitted to hospital.⁹

➤ Type of chronic condition

The current available evidence indicates that a higher percentage of people who have poor outcomes with

COVID-19 have one or more of the following chronic conditions:

- hypertension²⁻⁷
- chronic heart disease including heart failure, ischaemic heart disease^{2-7,9}
- diabetes^{2-7,9,10}
- chronic airways disease including COPD and asthma^{3-7,9}
- cerebrovascular disease^{3,4,7,10}
- chronic liver disease⁹
- chronic renal failure^{3,5,7,9}
- malignancy^{2,3,6,7,11}
- being immunocompromised or taking immune suppressing medicines.⁹

The prevalence of these chronic conditions in people with poor outcomes matches the prevalence for older age groups, so it is not yet clear whether people with these chronic conditions have worse outcomes due to the chronic conditions or due to their older age.

Living Guidelines: caring for people with COVID-19

An Australian national taskforce has developed evidence-based guidelines to support clinicians caring for people with COVID-19 in primary, acute and critical care settings.⁸ These guidelines are continually being updated and expanded as emerging data becomes available.⁸ To find out about disease severity and decision flowcharts for management of patients with COVID-19, go to: covid19evidence.net.au

For DVA patients with mild COVID-19 being managed in the community, and especially for those who are at

heightened risk of poor outcomes if they contract COVID-19, advise them and their carer or family to look out for the development of new or worsening symptoms, especially breathing difficulties which may indicate developing pneumonia or hypoxaemia.⁸ If symptoms do worsen, this is most likely to occur in the second or third week of the illness.⁸

Consider transferring your patient to hospital if moderate to severe symptoms occur, including:

- **signs and symptoms of pneumonia**
- **severe shortness of breath or difficulty breathing**
- **blue lips or face**
- **pain or pressure in the chest**
- **cold, clammy or pale and mottled skin**
- **new confusion or fainting**
- **becoming difficult to rouse**
- **little or no urine output**
- **coughing up blood.⁸**



References

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