

## MEN'S HEALTH: COVID-19 FOCUS

**The bad news:** Men are twice as likely to die from COVID-19 as women due, it is thought, to their behaviours and beliefs as well as their biological makeup.

**The good news:** Men can do something about much of it.



Let's take a look at the key risk factors.

**Hormones:** Women have a stronger immune response through their sex hormones, with oestrogens and prolactin acting to direct the way their immune cells work. Testosterone (the primary male sex hormone) tends to suppress men's immune response, the one that fights COVID-19. Additionally, the **X chromosome** tends to help people with their immunity – and women have two of them (XX), versus men's XY. As women go through the menopause, their oestrogen levels drop, which may be a reason why older women tend to be susceptible.

**Route of infection:** Once infected, the main route into the cells of the body is through a receptor called ACE2, which is found to be more highly expressed in males and past smokers, so it's a double risk for men who used to smoke.

**Men with pre-existing health problems:** Pre-existing health problems may also be a factor for those who experience the most severe COVID-19 symptoms, with high blood pressure, heart disease, diabetes mellitus and chronic lung conditions being present in nearly 40% of patients in a recent study. Obesity is also a factor.

Pre-existing cardiovascular (heart) disease has been suggested as the biggest risk factor followed by respiratory disease. For all these chronic diseases, there are a higher proportion of affected men, with a greater number affected at an earlier age as compared to women.

**Drinking:** Research has shown that drinking to excess can have an adverse effect on the immune system. On average, in the UK, men consume almost five times as much alcohol as women. This potentially elevates the risk of severe COVID-19 disease in men.

**Handwashing:** Evidence suggests that men are less likely to wash their hands. They are therefore more likely to catch COVID-19.

**Attitudes to the virus:** A study found men are more likely to downplay the severity of COVID-19, with men more likely to believe it only affects older people. They were also less inclined to follow official Government advice such as staying at home to stop the virus from spreading.

**Delayed presentation:** There is evidence that men use health services less and are more likely to not present until they are really sick, putting them, and the people around them, at more risk.

## So, what can you do?

1. Try to avoid catching it. Follow hand hygiene advice and social distancing measures. Wear a mask on public transport.
2. Eat healthily.
3. Keep your alcohol intake to recommended limits.
4. Exercise regularly.
5. Stop smoking.
6. If you need medication, take it regularly as prescribed and follow your doctor's advice.

The above measures will help to maximise your immunity and increase your ability to fight COVID-19 if you catch it.



Sources: Jin J-M, Bai P, He W, Liu S, Wu F, Liu X-F, et al. Higher severity and mortality in male patients with COVID-19 independent of age and susceptibility. medRxiv [preprint]. 2020; DOI: <https://doi.org/10.1101/2020.02.23.20026864>, Wu Y, Guo W, Liu H, Qi B, Liang K, Xu B, et al. Clinical outcomes of 402 patients with COVID-2019 from a single center in Wuhan, China. medRxiv [preprint]. 2020; DOI: <https://doi.org/10.1101/2020.03.07.20032672>, Caramelo F, Ferreira N, Oliveiros B. Estimation of risk factors for COVID-19 mortality - preliminary results. medRxiv [preprint]. 2020; DOI: <https://doi.org/10.1101/2020.02.24.20027268>, Rubtsov A V, Rubtsova K, Kappler JW, Marrack P. Genetic and hormonal factors in female-biased autoimmunity. Autoimmun Rev. 2010 May;9(7):494–8. Ortona E, Pierdominici M, Maselli A, Verona C, Aloisi F, Shoenfeld Y. Sex-based differences in autoimmune diseases. Ann Ist Super Sanità. 2016;52(2):205–12. Taneja V. Sex hormones determine immune response. Front Immunol. 2018;9:1–5. Wrapp D, Wang N, Corbett KS, Goldsmith JA, Hsieh C-L, Abiona O, et al. Cryo-EM structure of the 2019-nCoV spike in the prefusion conformation. Science. 2020;367(6483):1260–3. Cai H. Sex difference and smoking predisposition in patients with COVID-19. Lancet Respir Med. 2020;2600(20):2002107. DOI: [http://dx.doi.org/10.1016/S2213-2600\(20\)30117-X](http://dx.doi.org/10.1016/S2213-2600(20)30117-X), WHO. Who global report on trends in prevalence of tobacco smoking 2000-2025, second edition. Geneva: World Health Organisation; 2018. WHO. World Health Statistics 2019: Monitoring Health for the SDGs, sustainable development goals. Geneva: World Health Organisation; 2019. Wang J, Luo Q, Chen R, Chen T, Li J. Susceptibility Analysis of COVID-19 in Smokers Based on ACE2. 2020; 2020030078 DOI: 10.20944/preprints202003.0078.v1. Sarkar D, Jung MK, Wang HJ. Alcohol and the immune system. Alcohol Res Curr Rev. 2015;37(2):153–5. WHO. Global status report on alcohol and health 2018. Vol. 65, Global status report on alcohol. Geneva: World Health Organisation; 2018. <https://www.menshealthforum.org.uk/news/mens-biological-risk-covid-19>. <https://www.menshealthforum.org.uk/news/our-own-fault-men-and-covid-19>. <https://pubmed.ncbi.nlm.nih.gov/26695745/>. Global status report on alcohol and health 2018 WHO. <https://docs.cdn.yougov.com/tdmiiw5igp/Results%20for%20Internal%20%28Coronavirus%20tracker%29%20w.pdf>. <https://yougov.co.uk/topics/health/articles-reports/2020/03/30/covid-19-bogus-claims-fool-britons>. [https://www.who.int/gho/publications/world\\_health\\_statistics/2019/EN\\_WHS\\_2019\\_Main.pdf?ua=1](https://www.who.int/gho/publications/world_health_statistics/2019/EN_WHS_2019_Main.pdf?ua=1).

## COVID-19 and mental health

Feelings of uncertainty, anxiety and fear are natural in the current situation, but combined with other issues such as isolation, changes to health and social care provision and school closures/re-openings, they can really bump up mental health issues. **You are not alone.** In England, around 1 in 8 men have a common mental health problem. However, men are notoriously reluctant to seek support for their mental health or disclose mental health problems to loved ones.

There is no rule book about how men should behave: it is merely a societal construct. However, while wishing to feel strong and in control are not inherently negative things, some research suggests that a reliance on these **traditional ideas** as to what it means to be “a man” may negatively impact men’s mental health. **Key points to remember:**

- It is ok not to be ok.
- You are not alone in the way you feel.
- The feelings will pass.
- There is help out there.

The **Campaign Against Living Miserably (CALM)** is a great source of information for men seeking support with mental health issues. Their website includes webchat, videos and helplines.

<https://www.thecalmzone.net/>

The **Samaritans** are there to provide a listening, non-judgemental ear.

<https://www.samaritans.org/>

**Men’s Health Forum** is a great site with lots of information about men’s physical and psychological health.

<https://www.menshealthforum.org.uk/>

**Your EAP** (if you have one) should also be able to help -for discussion on debt, gambling, legal, carers, family, etc.