

COVID IS VASCULAR



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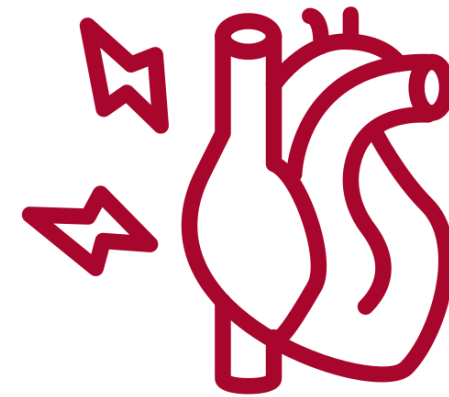
VASCULAR IMPACTS

Vascular conditions are those that impact **blood vessels**.

Cardiovascular conditions are those that impact the **heart**.

People who have had a COVID-19 infection face much higher relative risks for **20 vascular and cardiovascular conditions**, including:

- Heart attack.
- Inflammatory heart disease.
- Pulmonary embolism (blood clots in lungs)
- Thromboses (blocked blood vessels).
- Stroke.

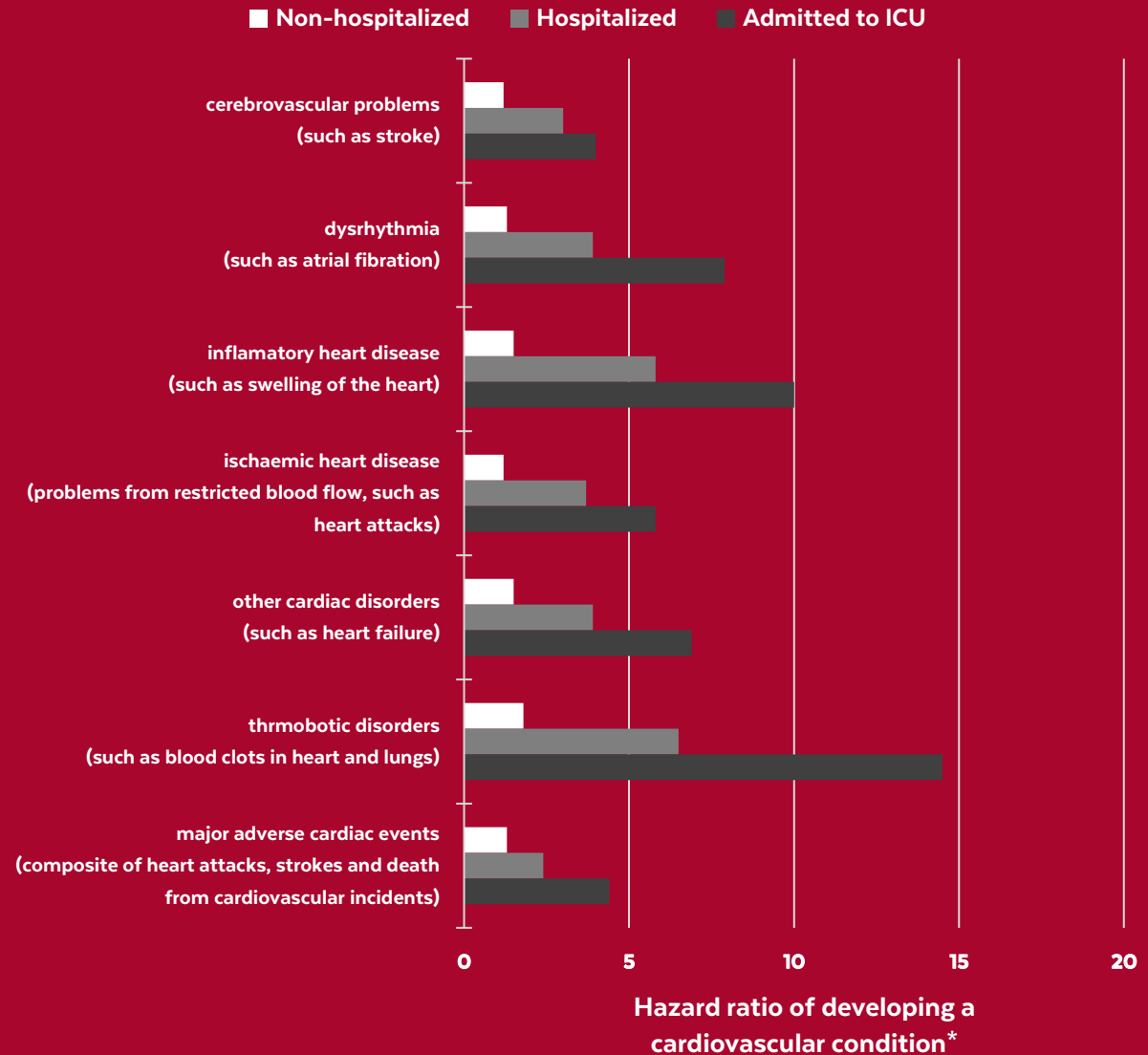


These higher risks are seen even if the infection was **mild** and are observed in both **children and adults** even those who are otherwise **healthy**.

HOSPITALIZATION AND ICU

People who have been admitted to hospital or intensive care with acute COVID-19 infections are observed to have drastically higher risk of vascular and cardiovascular problems during the following year.

The risk of some problems can increase by over 1000%.



* Ratio compared with control groups. 2 equals a doubling of the risk.

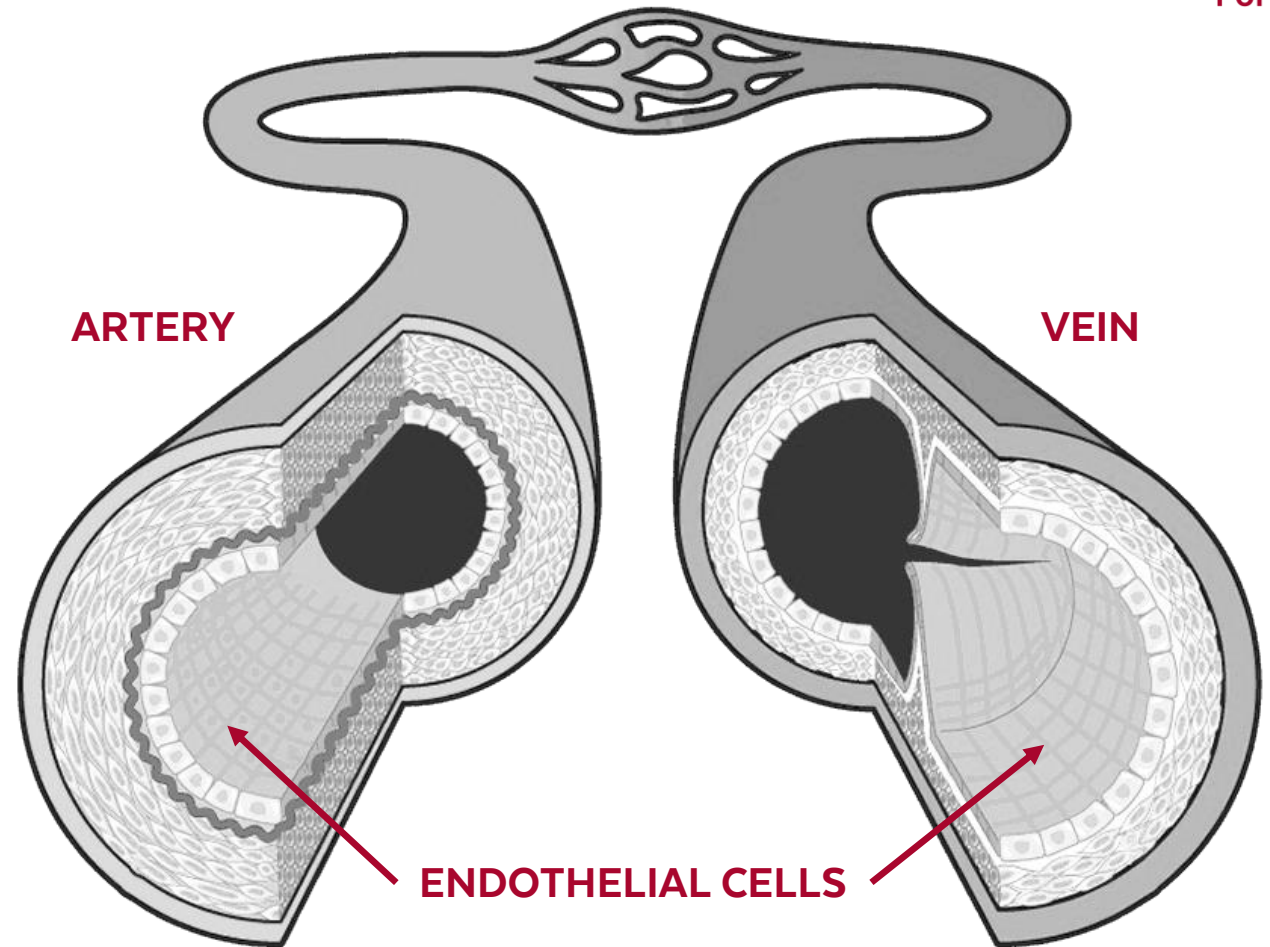


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WHERE COVID ATTACKS

COVID-19 targets the protein **ACE2** to enter your body's cells.

ACE2 can be found on the surface of dozens of types of human cell, including the cells which line the inside of blood vessels, called **endothelial cells**.



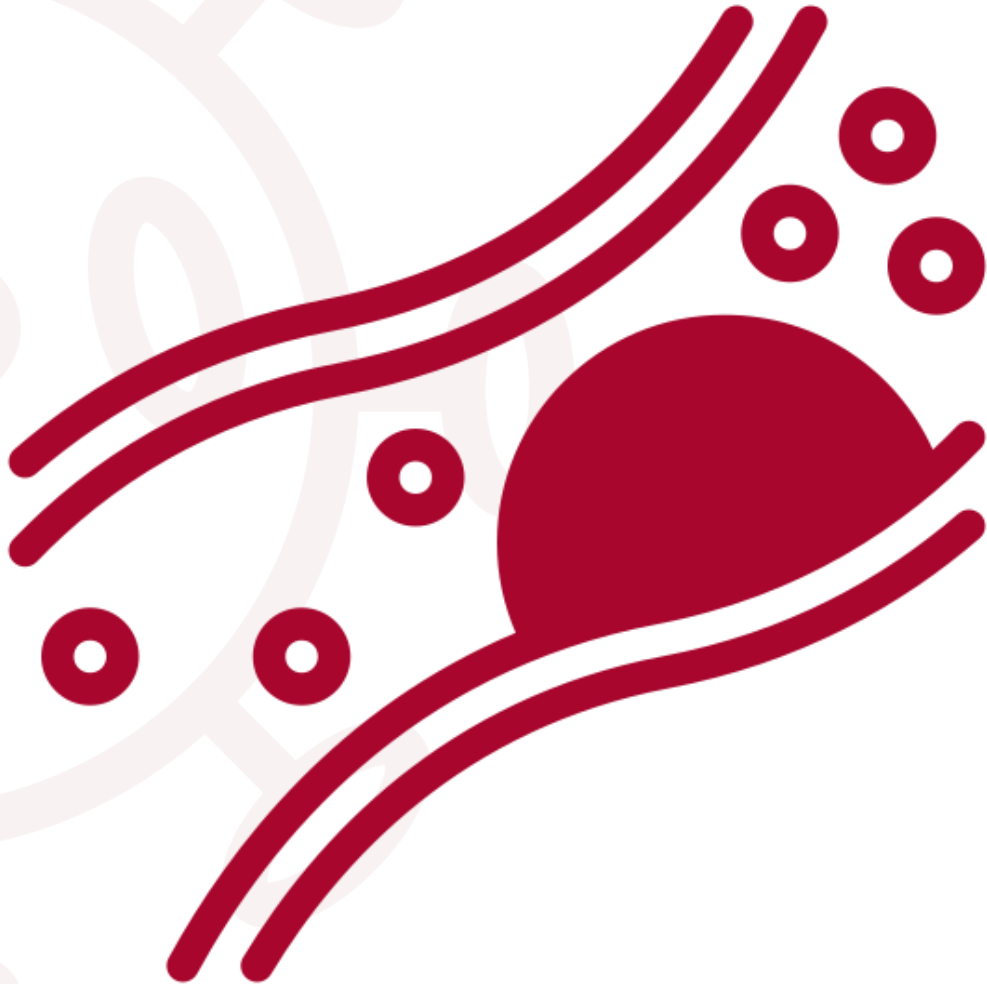
BLOOD CLOTS



Blood clots form naturally to heal cell damage caused by a COVID-19 infection. These can lead to blocked blood vessels which can cause issues as minor as localized pain or as severe as cardiac arrest.

Tiny **micro-clots** may constrict blood flow to vital organs, causing damage and throughout the body.

Studies have shown a **5-fold increase** in the risk of **deep vein thrombosis (DVT)** and a **33-fold increase** in a **potentially fatal blood clot in the lung** in the month following COVID-19 infection.





PREVENTION

Current studies suggest vaccination reduces, but does not eliminate, the risk of developing long term vascular problems.

Reinfection may compound the risk of developing long term vascular problems.

The only sure way to prevent the risk of developing long term vascular problems is to avoid infection altogether.

LAYER PROTECTIONS

No protection is 100% effective.

Reduce the chances of contracting COVID-19 by **layering** multiple protections you can control.



Stay up to date with COVID-19 vaccinations



Wear a well-constructed well-fitting mask



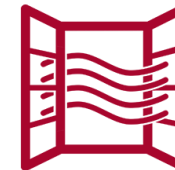
Utilize **rapid tests** as often as you are able



Stay home if you are sick or experiencing symptoms, even if mild



Stay informed about COVID-19 impacts, data, and the risks of activities and make **informed decisions**



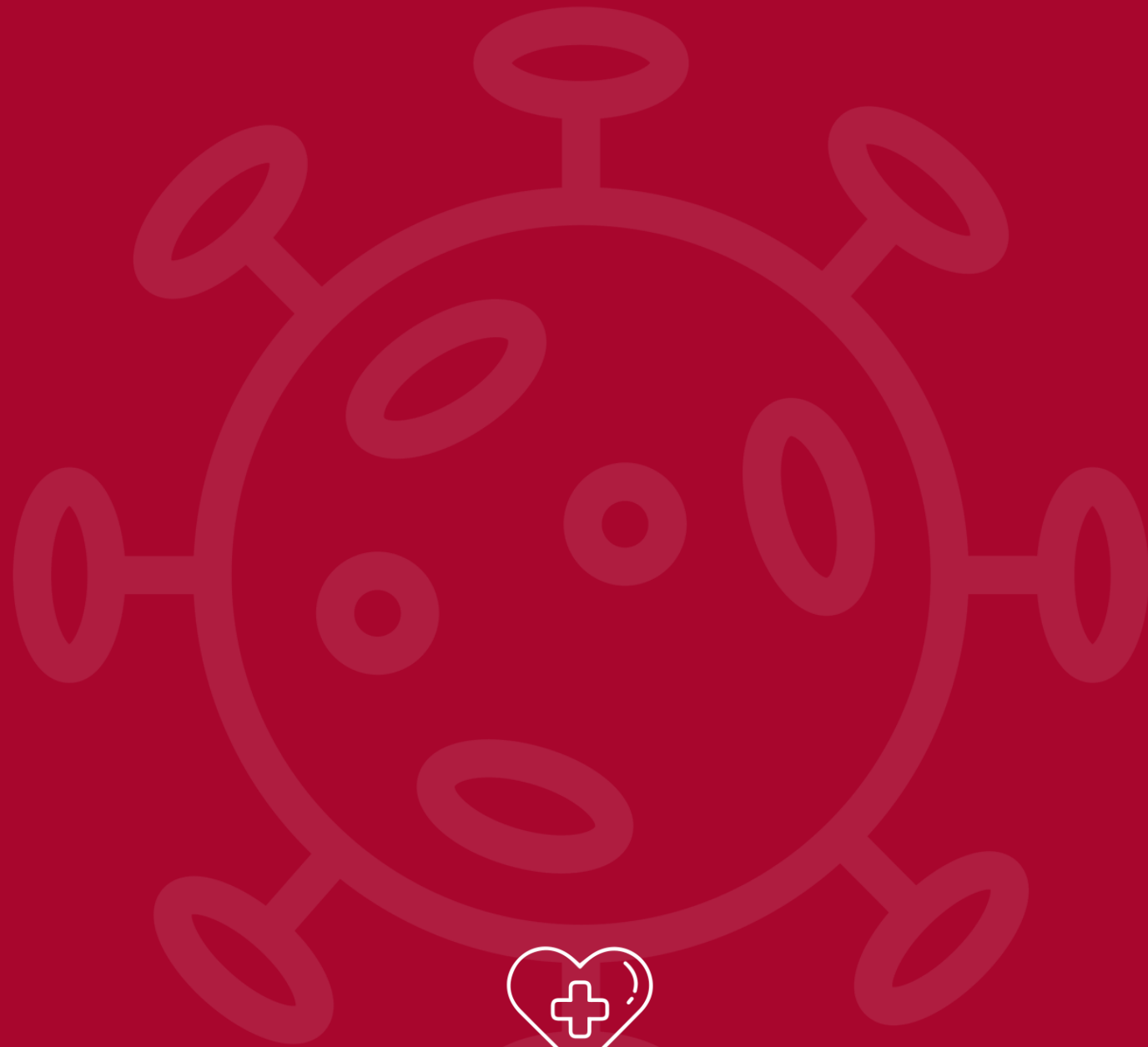
Improve indoor **ventilation** and **filter** indoor air

SOURCES



VASCULAR IMPACTS OF COVID-19:

- <https://www.scientificamerican.com/article/even-mild-covid-can-increase-the-risk-of-heart-problems/>
- <https://www.nature.com/articles/d41586-022-02074-3>
- <https://publichealth.jhu.edu/2022/covid-and-the-heart-it-spare-no-one>
- <https://fortune.com/2022/08/04/covid-creates-higher-risk-kids-children-pediatric-blood-clots-kidney-failure-heart-problems-type-1-diabetes/>
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- <https://www.health.harvard.edu/heart-health/covid-19-diagnosis-raises-risk-of-heart-attack-stroke>
- <https://www.ft.com/content/26e0731f-15c4-4f5a-b2dc-fd8591a02aec>
- <https://www.sciencedaily.com/releases/2020/06/200604095600.htm>
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- [https://www.thelancet.com/article/S1474-4422\(20\)30272-6/fulltext](https://www.thelancet.com/article/S1474-4422(20)30272-6/fulltext)
- <https://www.science.org/content/article/covid-19-takes-serious-toll-heart-health-full-year-after-recovery>
- <https://www.medrxiv.org/content/10.1101/2021.12.27.21268448v1https://www.science.org/doi/10.1126/science.abe2813>
- <https://www.nature.com/articles/s41591-022-02000-0>
- <https://www.theguardian.com/world/2022/apr/06/covid-linked-33-fold-increase-risk-pulmonary-embolism-dvt>



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