



G



Home

News

Sport

More ▼

Search

[Home](#) | [Coronavirus](#) | [Climate](#) | [UK](#) | [World](#) | [Business](#) | [Politics](#) | [Tech](#) |[More](#)[Science](#) | [Health](#) | [Family & Education](#)

Health

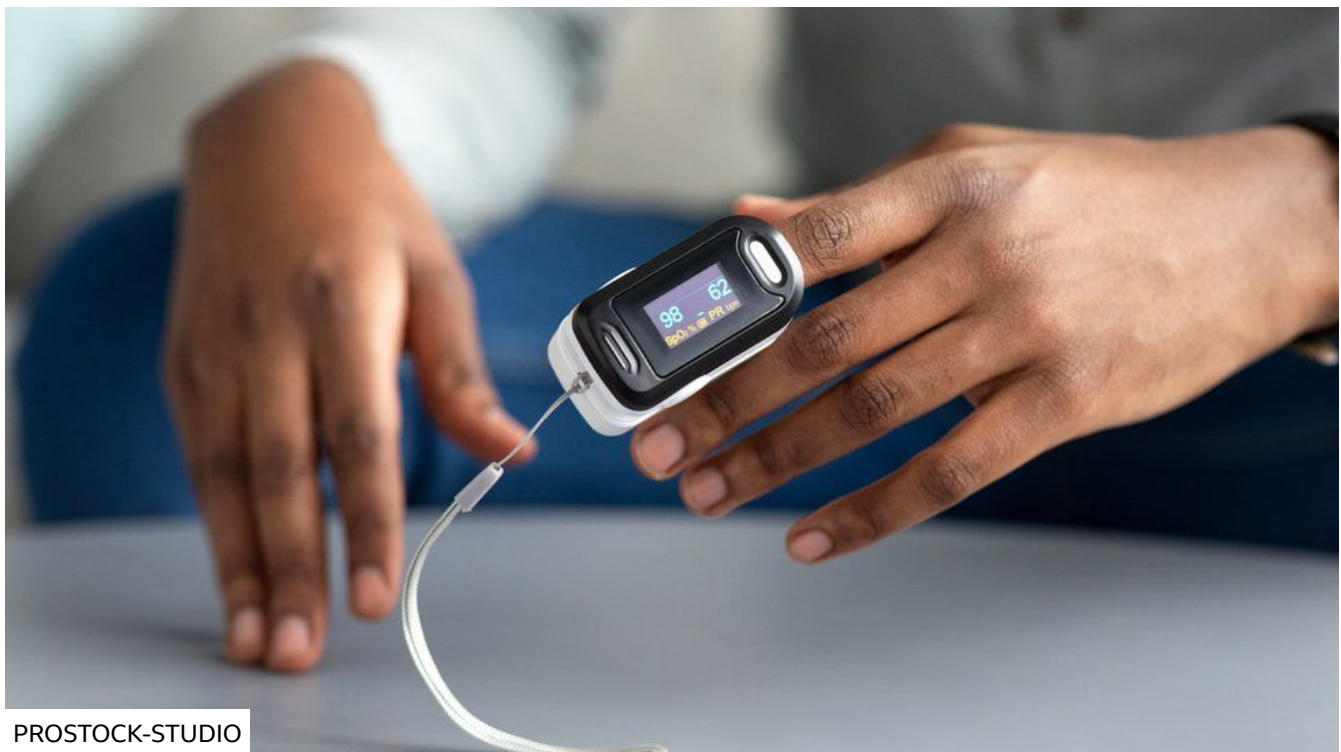
Covid: Pulse oxygen monitors work less well on darker skin, experts say

By Amara Sophia Elahi
BBC News

🕒 31 July



Coronavirus pandemic



PROSTOCK-STUDIO

Pulse oximeters have been used increasingly during the coronavirus pandemic in hospital and the community

A device designed to spot early signs of dangerous falls in oxygen levels in Covid patients works less well in those with darker skin, experts are warning.

NHS England and medicines regulator, the MHRA, say pulse oximeters may sometimes overestimate oxygen levels.

The devices beam light through the blood, and skin pigmentation may affect how light is absorbed, they say.

Anyone with concerns is advised to look for changes over time rather than relying on a single reading.

NHS England is issuing updated guidance, advising patients from black, Asian and other ethnic minority groups to continue using pulse oximeters, but to seek advice from a healthcare professional.

An NHS Health and Race Observatory report published in March recommended that the MHRA should carry out an urgent review into the use of pulse oximeters.

The devices have been used increasingly during the coronavirus pandemic, both in hospital and within the community.

In people with Covid-19, oxygen levels in the blood can drop to dangerously low levels without them noticing - a condition known as "silent hypoxia".



RANJIT SENGHERA MARWAHA

Ranjit Senghera Marwaha said she did not factor that the colour of her skin would have an impact on an oximeter

Ranjit Senghera Marwaha bought a pulse oximeter while unwell with coronavirus last year, but her oxygen levels dropped so low that she had to be hospitalised.

"When I went into hospital the first thing they said was, 'you've really left it too late,'" Ms Marwaha said.

"I was on 14 litres of oxygen - that's the highest they give you just before you move into intensive care.

"Never ever did I factor that the colour of my skin or the pigmentation in my skin would have an impact on the way in which these gadgets work."

- **Covid: How a £20 gadget could save lives**
- **Covid: What's the risk for ethnic minorities?**
- **Why are more people from BAME backgrounds dying from coronavirus?**

Dr Habib Naqvi, director of the NHS Race and Health Observatory, welcomed the updated guidance on pulse oximeters.

"Although a valuable clinical tool, clinicians are increasingly becoming aware of the potential errors or inconsistencies associated with pulse oximeters, so we need to have this in mind when using the devices," he said.

Dr Omar Jundi, an intensive care consultant in West Yorkshire, observed inaccuracies in pulse oximeter readings in black Covid patients.

"It's something I would pick up on at least once a day, in maybe two or three patients," he said.

"It's an aspect of the sort of systemic biases and systemic racism that occur in the NHS and the care that we provide in the NHS every day."

How to use your pulse oximeter and Covid-19 diary



Warning: Third party content may contain adverts

Figures show that people from black, Asian and other ethnic minority groups are more likely to get coronavirus, and become seriously unwell or die from it.

Experts believe the potential inaccuracies in pulse oximeters may be a contributing factor to this.

"We need to ensure there is common knowledge on potential limitations in

healthcare equipment and devices, particularly for populations at heightened risk of life-changing illness, this includes black, Asian and diverse communities using pulse oximeters to monitor their oxygen levels at home," Dr Naqvi said.

He added it was vital that culturally-inclusive research now took place to ensure that pulse oximeters performed accurately on people with darker skin tones.

Related Topics

[BAME communities](#)[Coronavirus pandemic](#)

More on this story

How a £20 gadget could save lives from Covid

21 January

Why are more BAME people dying from coronavirus?

19 June 2020

Top Stories

**Johnson warns of
Omicron tidal wave as
he sets new booster
goal**

🕒 1 hour ago

**Verstappen beats
Hamilton to win first
title**

🕒 4 hours ago

**Jabbed Covid
contacts told to take
daily tests**

🕒 7 hours ago

Features