- Health / Medical awareness

Face masks safe to use during intense exercise, research suggests

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Face masks can be worn safely during intense exercise, and could reduce the risk of Covid-19 spreading at indoor gyms, preliminary findings suggests.



Scientists from the Monzino Cardiology Centre (CCM) in Milan and the University of Milan tested the breathing rate, heart rate, blood pressure and oxygen levels of six women and men on exercise bikes, with and without a mask.

Wearing a face covering reduced the participants' ability to perform vigorous exercise by about 10%, probably because they found it slightly harder to breathe through the mask, according to the paper published in the European Respiratory Journal.

"This reduction is modest and, crucially, it does not suggest a risk to healthy people doing exercise in a face mask, even when they are working to their highest capacity," said Dr Massimo Mapelli, a cardiologist at the CCM. "While we wait for more people to be vaccinated against Covid-19, this finding could have practical implications in daily life, for example potentially making it safer to open indoor gyms."

More research needs to be done to see if the same would be true for people with heart or lung conditions, scientists say.

The volunteers, made up of healthy individuals with an average age of 40, did three rounds of exercise. One, without a face mask, another with a singleuse surgical mask and the last with a FFP2 mask. The thicker FFP2 mask resulted in a 10% reduction in peak oxygen up-take and the surgical mask had a marginally smaller impact, researchers say.

Researchers are investigating whether wearing a face mask affects people's ability to carry out daily activities such as housework or climbing stairs, examining healthy people as well as those with heart and lung conditions.

Prof Sam Bayat, a physiologist from Grenoble University hospital, who was not involved in the research, said: "Although these results are preliminary and need to be confirmed with larger groups of people, they seem to suggest that face masks can also be worn safely for indoor sports and fitness activities, with a tolerable impact on performance."

Gyms and other indoor fitness facilities are due to reopen in England after 12 April. Current guidance says people do not need to wear a face covering while exercising, but should at other times when using indoor leisure facilities. The government Department of Digital, Culture, Media and Sport declined to comment on the Italian study.

A spokesperson from UK Active, which represents gyms and leisure centres, said the study was "limited" and much wider research was needed before informing practice. In the meantime "people should continue to follow World Health Organization guidance which recommends that face coverings should not be worn while exercising", the spokesperson said.

"Gyms in the UK will be safe to reopen based on the Sage-approved safety measures already in place, which focus on social distancing, sanitisation and ventilation – allowing visitors to return with confidence."