

Claim Text

Carbon dioxide **intoxication** is caused by **wearing face masks**.

Evidence

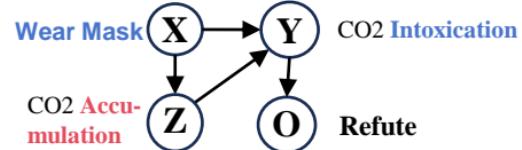
"The prolonged use of medical masks can be **uncomfortable**. However, it does not lead to CO2 intoxication nor oxygen deficiency," the WHO says on its website.

"The CO2 **would pass** through the gaps around the side and through the face covering as CO2 (molecules are) much smaller than the fabric/mask materials," Dr Chan said.

The research tested CO2 levels and oxygen saturation before and after wearing a surgical mask on 15 physicians without lung conditions and 15 veterans with

Step
1

Extract the Reasoning Graph



Step
2

Formalize Claim

$$P(Y|do(X = 1)) > 0$$

Step
3

Gather All Relevant Data

$$p(X \rightarrow Z) = 0.05 \quad p(Z \rightarrow Y) < 0.01$$

Step
4

Deduce and Calculate the Probability

$$P(Y|do(X)) = \sum P(Y|Z)P(Z|do(X)) = 0.0005$$
$$P(O_{refute}|Y, X) = 1$$

Step
5

Classify the Claim

Contradictory evidence? Strong refutation.

$$X \rightarrow Z \rightarrow Y \rightarrow O_{refute}$$

Step
6

Generate Explanation

The tiny CO₂ molecules escape... Even for N95Therefore, the proposed causal path X → Z → Y has very low edge weights, leading us to reject the claim.