

## Social Distancing Revisited

We have been indoctrinated in the 6 foot (2M) rule of social distancing. A recent [paper](#) in the prestigious “British Medical Journal” adds nuance to this rule. It indicates the relative risk of various situations.

Type and level of group activity	Low occupancy			High occupancy		
	Outdoors and well ventilated	Indoors and well ventilated	Poorly ventilated	Outdoors and well ventilated	Indoors and well ventilated	Poorly ventilated
<b>Wearing face coverings, contact for short time</b>						
Silent	Low	Low	Low	Low	Low	Medium
Speaking	Low	Low	Low	Low	1	Medium
Shouting, singing	Low	Low	Medium	Medium	Medium	High
<b>Wearing face coverings, contact for prolonged time</b>						
Silent	Low	Low	Medium	Low	Medium	High
Speaking	Low	*	Medium	*	2	High
Shouting, singing	Low	Medium	High	Medium	High	High
<b>No face coverings, contact for short time</b>						
Silent	Low	Low	Medium	Medium	Medium	High
Speaking	Low	Medium	Medium	Medium	High	High
Shouting, singing	Medium	Medium	High	High	High	High
<b>No face coverings, contact for prolonged time</b>						
Silent	Low	Medium	High	Medium	High	High
Speaking	Medium	Medium	High	High	High	High
Shouting, singing	Medium	High	High	High	High	High

**Risk of transmission**  
 Low ■ Medium ■ High ■

\* Borderline case that is highly dependent on quantitative definitions of distancing, number of individuals, and time of exposure

Fig 3 | Risk of SARS-CoV-2 transmission from asymptomatic people in different settings and for different occupation times, venting, and crowding levels (ignoring variation in susceptibility and viral shedding rates). Face covering refers to those for the general population and not high grade respirators. The grades are indicative of qualitative relative risk and do not represent a quantitative measure. Other factors not presented in these tables may also need to be taken into account when considering transmission risk, including viral load of an infected person and people’s susceptibility to infection. Coughing or sneezing, even if these are due to irritation or allergies while asymptomatic, would exacerbate risk of exposure across an indoor space, regardless of ventilation

For instance, according to this paper if you have a group of people speaking, in tight quarters, for a short time, wearing masks, inside where it is well ventilated the risk is low of spreading the infection (1). However, change it to a prolonged time and the risk becomes medium (2).

Of course, the problem is what is short and what is prolonged? What is low occupancy and what is high? The paper indicates more study is needed. It points out the duration of 5-15 minutes as a cut off time has

not been proven for COVID-19. It also points out that ventilation isn't as easy as well verses poorly. The direction of flow is important too. In other words, as the paper points out, more study is needed.

So how would you judge, according to this paper, a backyard barbeque in the Somerset area of town, with 20 people talking and face masks going on and off to eat and drink?