

Thank you for your response to my letter addressed to Dr. Hinshaw.

From your response, it is clear that the expected 'emerging evidence' never came and thus there is no evidence to support mask mandates. Without quality evidence of efficacy and safety, you should never force something that may be harmful upon the population, and especially on children who are still developing and may suffer even greater harm from such measures.

The studies that you have listed provide no quality evidence for the effectiveness of masks on reducing transmission of respiratory viruses – not even for medical masks never mind cloth masks. In fact, the updated version of the first study you cited (Jefferson et al. - the Cochrane review) with an additional 9 years of quality science included, shows that medical masks are not effective against respiratory viruses, and while the second study you cited (Suess et al.) provides weak evidence for the effectiveness of masks plus hand hygiene combined, the third study (Cowling et al.) suggests that masks actually increase the rate of respiratory infections (by comparing the results with masks plus hand hygiene to those with hand hygiene alone). The next two studies you cited (Stockwell et al., Dharmadhikari et al.) do not involve respiratory viruses so I am not sure why you would include them to support your claim that "Masks have been deemed effective in studies on suppressing transmission of other respiratory viruses". Together, what these three studies (relevant to respiratory viruses) show, is that masks alone have no benefit, that when researchers do not separate masks and hand hygiene there can be a beneficial impact of the combined interventions, but that adding masks may actually reduce the benefit of hand hygiene alone. Please see the attached document ("Comments on studies cited by Alberta Health") for a more detailed consideration of each of these studies.

You also listed four studies that consider the use of masks for Covid-19 – three related to mask mandates (Lyu and Wehby, Leffler et al., Mitze et al.) and one on household transmission (Wang et al.). The studies looking at mask mandates are poor quality (it appears that only the first is a peer reviewed published study), that do not account for the many potential confounding variables, have too narrow a focus to capture meaningful relationships between masks and cases (either too short of a time period, or too few regions) and the second makes serious errors in analysis (see the attached file). In fact, it is easy to find counterevidence to these studies simply by looking at what we have experienced locally – in many municipalities in Alberta cases exploded after mask mandates were implemented (for example Beaumont, Calgary, Edmonton, Leduc, Sherwood Park). It seems clear that infection rates have little to do with mask mandates and more to do with other factors including where in the natural progression of the 'case curve' the particular region is. For example the City of Beaumont, despite implementing a mask bylaw in August 2020, had the highest per capita case rate the province at one point in November 2020.

The final study that you cite (on household transmission) provides weak evidence that wearing masks within households may provide some benefit, although there are many potential confounding variables not included in the model. This study does not provide evidence for widespread masking of asymptomatic people in the community and is insufficient to refute the massive body of higher quality science that shows that masks are not effective for respiratory viruses in general, or for Covid-19 and/or other coronaviruses in particular.

As I said in my original letter, I understand that the CMOH orders and guidelines do not require masks for those engaging in physical activity, and that they allow for exemptions and make allowances for schools so that children are not required to be in masks continually throughout their school day. However, because of your messaging around masks (indicating that they should be worn to protect others and not representing the potential harms) many people (business owners, citizens, teachers/educators, coaches/leaders within sports organizations, etc.) are going beyond what is stated in the orders and guidelines – not honouring exemptions, requiring masks during exercise/competition, and forcing children to wear masks all day at school.

There is no quality evidence for the efficacy of masks in reducing transmission of respiratory viruses, however there is quality evidence indicating that they do not reduce transmission of respiratory viruses (for example, [Xiao et al.](#), [Jefferson et al.](#)), or of Covid-19 in particular ([Bundgaard et al.](#)), there is evidence that they may increase the rate of respiratory virus infection ([Cowling et al.](#), [MacIntyre et al.](#)), and more importantly there is no evidence of safety. For all of these reasons, and because there is increasing potential for harm (with organizations now requiring masks during exercise and new messaging advocating multiple masks), I ask that you remove all mask requirements within the health orders and update your messaging before it is too late.

Thank you,

Susan Budge, PhD