

Twitter Thread by James Munday



James Munday

@JDMunday



Our preprint on the impact of reopening schools on reproduction number in England is now available online: <https://t.co/CpfUGzAJ2S>. With @Jarvis_Stats @amyg225 @kerrylmwong @KevinvZandvoort @sbfknk + John Edmunds. NOT YET PEER REVIEWED. 1/

We used contact survey data collected by CoMix (<https://t.co/ezbClOgRa1>) to quantify differences in contact patterns during November (Schools open) and January (Schools closed) 'Lockdown periods'. NOT YET PEER REVIEWED 2/

We combined this analysis with estimates of susceptibility and infectiousness of children relative to adults from literature. We also inferred relative susceptibility by fitting R estimates from CoMix to EpiForecasts estimates(<https://t.co/6lUM2wK0bn>). NOT YET PEER REVIEWED 3/

We estimated that reopening all schools would increase R by between 20% to 90% whereas reopening primary or secondary schools alone would increase R by 10% to 40%, depending on the infectiousness/susceptibility profile we used. NOT YET PEER REVIEWED 4/

Assuming a current R of 0.8 (in line with Govt. estimates: <https://t.co/ZZhCe79zC4>). Reopening all schools would increase R to between 1.0 and 1.5 and reopening either primary or secondary schools would increase R to between 0.9 and 1.2. NOT YET PEER REVIEWED 5/

Our results suggest that reopening schools is likely to increase R to above or close to 1.0, under which conditions we would expect cases to stop falling and begin to increase. NOT YET PEER REVIEWED 6/

Note that we assume that upon reopening, schools operate as in November. If schools were to implement additional measures to reduce transmission in schools (e.g. mask wearing, regular testing, ventilation) the impact on R may be smaller. NOT YET PEER REVIEWED 7/

We urge that these results should be considered alongside other evidence on the impact of school closures on transmission. Always read the limitations section first. NOT YET PEER REVIEWED 8/

Finally, we are clear that allowing children to return to classrooms as quickly and safely as possible is a public health priority. These results need to be considered alongside the clear benefits that reopening schools will have on children and wider society 9/