

## **The English mass infection strategy is dangerous and wrong**

As the third wave of the pandemic takes hold across England, the government plans to further re-open. Implicit in this strategy is the acceptance that infections will surge, but that this does not matter as vaccines have 'broken the link' between infections and deaths.<sup>1</sup> On 19<sup>th</sup> July, branded as 'freedom day', almost all restrictions are set to end. We believe this is dangerous and premature.

The end to pandemics is population immunity - enough of the population being immune to prevent exponential growth of the virus. This is unlikely to be achieved without much higher levels of vaccination, with interim proportionate mitigations to contain spread. However, the UK Government intends to abandon mitigations from July 19<sup>th</sup>, meaning immunity through vaccination for some and immunity through infection for others (predominantly the young). The link between infection and deaths has been weakened not broken and infection can still cause substantial morbidity in both acute and long-term illness. We have previously pointed to the dangers of immunity through infection.<sup>2</sup> Here are five.

First, unmitigated transmission will disproportionately affect unvaccinated children and the young, who have already suffered greatly. Only 49% of people in England are fully vaccinated, and another 17% partially. Given this, and the high transmissibility of the Delta variant, exponential growth will likely continue until millions more are infected, leaving hundreds of thousands with long-term illness and disability.<sup>3</sup> This risks creating a generation left with chronic health problems and disability, the personal and economic impacts of which may be felt for decades to come.

Second, high rates of transmission in schools and in children will lead to significant educational disruption, a problem not addressed by abandoning isolation of exposed children (depending on imperfect rapid tests daily).<sup>4</sup> The root cause of educational disruption is transmission, not isolation. Strict mitigations in schools alongside measures to keep community transmission low and eventual vaccination of children will ensure children can remain in schools safely.<sup>5-7</sup> This is all the more important for clinically and socially vulnerable children. Allowing transmission to continue over the summer will create a reservoir of infection, which will likely accelerate spread after schools and universities re-open in autumn.

Third, the government's strategy provides a fertile ground for the emergence of vaccine-resistant variants.<sup>8</sup> This would place all at risk, including those already vaccinated, within the UK and globally. While vaccines can be updated, this requires time and resources, leaving many exposed in the interim. Spread of potentially more transmissible escape variants would disproportionately impact the most disadvantaged in our country and other countries with poor access to vaccines.

Fourth, this will have a significant impact on health services and exhausted healthcare staff who have not yet recovered from previous waves. The link between cases and hospitalisations has not been broken, and rising cases will inevitably lead to increased hospitalisations, applying further pressure at a time when millions are waiting for medical procedures and routine care.

Fifth, as more deprived communities are more exposed to and more at risk from covid, these policies will continue to disproportionately impact the most vulnerable and marginalised, deepening inequalities.

In the light of these grave risks, and given that vaccination offers the prospect of quickly reaching the same goal of population immunity without incurring them, we consider that any strategy which tolerates high levels of infection to be both unethical and illogical. The government must reconsider its current strategy and take urgent steps to protect the public, including children. We believe it is

embarking on a dangerous and unethical experiment, and we call on it to pause plans to abandon mitigations on July 19th.

Instead, the government should delay complete re-opening until (i) everyone, including adolescents, have been offered vaccination and uptake is high and (ii) mitigation measures, especially adequate ventilation and spacing, are in place in schools. Until then, public health measures must include those called for by e.g. the World Health Organization [universal masking in indoor spaces, even for those vaccinated], SAGE & CDC [ventilation and air filtration], Independent SAGE [effective border quarantine; test, trace isolate & support]. This will ensure that everyone is protected, and make it much less likely that we will need further restrictions or 'lockdowns' in the autumn.

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Appendix:

### **The government is pursuing a strategy of population immunity through mass infection**

The dangers of pursuing population immunity through mass infection with SARS-CoV-2 were outlined by a group of scientists in the John Snow Memorandum in October 2020.<sup>1</sup> The Memorandum outlined the many scientific and ethical reasons why such a strategy was deeply flawed.<sup>1</sup> What we have learned since has vindicated this stance. We have since witnessed extensive virus evolution giving rise to multiple variants which are more transmissible, more severe and capable of partially evading immunity conferred by vaccines or previous infection.<sup>2</sup> Infection-acquired immunity from COVID-19 provides inferior protection compared with vaccination while re-infections appear more common than previously thought.<sup>3</sup> Persistent and sometimes debilitating illness have been found in 10-30% of those infected, including among the young.<sup>4-5</sup> It is clear that COVID-19 is far more than a respiratory disease; it affects many body systems<sup>6-8</sup> including the brain, even in people who initially experienced only mild disease.<sup>9</sup> Now that safe and highly effective vaccines are available, that protect people against severe disease and reduce transmission, it is unethical to expose people deliberately to risk of infection.

Unfortunately, England's infection-acquired population immunity strategy has re-emerged. Thus far, the government's policy of acting only when healthcare services are at breaking point has contributed to over 150,000 deaths,<sup>10</sup> up to 2 million people with Long COVID,<sup>11</sup> and the emergence and spread of the highly transmissible Alpha variant that caused a devastating 2<sup>nd</sup> wave in the UK before spreading across Europe and beyond. The government's refusal to adopt adequate mitigations in schools at a time of high levels of community infections<sup>12-13</sup> has contributed to mass infections of children and onward transmission to family members. Children have suffered significant educational disruption, missed key developmental milestones, and too many have lost parents or grandparents as a result.

The government removed the mandate for masks in English secondary schools on 17th May 2021, despite the emerging dominance of the even more transmissible Delta variant.<sup>14</sup> Now, when infection rates in children and young adults are high and rising rapidly,<sup>15-16</sup> ministers have announced plans to abandon isolation of contacts of schoolchildren (replacing this with suboptimal daily rapid tests),<sup>17</sup> and to abandon bubbles in schools after the summer.<sup>18</sup> This will leave children, who have been woefully unprotected in schools throughout the pandemic, exposed to a significantly increased risk of infection. While the Pfizer vaccine has been shown to be safe in children over 12 and is being administered in many countries,<sup>19</sup> some government advisors, albeit speaking personally,<sup>20</sup> have advocated allowing children to be infected, arguing that the benefit-harm balance may be better than vaccination. So far, despite MHRA approval, the Joint Committee on Vaccination and Immunisation (JCVI) has not supported vaccination of adolescents, a policy out of step with much of Europe, North America, and South East Asia, where millions of under 18s have been vaccinated.<sup>21</sup> The inevitable consequence of these policies has been, and will continue to be, mass infection in children, with ensuing chronic illness for many.

The 'road map' for re-opening, announced in February 2021,<sup>22</sup> did not focus on controlling transmission, unless this risked overwhelming the NHS. The adherence to the stage 3 of the road map's releasing of restrictions effectively demonstrated the government's acceptance of risks that a significant 3<sup>rd</sup> wave modelled by the government's advisory group (SAGE SPI-M) could occur.<sup>23</sup> Continuing roll-out of vaccines meant that much larger surges in cases could be tolerated before

healthcare capacity was overwhelmed. Whilst the emergence of new variants of concern was a criterion for re-evaluating the road map,<sup>22</sup> the rapid spread of the delta variant was not seen as a reason to pause further opening. The acceptance of virus spread through the young is no different to the strategy of herd immunity by infection, which was rightly abandoned by the government in late March 2020.

England is now experiencing a third wave with over 20,000 daily reported cases and 9 day doubling times as of 2 July 2021, this time with the more transmissible Delta variant. Yet the government is rapidly easing measures in the midst of a surging pandemic. Euro2020 matches attended by tens of thousands of fans have gone ahead, leading to 15% of those who attended from Scotland becoming infected.<sup>24</sup> While it is unclear where these infections were acquired, it is likely that activities such as travel and socialisation linked to these events have contributed to spread. On 19<sup>th</sup> of July, almost all restrictions including social distancing and widespread mask use will be stopped.<sup>25</sup> The same day, nightclubs will open without the need for pre-testing.<sup>26</sup> This has been widely branded as 'freedom day', sending the message that the pandemic is effectively over. As cases rise rapidly, some government advisors and MPs are now suggesting that release of daily case updates on COVID-19 should be stopped, as they 'are a long way from being an important cause of death'.<sup>27</sup>

These strands of evidence support the conclusion that the policy being pursued, by design or default, is population immunity through mass infection of large swathes of the population. Herd immunity to an infectious disease has never been achieved by this approach in the timescale that would avoid undue harm to the UK population.

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