by official handles of government. COVID-19 fact checkers were updated to address misinformation on social media.

Understanding the support provided by social media during the pandemic might help to create support for crises in the future.[5] There are limitations of social media, such as the spread of rumours and panic messages and anxiety induced by sharing stories of suffering. Twitter users, however, have paved the way to turn social media into a blessing during the pandemic. We have witnessed many stories of courage, struggles to survive, and ordinary citizens turning into saviours to help society in one of the worst pandemics ever faced.

I declare no competing interests.

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Can the USA return to pre-COVID-19 normal by July 4?

As of May 17, 2021, more than 270 million vaccine doses have been administered in the USA, with over 123 million people fully vaccinated, having received the second dose in a two-dose COVID-19 vaccine series (Moderna or Pfizer-BioNTech) or one dose of the single-shot vaccine (Johnson & Johnson).[1] President Joe Biden has set a goal of vaccinating 70% of adults by July 4 for the nation to return closer to pre-pandemic normal. However, at the current vaccination pace of fewer than 2·5 million doses per day, at least 50 million adults will still not be fully vaccinated by that date, along with more than 48 million unvaccinated children younger than 12 years. To project the impact of lifting social distancing measures by July 4, we fitted an agent-based model of COVID-19 transmission and vaccination[2] to daily case incidence reported in the USA from Oct 1, 2020, to May 1, 2021 .

We project that, at the vaccination rate of 2 million doses per day and expansion of vaccine eligibility to children aged 12–15 years on May 13, 2021, the daily incidence would decline to less than 3 per 100 000 population by July 1 (appendix p 5). The updated guidelines from the US Centers for Disease Control and Prevention (CDC) permit fully vaccinated individuals to resume certain pre-pandemic activities and social interactions 2 weeks after the second dose.[3] We found a minimal change in daily incidence even if vaccinated individuals reverted to their pre-pandemic contact behaviour as soon as 2 weeks after their first dose. By contrast, if the loosening of CDC guidelines was extended to all individuals on July 4, we project a surge in COVID-19 cases, with a magnitude that depends on the social activity level of unvaccinated individuals. For example, if all individuals resumed their pre-pandemic activities on July 4, the surge would lead to an average of 102 daily cases per 100 000 population at the peak, corresponding to 337 865 (95% credible interval [CrI] 289 082–384 304) cases for the entire USA. This peak would represent a 21% increase beyond the apex of the pandemic thus far, which occured in January, 2021. Hospitalisations and deaths, although lower than the previous wave, would still be substantial, with an average of 9780 (95% CrI 8289–11 200) hospital admissions and 1261 (962–1593) deaths at the peak of the surge. Under the scenario that social activities of unvaccinated individuals revert to 70% of their pre-pandemic level on July 4, we still project a surge, with a peak incidence comparable to that observed in April, 2021, but considerably lower hospitalisations and deaths (appendix p 6). However, we found that social distancing measures could be lifted for all individuals as early as September without the risk of a significant surge in incidence or severe outcomes (appendix p 8).

Our results demonstrate that relaxing social distancing measures for vaccinated individuals would have minimal impact on incidence, but extending such guidelines to other individuals before adequate vaccination of children could fuel a rapid rise in COVID-19 cases, hospitalisations, and deaths.[4] Furthermore, mounting incidence makes the emergence of additional variants of concern more likely, potentially compromising the efficacy of vaccines.[5] These findings have important policy implications for the control of the pandemic. Given that most children might not be vaccinated until 2022, it is unlikely that the coverage of fully vaccinated individuals aged 12 years and older would confer sufficient herd immunity by July 4. To bank the benefits of vaccination, avert additional pandemic waves, and facilitate a sustainable resumption of social and economic activities, we urge a cautious approach to updating COVID-19 guidelines in the coming months, especially given the emergence of highly transmissible SARS-CoV-2 variants.[6] Our study underscores the risks of prematurely lifting measures, which will be borne disproportionately by individuals who are not yet vaccinated.

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For **COVID-19 incidence data** see https://github.com/nytimes/covid-19-data/

See **Online** for appendix

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