

THE UNIVERSITY of EDINBURGH

Edinburgh Research Explorer

Risks to children during the covid-19 pandemic

Citation for published version: Bhopal, SS, Bagaria, J & Bhopal, R 2020, 'Risks to children during the covid-19 pandemic: some essential epidemiology', *BMJ (Clinical research ed.)*, vol. 369, pp. m2290. https://doi.org/10.1136/bmj.m2290

Digital Object Identifier (DOI):

10.1136/bmj.m2290

Link: Link to publication record in Edinburgh Research Explorer

Document Version: Publisher's PDF, also known as Version of record

Published In: BMJ (Clinical research ed.)

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



- Check for updates
- ¹ Newcastle University, Newcastle upon Tyne NE1 7RU, UK
- ² Usher Institute, University of Edinburgh, Edinburgh, UK

sunil.bhopal@newcastle.ac.uk Cite this as: *BMJ* 2020;369:m2290 http://dx.doi.org/10.1136/bmj.m2290 Published: 10 June 2020

RISKS TO CHILDREN DURING COVID-19 PANDEMIC

Risks to children during the covid-19 pandemic: some essential epidemiology

Sunil S Bhopal, ¹ Jayshree Bagaria, ¹ Raj Bhopal²

Difficult and varying decisions are being made worldwide about ways to protect children from covid-19. Green warns of the dangers of scarring a generation through curtailment of child protection systems during the pandemic.¹

Given multiple unknowns, we think that caution from parents and carers is natural, not least because the rare inflammatory syndrome reported in recent weeks remains under investigation.² But caution in the form of shielding is not risk-free, and children cannot be kept at home if they are to thrive.

To help decision making we have compiled information for parents, teachers, clinicians, and policy makers grappling with this quandary. We examined mortality data for 0-19 year olds, showing that across France, Germany, Italy, Korea, Spain, the United Kingdom, and the United States there were 44 deaths from covid-19 in 0-19 year olds (total population 135 691 226) up to 19 May 2020.^{3 4} Over a normal three month period, in these countries, published Global Burden of Disease data estimate that more than 13 000 deaths would be expected from all causes in this age group, including over 1000 from unintentional injury and 308 from lower respiratory tract infection including influenza.⁵ Covid-19, by this estimate, was responsible for about 0.333% of deaths of o-19 year olds. Results were similar for each country. We are regularly updating a data table including deaths by age categories and country, and we welcome feedback (https://tinyurl.com/childcovid; this table and fuller details also in press⁶).

Given these data, we think the medical community should inform parents, carers, teachers, clinicians, and decision makers that the direct impact of covid-19 on children is currently small in comparison with other risks and that the main reason we are keeping children at home is to protect adults. This conclusion might change as the pandemic evolves, so the epidemiology of covid-19 in children should be closely monitored.

Competing interests: None declared.

Full response at: https://www.bmj.com/content/369/bmj.m1669/rr-4.

- 1 Green P. Risks to children and young people during covid-19 pandemic. *BMJ* 2020;369:m1669. doi: 10.1136/bmj.m1669 pmid: 32345583
- 2 Mahase E. Covid-19: concerns grow over inflammatory syndrome emerging in children. *BM*/2020;369:m1710. doi: 10.1136/bmj.m1710. pmid: 32345602
- ³ National Institute for Demographic Studies (INED). The demography of deaths by covid-19. 2020. https://dc-covid.site.ined.fr/fr/.
- 4 Centers for Disease Control and Prevention. National Center for Health Statistics. Daily updates of totals by week and state. Provisional death counts for coronavirus disease (covid-19). 2020.https://www.cdc.gov/nchs/nvss/vsrr/covid19/index.htm

- 5 Global Burden of Disease Study. Data resources. 2017. http://ghdx.healthdata.org/gbd-2017.
- ⁶ Bhopal S, Bagaria J, Bhopal R. Children's mortality from COVID-19 compared with all-deaths and other relevant causes of death: epidemiological information for decision-making by parents, teachers, clinicians and policymakers. *Public Health* 2020; [forthcoming] doi: 10.1016/j.puhe.2020.05.047.

This article is made freely available for use in accordance with BMJ's website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may use, download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.