# Analysis of the potential drivers of seasonality in COVID-19 transmission dynamics in 409 locations across 26 countries

**Rachel Lowe**

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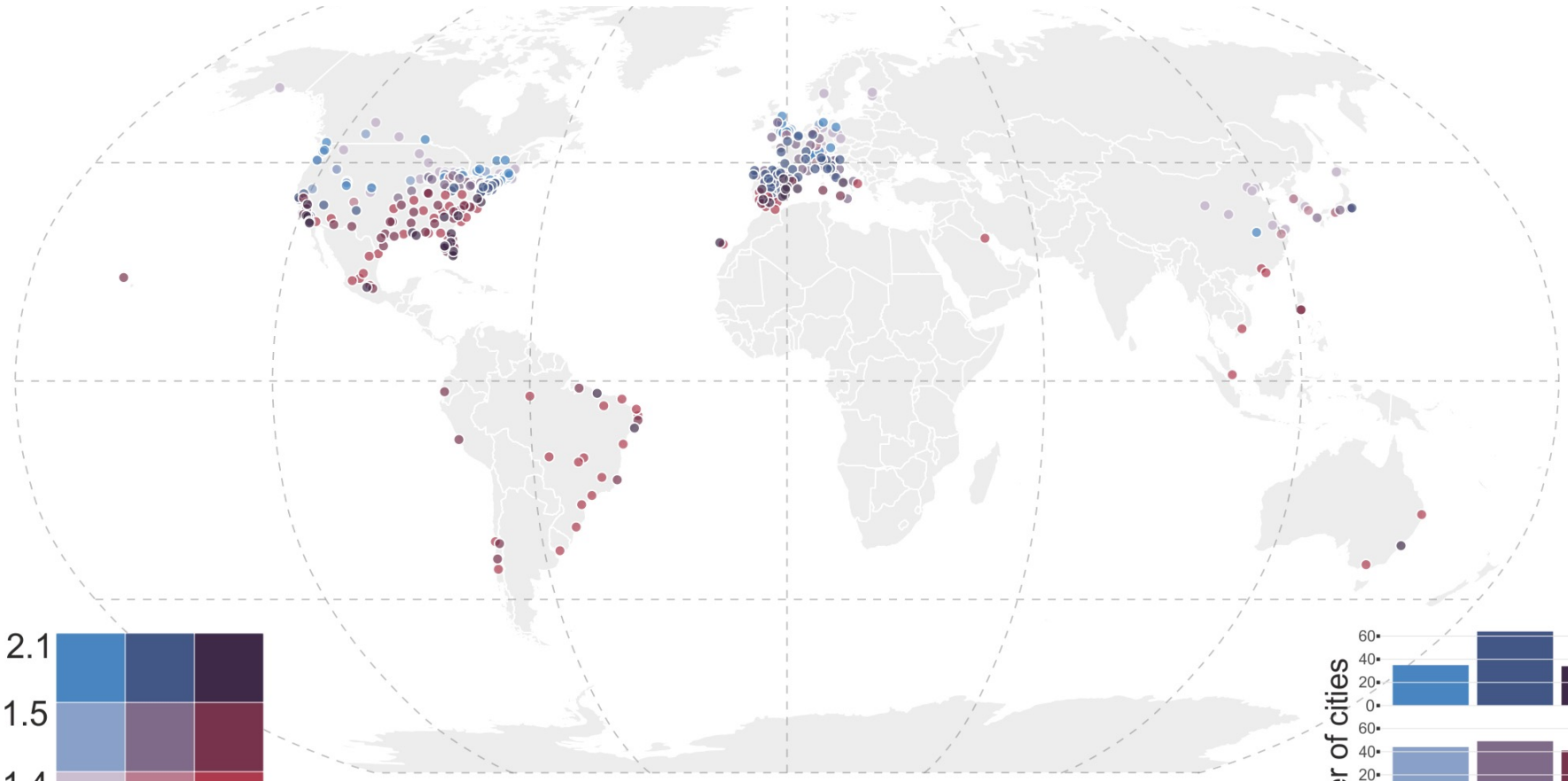
On behalf of the MCC Collaborative Research Network and the CMMID 2019-nCoV working group

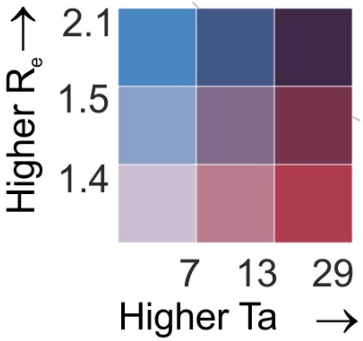
LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

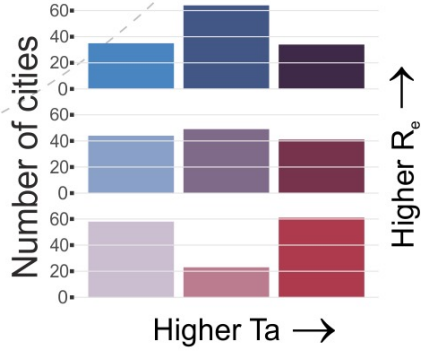
Centre on Climate Change & Planetary Health

cmmid centre for the mathematical modelling of infectious diseases

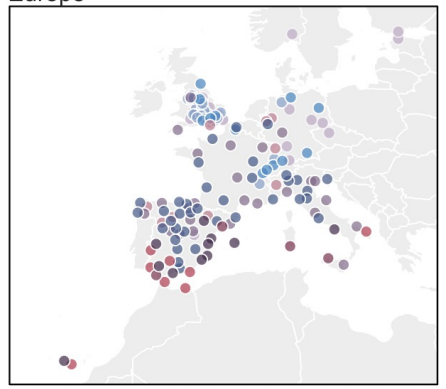
# 3 million COVID-19 cases across > 500 cities



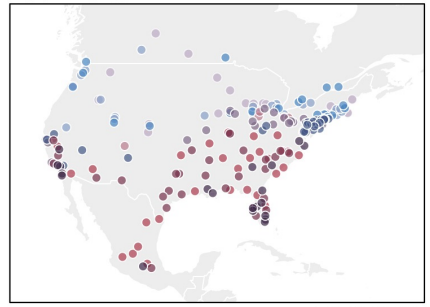



Europe

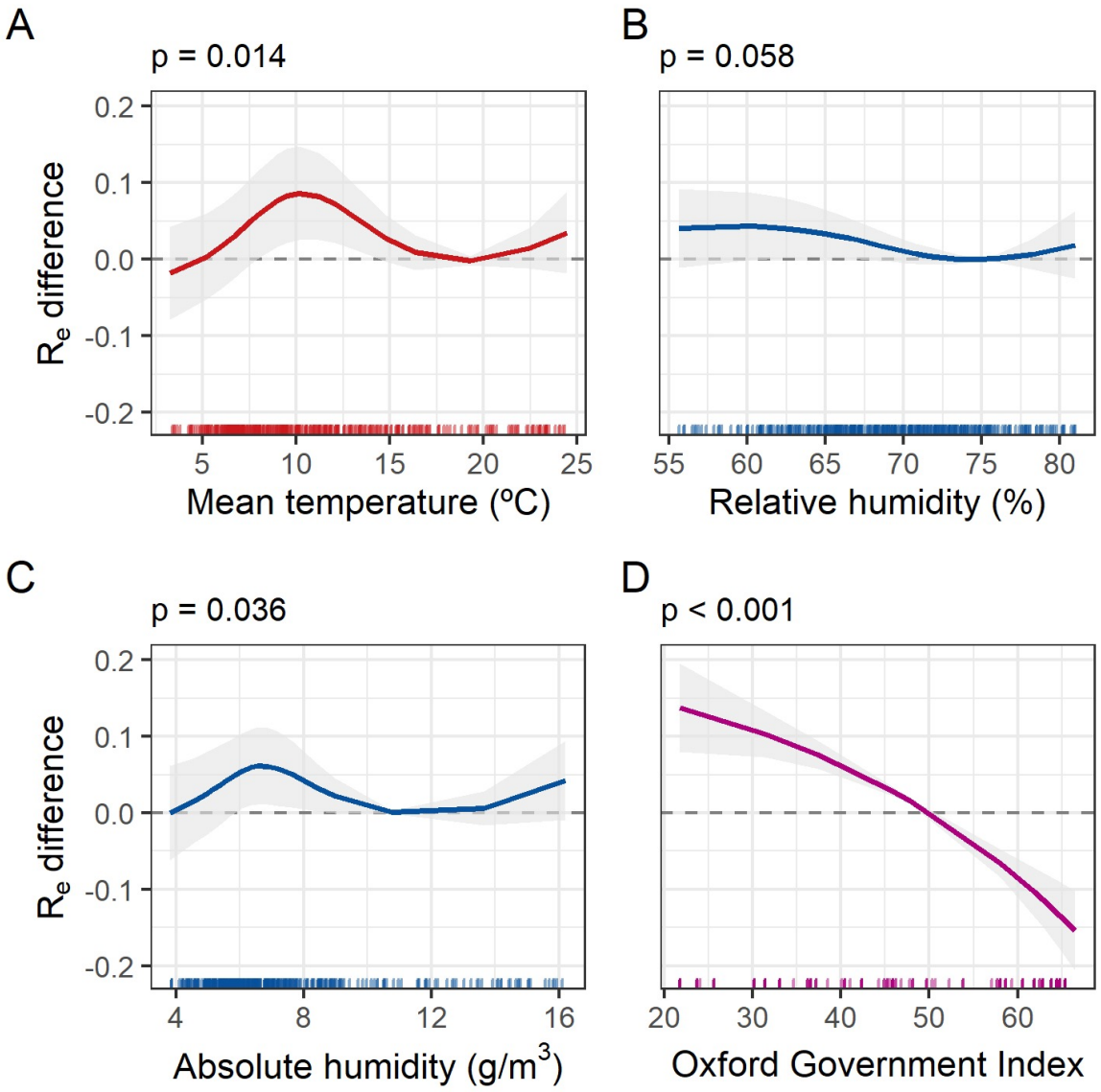


North America



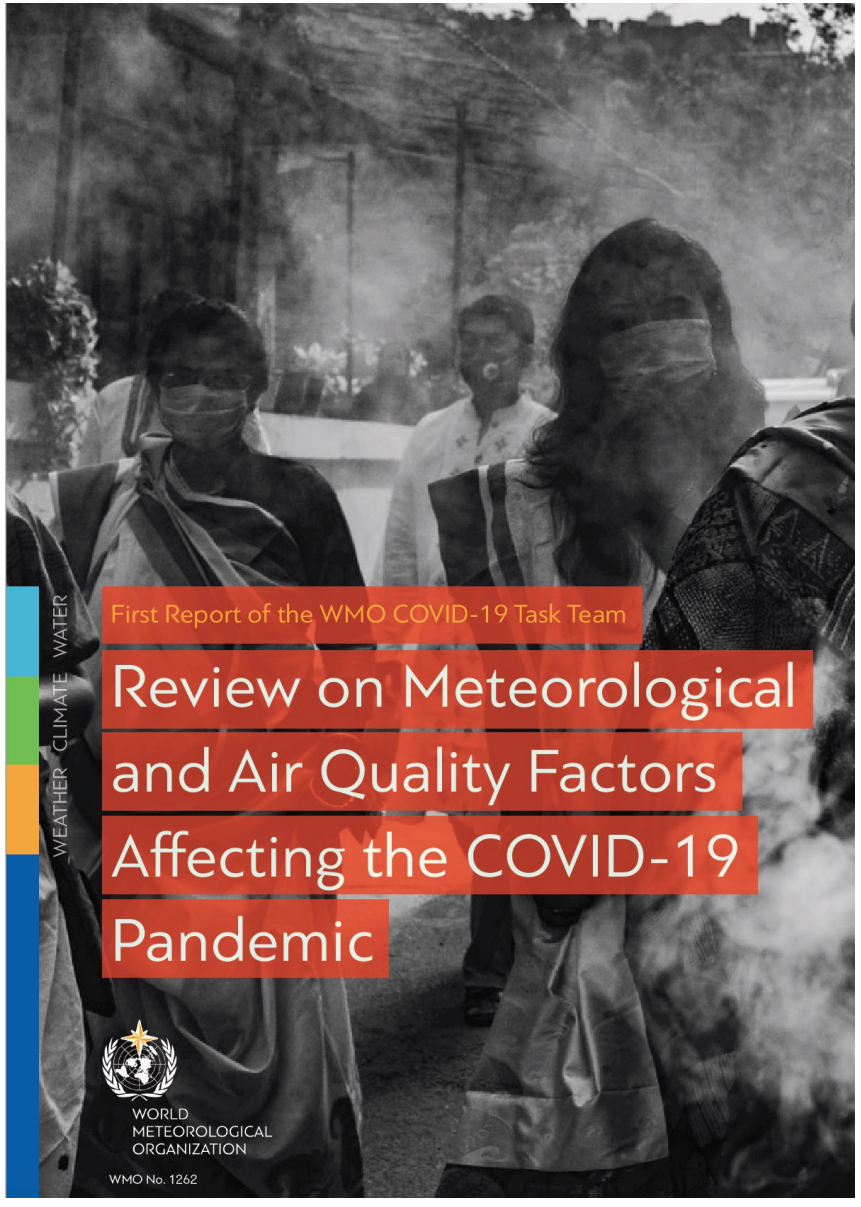
East Asia

# Climate, NPIs and $R_e$




Sera *et al.*, (in review)

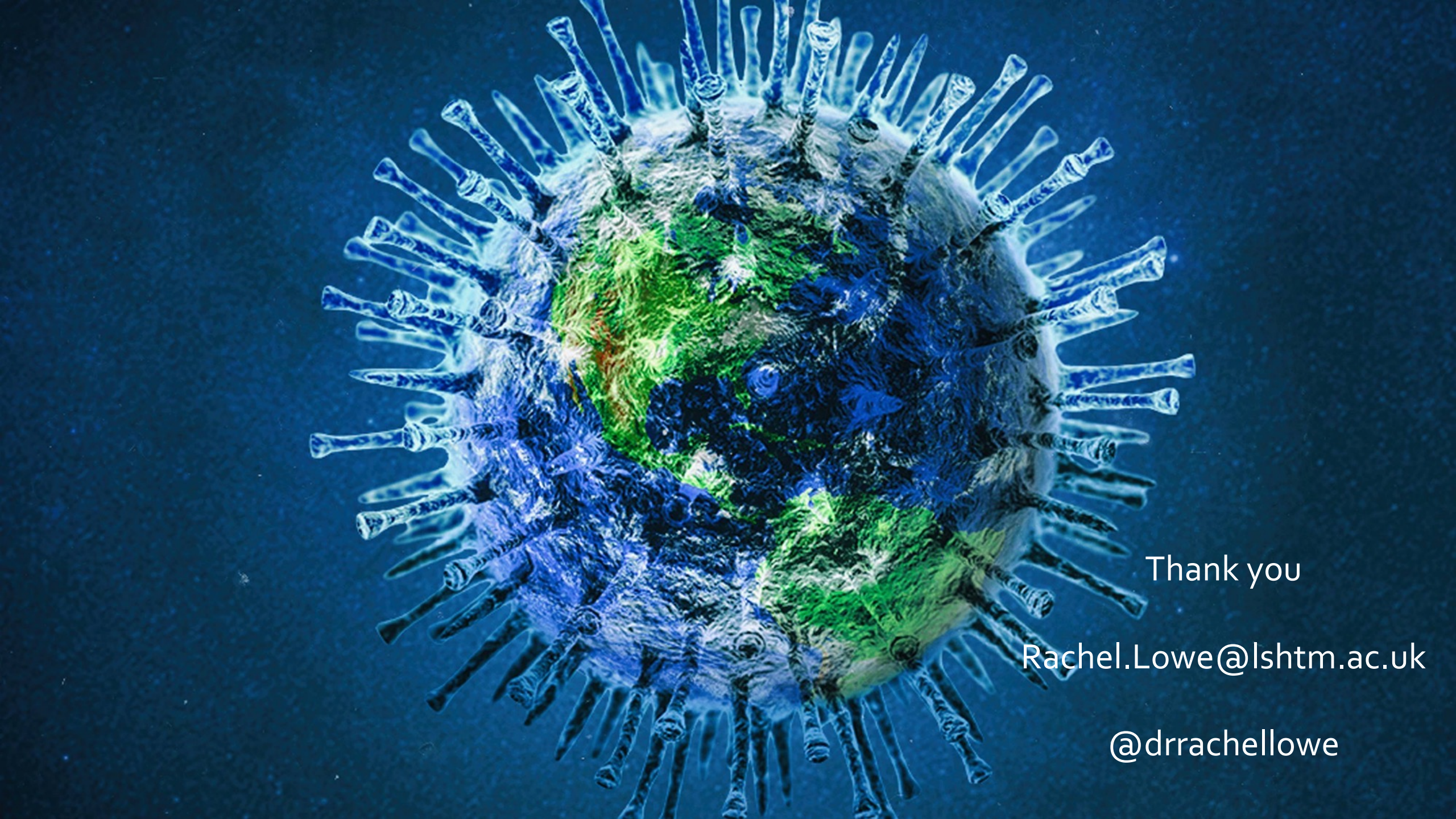
# First report of the WMO COVID-19 Task Team




**Government interventions outweigh weather factors in determining COVID-19 transmission patterns**

The First Report of the World Meteorological Organization's COVID-19 Task Team presents the current state of knowledge on meteorological and air quality factors affecting COVID-19 dynamics.

To date, COVID-19 dynamics have been driven by non-pharmaceutical interventions, human behaviour and underlying socio-economic vulnerabilities. Evidence on the influence of meteorological and air quality conditions (MAQ) on COVID-19 is still inconclusive. Global vaccination roll-out and new variants will further challenge our ability to disentangle the impact of MAQ factors on transmission.



Thank you

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