COVID-19 Critical Intelligence Unit

Evidence digest

19 August 2022

The evidence digest collates recently released reports and evidence – provision of these links does not imply endorsement nor recommendation.

SARS-CoV-2 infection in children, brain infection in COVID-19, virological characteristics of Omicron BA.2.75, COVID rebound

Peer reviewed journals featured:

- A systematic review on SARS-CoV-2 infection in children and implications for vaccination <u>here</u>
- Randomised clinical trial of metformin, ivermectin, and fluvoxamine for COVID-19 <u>here</u> and associated editorial here
- Narrative review on brain infection in COVID-19 patients here
- Observational studies on:
 - Comparison of severe maternal morbidities associated with specific SARS-CoV-2 variants <u>here</u> and associated commentary <u>here</u>
 - o Healthcare utilisation in the 6 months following SARS-CoV-2 infection here
 - Durability of heterologous and homologous COVID-19 vaccine boosts here
 - o Antibody response in immunocompromised patients with hematologic cancers here
 - Association of COVID-19 and influenza with risk of arterial and venous thrombosis among hospitalised patients <u>here</u>
 - o Phenotypes of disease severity in hospitalised COVID-19 patients in the US here
 - Safety of COVID-19 vaccines in pregnancy here and associated commentary here
 - Long COVID and psychiatric disorders after COVID-19 hospitalisation <u>here</u>
 - Neurological and psychiatric risk trajectories after SARS-CoV-2 infection <u>here</u> and associated commentary <u>here</u>
 - Empirical evidence on the efficiency of backward contact tracing in COVID-19 here
 - o A fourth COVID-19 vaccination in rituximab-treated patients here
 - o Electronic nose (GeNose C19) for sniffing out COVID-19 here
- Commentary on health worker burnout and well-being in the US here

Letters and correspondence discussed:

- Challenges and opportunities for COVID-19 self-test data in the US here
- Risk of SARS-CoV-2 acquisition in health care workers according to cumulative patient exposure and preferred mask type here
- COVID-19 and microbiome diversity in sub-Saharan Africa <u>here</u> and author's reply <u>here</u>
- Comparative neutralisation profile of Omicron subvariants BA.2.75 and BA.5 here



Pre-peer review articles featured:

- Virological characteristics of the Omicron BA.2.75 variant here
- Risk factors associated with long COVID in the US here
- Waning of protection induced by prior BA.1/BA.2 infection against BA.5 infection here
- Risk factors for COVID-19 hospitalisation or death during the first Omicron surge in adults here
- Clinical effectiveness of COVID-19 booster against Omicron in long-term care facilities here
- The role of nightlife settings in sustained COVID-19 transmission <u>here</u>
- Further humoral immunity evasion of emerging Omicron BA.4 and BA.5 subvariants here
- Omicron BA.2, BA.4 & BA.5 serum neutralisation in patients receiving monoclonal antibodies here
- Recent prior SARS-CoV-2 infection and risk of Omicron infection and hospitalisation here

Guidance and reports

- The World Health Organization published its weekly COVID-19 epidemiological report here
- The National COVID-19 Clinical Evidence Taskforce released updated recommendations and clinical flowcharts here
- The US Association for the Advancement of Blood and Biotherapies (AABB) published guidelines on the use of COVID-19 convalescent plasma here
- US Centers for Disease Control published guidance on minimising the impact of COVID-19 on individuals, communities, and healthcare systems here

News and blogs

- A US research plan for long COVID here
- Moderna's Omicron BA.1 vaccine and the UK autumn booster program here
- The UK will not buy Evusheld owing to "insufficient data" on protection here
- How much virus does a person with COVID exhale? here
- Should parents delay kids' second COVID-19 vaccine? here
- COVID rebound is surprisingly common even without Paxlovid <u>here</u>
- What have been the direct and indirect health impacts in England? here

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Living Evidence Tables

Living Evidence tables are up-to-date summaries of emerging evidence. Tables are available on SARS-CoV-2 <u>vaccines</u>, and <u>variants</u> of concern, and <u>post-acute sequelae of COVID-19 (long COVID)</u>.



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