



## **ESTIMATING THE COVID-19 MORTALITY BURDEN IN MALAYSIA IN CALENDAR YEAR 2022**

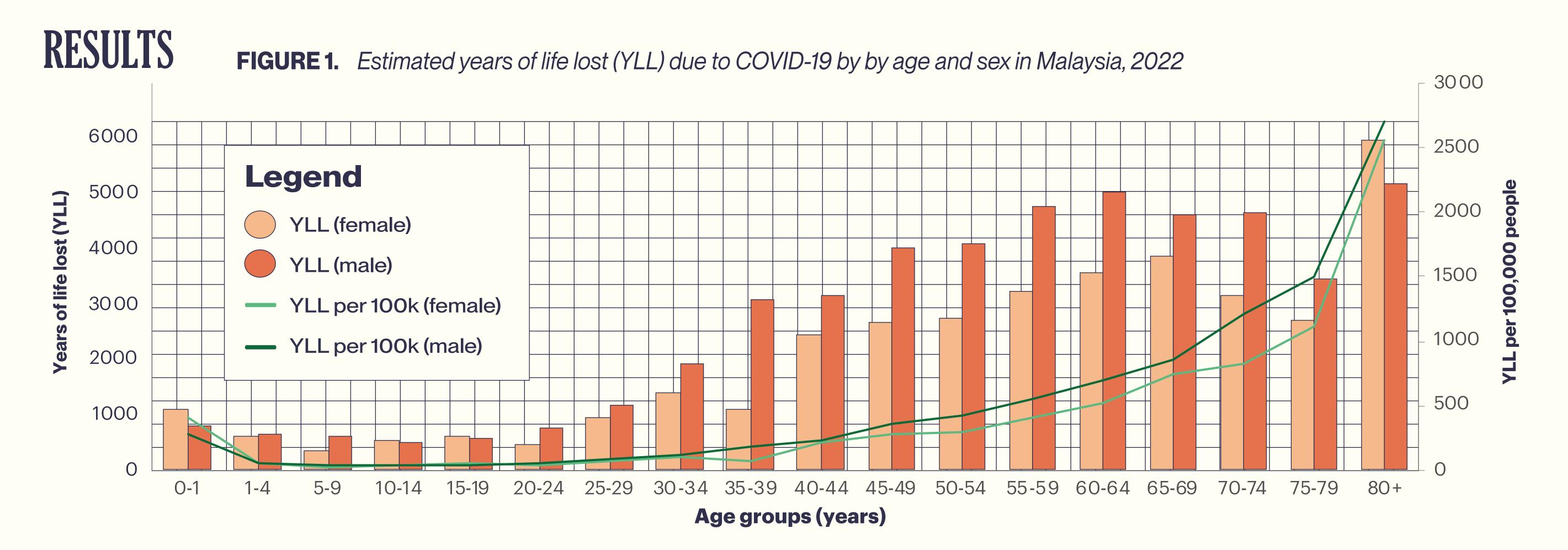
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IUN Measuring years of life lost (YLL) owing to premature death from a disease offers a more appropriate metric than absolute death counts for measuring the mortality burden of a disease. This study is part of a continued effort to estimate the burden of mortality attributable to COVID-19 by measuring YLL to COVID-19 in Malaysia in 2022.

**METHODS** Data on individual COVID-19 deaths in Malaysia that occurred in 2022 were obtained from the Ministry of Health's GitHub repository.<sup>1</sup> We calculated YLL attributable to COVID-19 using life expectancy data from the national life table for 2022 (estimates) published by the Department of Statistics Malaysia (DOSM), and compared the burden of COVID-19 relative to deaths from other leading causes of disease and injury in the country as reported by the Malaysian Burden of Disease and Injury Study 2017 (MBOD 2017).<sup>2</sup>



## COVID-19, 2021 calendar year (665,029 YLL)

Ischaemic heart disease (615,517 YLL)

Cerebrovascular disease (stroke) (429,569 YLL)

Road traffic injuries (324,009 YLL)

LRI (310,309 YLL)

Diabetes (205,500 YLL)

COPD (88,812 YLL)

**COVID-19, 2022 calendar year (86,591 YLL)** 

Breast cancer (52,569 YLL)

Males lost 49,121 YLL and females lost 37.470 YLL— corresponding to 16.1 and 16.6 years lost per person who died of **COVID-19, respectively** in 2022 in Malaysia. The state of Kedah saw the highest YLL rate of 427.8 years per 100k people.

**FIGURE 2.** Comparison of overall estimated YLL due to COVID-19 in calendar years 2021 and 2022 with YLL due to the top ten leading causes of fatal burden in Malaysia in 2017

Endocrine, blood, and immune disorders (51,020 YLL)

**DISCUSSION/CONCLUSION** In 2021, the mortality burden attributable to COVID-19 was higher than that of ischaemic heart disease, which was the leading cause of fatal burden in the country in pre-pandemic times. In 2022, the mortality burden fell by more than seven-fold compared to 2021 — a likely reflection of the success of the National COVID-19 Immunisation Programme / Program Imunisasi COVID-19 Kebangsaan (PICK), which served to prevent severe illness and hence death, thus drastically reducing YLL.



- Official data on the COVID-19 epidemic in Malaysia. Powered by CPRC, CPRC Hospital System, MKAK, and MySejahtera. GitHub. https://github.com/MoH-Malaysia/covid19-public. Accessed 22 February 2022.
- 2. Centre for Burden of Disease Research (CBODR). Malaysian Burden of Disease and Injury Study 2015-2017. Selangor, Malaysia: Institute for Public Health (IKU); 2020.

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