Victorian COVID-19 Surveillance Report
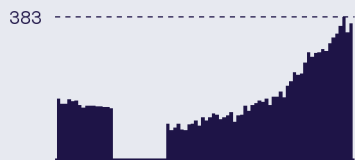
24 May 2024

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VICTORIA State Government | Department of Health

Epidemiological Summary

Current trends indicate high levels of COVID-19 activity in Victoria.

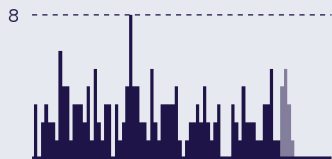| Daily counts last 12 weeks	
383	**The number of people in hospital with COVID-19 has increased this week.** The 7-day average is 347, compared to 284 last week.
	The latest quantitative wastewater measures indicate there are increasing SARS-CoV-2 viral loads in Victorian wastewater in regional catchments. Increasing levels of SARS-CoV-2 in wastewater suggest increasing prevalence of COVID-19 infections in the community. *(Plot shows metropolitan relative quantitative levels of SARS-CoV-2 in wastewater)*
8	**Deaths in the most recent 28-day period (10 Apr 2024 - 07 May 2024) have declined compared to the prior 28-day period (13 Mar 2024 - 09 Apr 2024), with a current 28-day total of 53.** Increases and decreases in the reporting of deaths attributable to COVID-19 tend to lag waves of infections and hospitalisations by several weeks.
	Following rapid growth in early December, **JN.1 remains the dominant variant in Victorian wastewater samples** at approximately 73% in the most recent samples. As of 3 May 2024, 4 JN.1 sublineages were declared Variants Under Monitoring by the WHO, including **KP.3 which has been detected in Victorian wastewater** at approximately 23% in the most recent samples. KP.3 is the fastest growing variant globally, making up 20% of sequenced samples globally in the week to 28 April.

COVID Hospitalisations

Daily COVID-19 cases in hospital and ICU
Data until 21 May 2024

Legend: Hospitalised, ICU
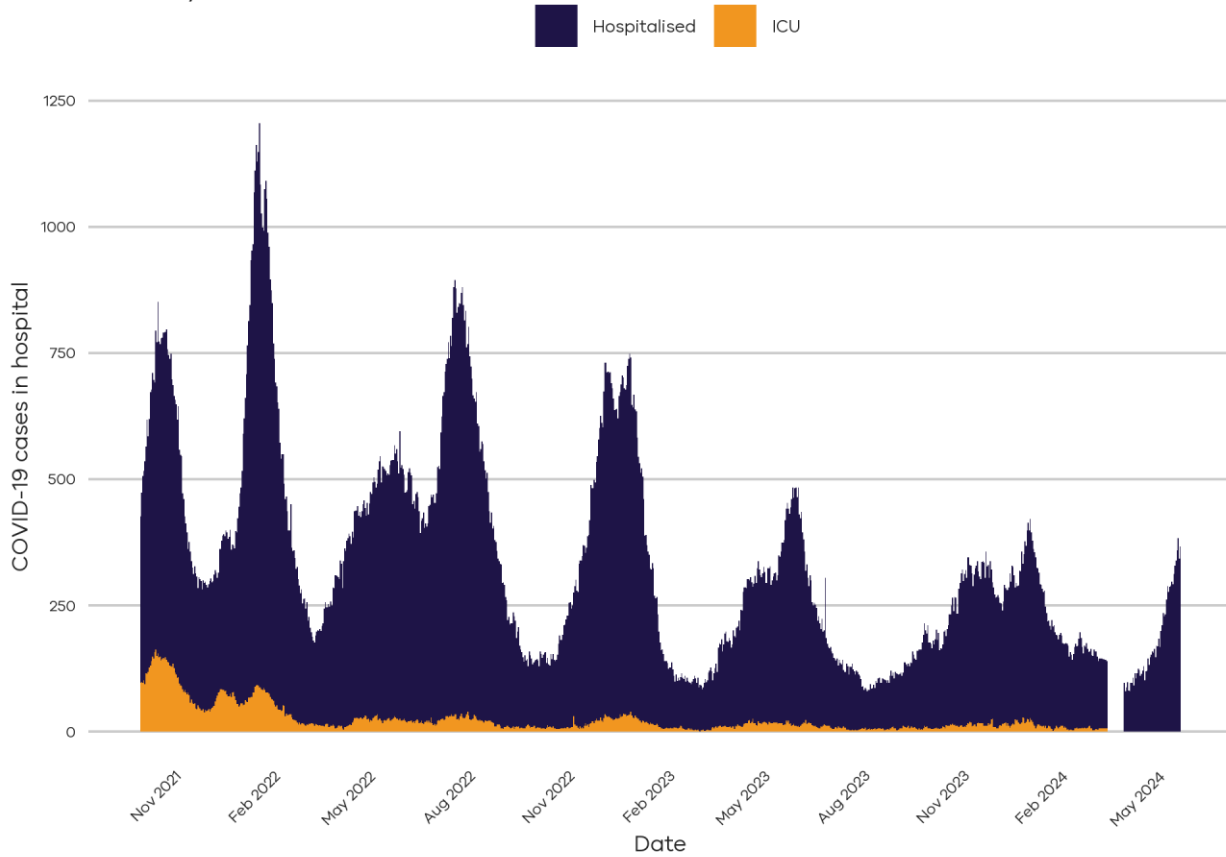
Data source: Critical Health Resource Information System (CHRIS)

COVID-19 hospitalisations by age
Data until 21 May 2024

Legend: 0-4, 5-17, 18-29, 30-49, 50-64, 65-84, 85+
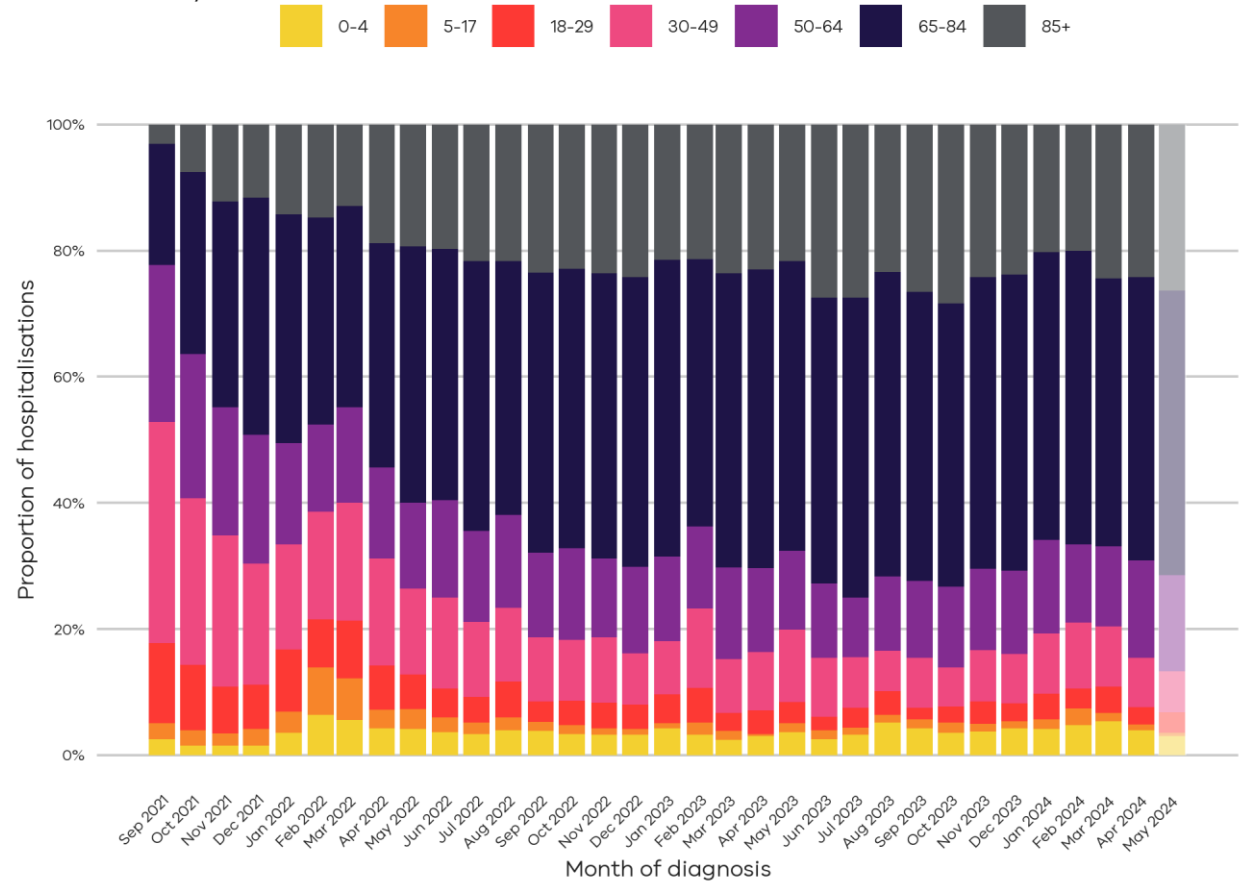
Data source: TREVI, VICNISS
Note: Faded area includes current month where data is incomplete

This graph shows data back to September 2021 when hospitalisations were increasing during the Delta variant wave.
Hospitalisations represent the number of COVID-19 positive patients in hospital on a given day.
Please note that COVID-19 hospitalisation data from CHRIS is unavailable for dates between 15 March 2024 and 30 March 2024
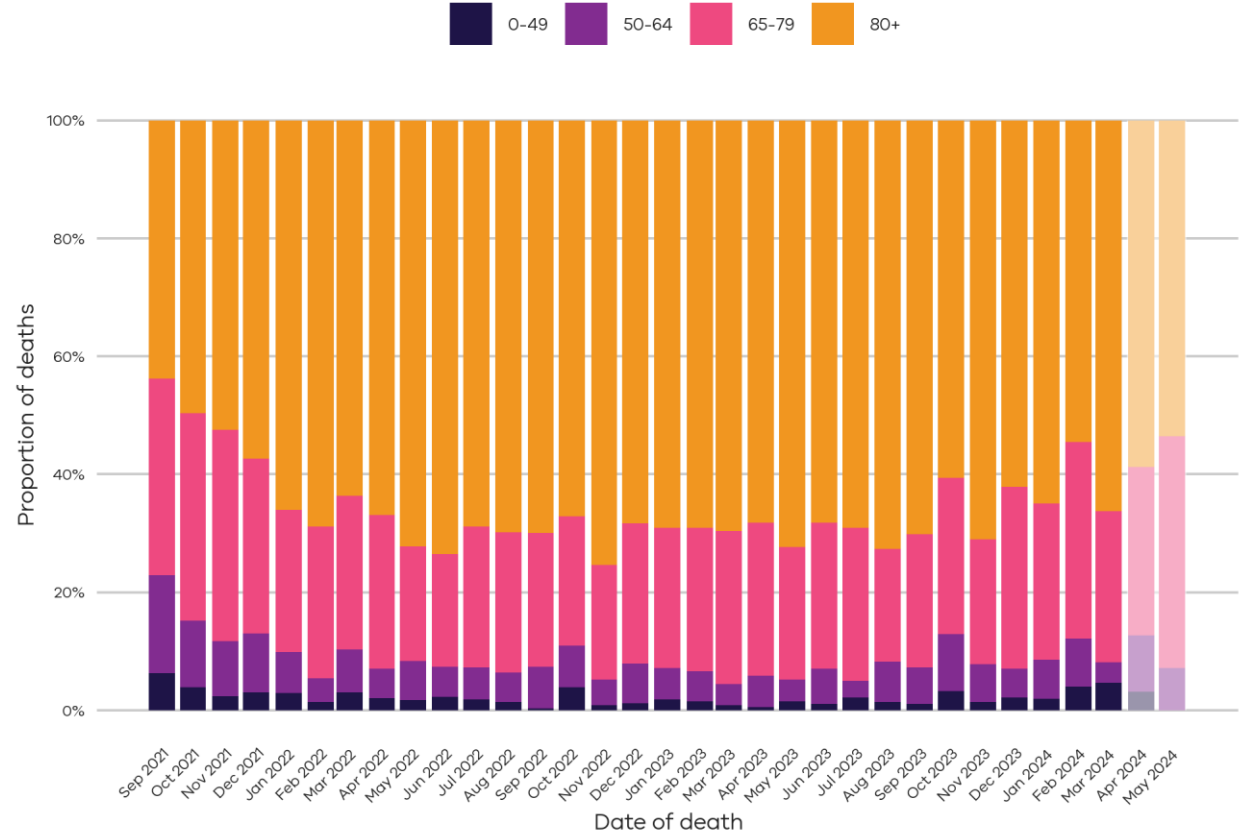
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COVID Mortality

Weekly COVID-19 deaths
Data until 21 May 2024

Weekly deaths (y-axis: 0, 50, 100, 150, 200)

Date of death (x-axis: Oct 2021 – May 2024)
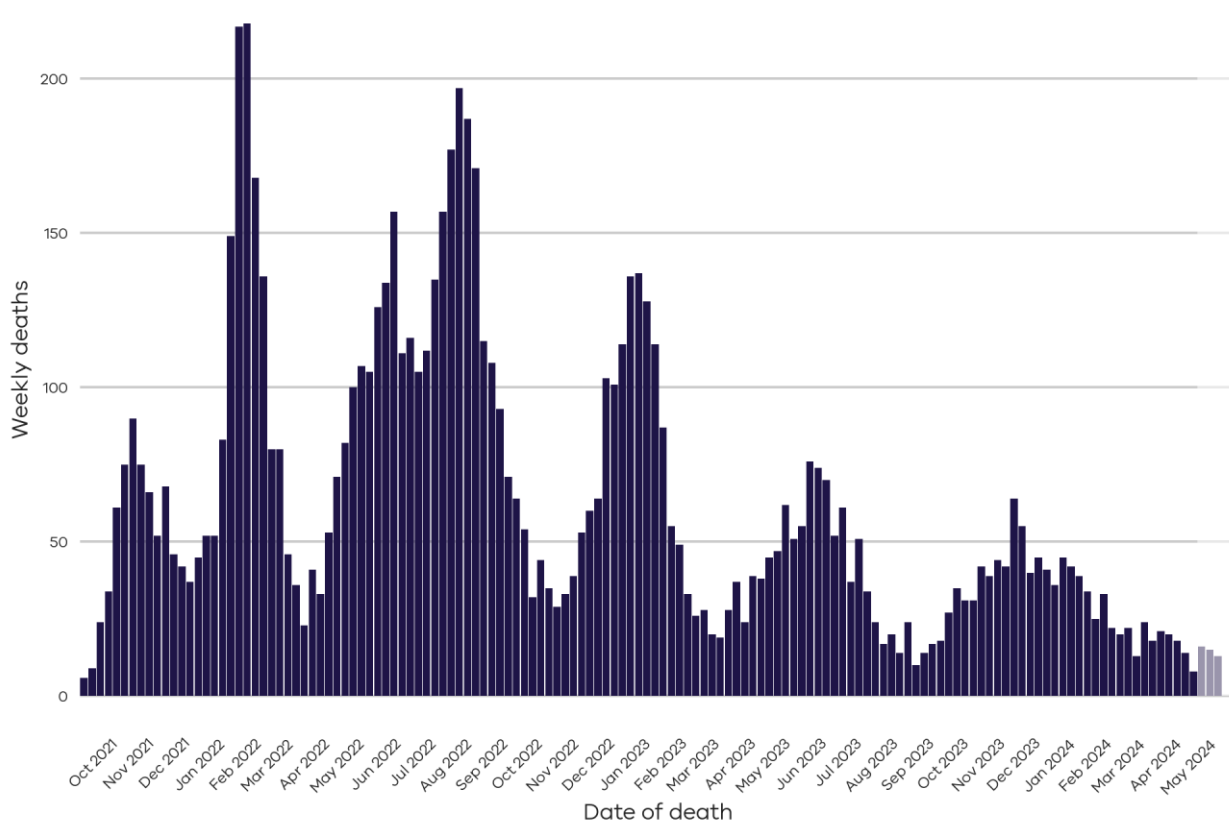
Data source: TREVI
Note: Faded area includes last 4 weeks where data is incomplete

COVID-19 deaths by age
Data until 21 May 2024

Legend: 0-49, 50-64, 65-79, 80+

Proportion of deaths (y-axis: 0%, 20%, 40%, 60%, 80%, 100%)
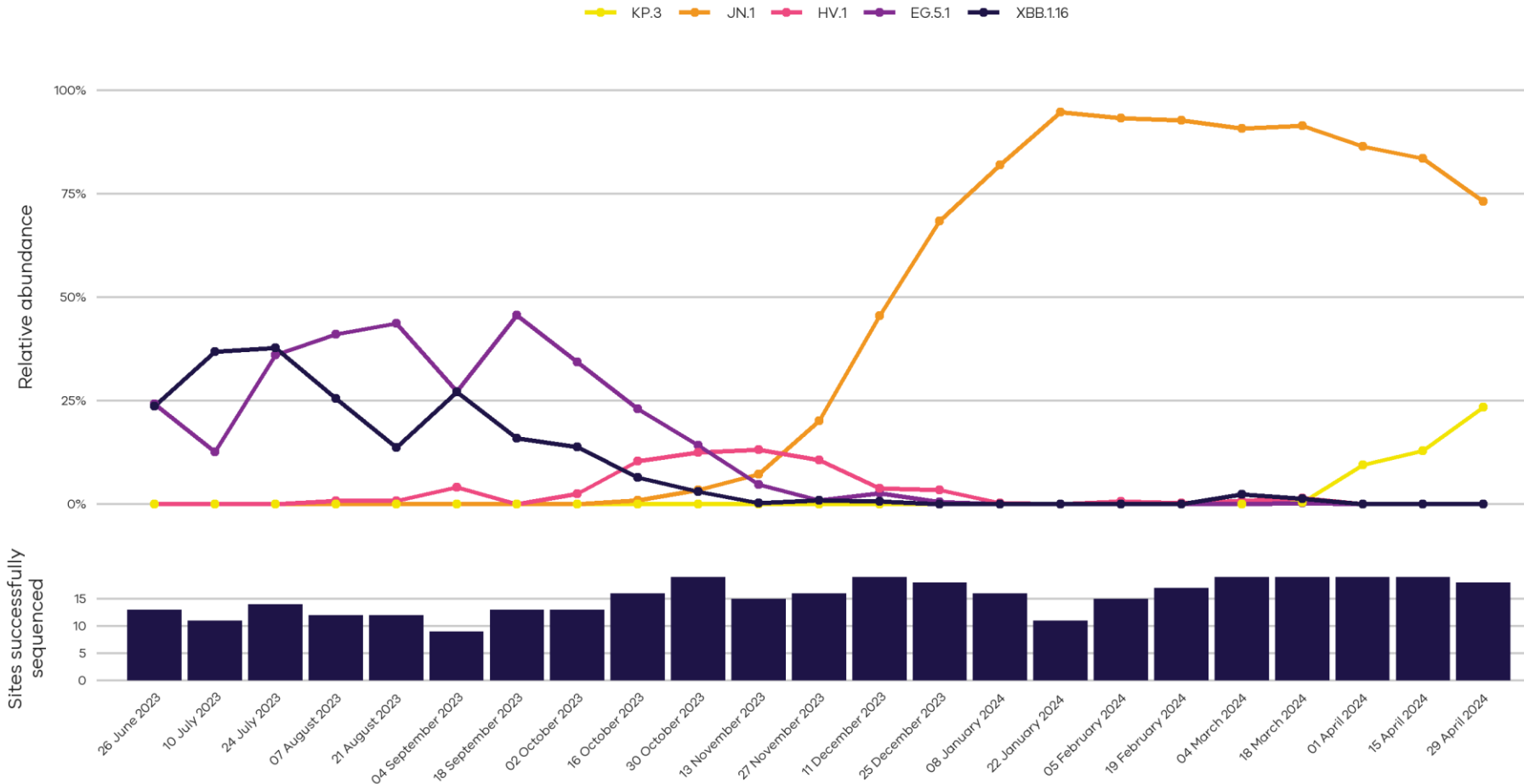
Date of death (x-axis: Sep 2021 – May 2024)

Data source: TREVI
Note: Faded area includes last 4 weeks where data is incomplete

Date is based on date of death, not the date of when each death was reported. This applied to all death metrics in this report unless stated otherwise.

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Wastewater surveillance: variant trends in Victoria

Variant trends in wastewater
Latest retrieval 02 May 2024

Legend: KP.3 — JN.1 — HV.1 — EG.5.1 — XBB.1.16

Y-axis (top chart): Relative abundance (0%, 25%, 50%, 75%, 100%)
Y-axis (bottom chart): Sites successfully sequenced (0, 5, 10, 15)

X-axis dates: 26 June 2023, 10 July 2023, 24 July 2023, 07 August 2023, 21 August 2023, 04 September 2023, 18 September 2023, 02 October 2023, 16 October 2023, 30 October 2023, 13 November 2023, 27 November 2023, 11 December 2023, 25 December 2023, 08 January 2024, 22 January 2024, 05 February 2024, 19 February 2024, 04 March 2024, 18 March 2024, 01 April 2024, 15 April 2024, 29 April 2024

Analysis of wastewater samples can help us understand which SARS-CoV-2 variants are currently circulating in Victoria.

In the past there have been waves of infections and hospitalisations when a new variant or subvariant has spread quickly relative to the others.
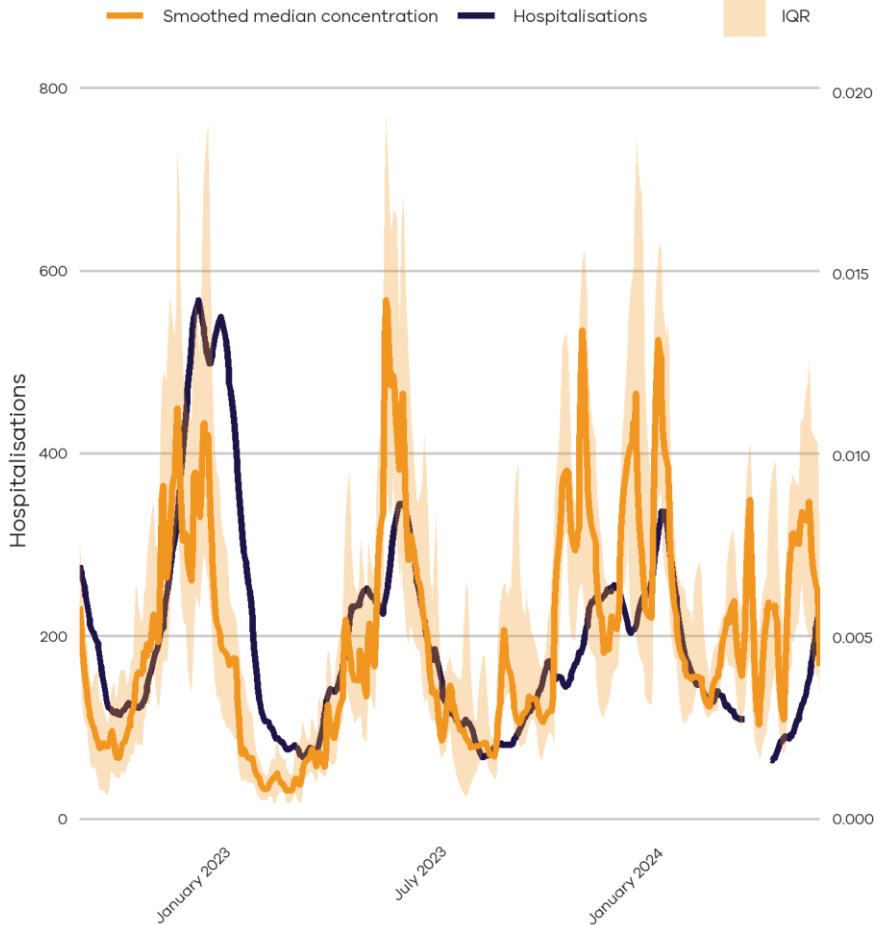
There are a number of closely related sublineages circulating in Victoria. Only the most detected variants have been displayed here.

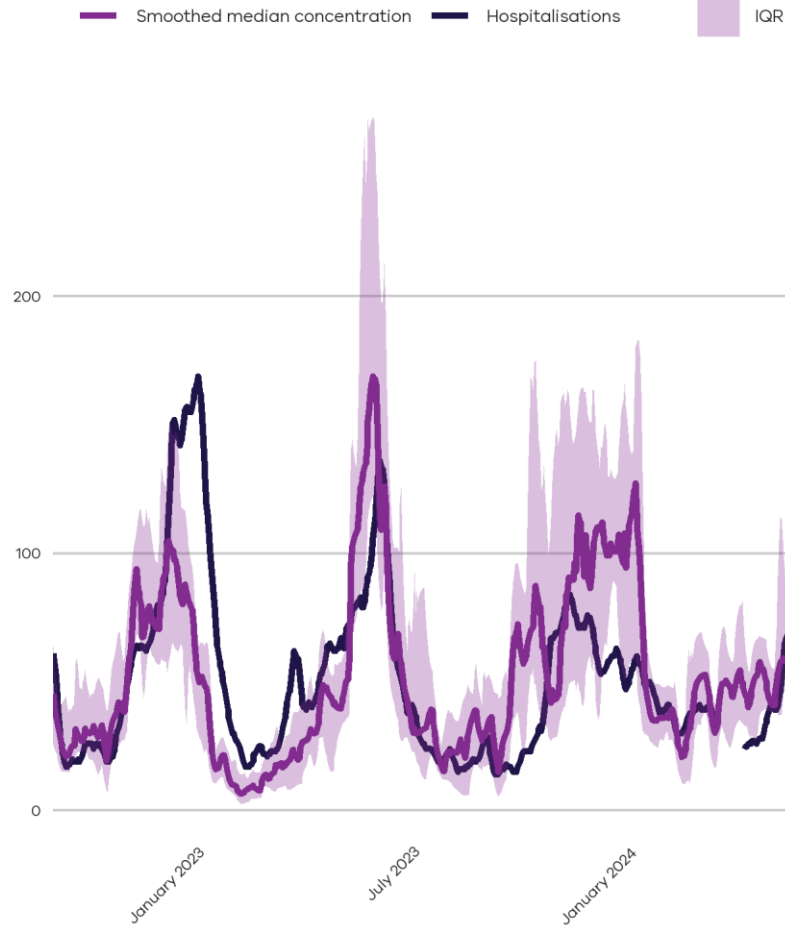*Please note: Previous reports have shown KP.3 included in JN.1.*

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Quantitative Wastewater Levels

Metro Melbourne
Wastewater data until 16 May 2024

Legend: Smoothed median concentration — Hospitalisations — IQR

Regional Victoria

Legend: Smoothed median concentration — Hospitalisations — IQR

Quantitative wastewater sampling and 7-day average hospitalisations provide insights into changes in prevalence and COVID-19 wave detection.

These charts show the median SARS-CoV-2 wastewater viral loads with hospitalisations over time, which show a close relationship.

Quantitative SARS-CoV-2 levels are normalised by PMMoV (a non-pathogenic virus that is shed consistently by the population) and smoothed over the read period to account for rainfall, population movements and catchment size.
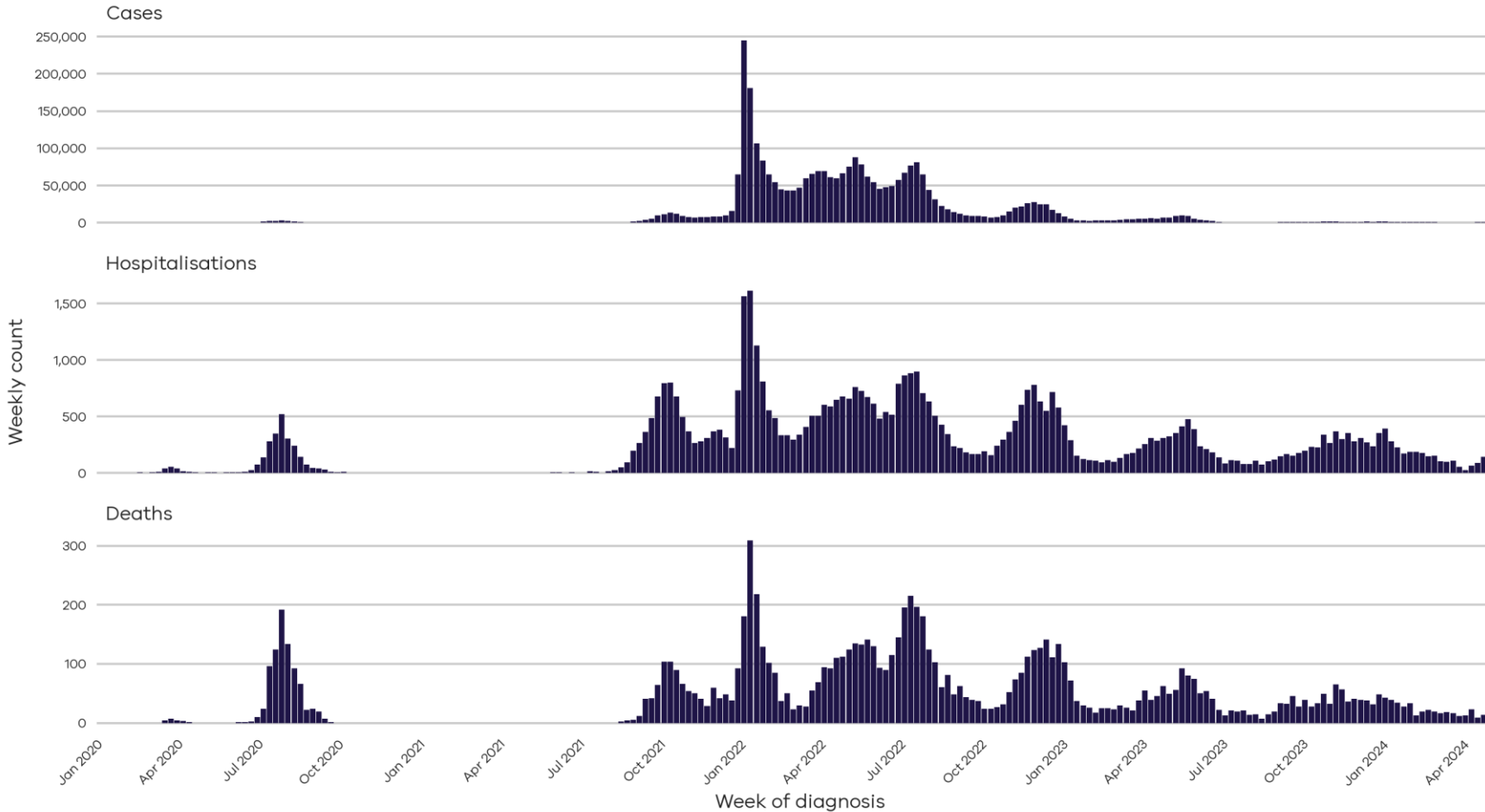
Please note that COVID-19 hospitalisation data from CHRIS is unavailable for dates between 15 and 30 March 2024

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Appendix

COVID-19 Historical Data

Epidemic curve of weekly COVID-19 metrics
Data until 21 May 2024

Data source: TREVI

Cases are reported according to the definitions given in the Coronavirus (COVID-19) CDNA National Guidelines for Public Health Units. Where multiple positive test results are received for the same person within 35 days of the initial test result they are counted as a single case. **As of 30 June 2023, probable cases are not collected by the Victorian Department of Health, case counts since this date reflect cases with a positive PCR test only.**

COVID-19 Hospitalisations represent the number of active COVID-19 patients in hospital on a given day. This is reported in two ways:

- as reported by Victorian hospitals to the Critical Health Resource Information Service (CHRIS) as aggregated data.

- as reported to the Victorian Nosocomial Infection Surveillance System (VICNISS) at case level. Totals using demographic breakdowns from VICNISS may differ from totals using the aggregated values from CHRIS.

COVID-19 deaths are counted according to the Victorian surveillance definition, including all deaths reported in the Victorian Deaths Index (VDI) with COVID-19 listed as a primary or contributing cause of death on the medical death certificate, or a death within 35 days of diagnosis, excluding clearly unrelated causes such as trauma. Deaths may be reported retrospectively as the time between death, submission of the data to VDI and linkage to case data may vary.

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