



COVID-19 and Children's Surveillance Report

Number 3

Compiled: 17 December 2021



Contents

- Overview 2
- Summary..... 3
- List of abbreviations 6
- Australia: Victoria 7
- Australia: New South Wales 8
- Canada 9
- Denmark 10
- England, UK 11
- Finland 12
- Scotland, UK 13
- Singapore 14
- South Africa..... 15
- USA 16
- USA: Comparison of states 17
- USA: Impact of vaccination on disease incidence 19
- Authors 20





Overview

- This weekly summary documents the latest COVID-19 surveillance data in children and adolescents, with a focus on Victoria and New South Wales (NSW) as well as specific countries that are relevant to the Australian context because of their size, COVID-19 epidemiology, the mitigation measures in place and data availability.
- Data on Multisystem Inflammatory Syndrome in Children (MIS-C), otherwise known as Paediatric Inflammatory Multisystem Syndrome (PIMS-TS), is also searched for but is not always available.
- This report is updated weekly using the most recently available data.
- Surveillance data for the Omicron variant of concern is included where available, including for South Africa and Denmark.
- The number of infections in unvaccinated children may also increase if school mitigation measures are few, there are changes to testing criteria and the adoption of screening in schools. The number of cases will be biased towards the age groups that are tested most.



Summary

- Throughout 2021, the proportion of infections in unvaccinated children has generally increased as vaccination of adults has increased.^{1,2} This proportion may continue to increase in countries where a low proportion of children are vaccinated. Many countries are now vaccinating adolescents and the USA and several other countries have begun vaccinating children aged 5 years and over.
- COVID-19 epidemiology in children and adolescents varies by setting.
- Following the return to school, many settings with high vaccination coverage and school mitigation measures have had few infections and outbreaks. Other settings with low coverage in all ages, including adolescents, and/or few mitigation measures have experienced an increase in case numbers in children, and school outbreaks.
- The **Omicron variant** of concern³ was first reported from South Africa on 25 November 2021. At the time of writing, it has been detected in 67 countries⁴, up from 42 countries last week. Omicron is now the predominant variant in South Africa, overtaking the Delta variant which was the predominant variant in October 2021. Initial reports from UK and Denmark, countries which have intensive surveillance, indicate that transmission occurs initially in 20-29 year olds, with children and adolescents less infected so far.
- Infections appear to be stable in children and adolescents in **Victoria** and declined in **New South Wales (NSW)** with the return of face-to-face learning despite many school infections. This could be attributable to high vaccine coverage in ≥ 12 year olds and implementation of mitigation measures in schools including test, trace, isolate and quarantine (TTIQ).
- **Victoria** opened all schools for onsite fulltime schooling on 1 November 2021.
 - There are currently ~1300 confirmed cases per day in all ages, highest in the 0-9 year age group, although this is stable.
 - There is no hospitalisation data available by age.
- In **NSW**, early childhood and education centres have been open throughout the entire Delta period. Despite this, the effective reproduction number (an estimate of how many people are infected by each positive case) declined up until November, which suggests young children contribute little to broader community transmission.
 - Onsite fulltime schooling commenced on 8 November.
 - Case numbers have increased to ~2500 confirmed cases in all ages. Children 0-9 years old comprised <9% of all cases, and 10-19 year olds 39%.
- In **Canada**, where ~87% of 12-17 year olds are fully vaccinated, there has been no increase in cases in children aged 12+ years following schools reopening in early September.
 - There was an initial steep increase in infections in 5-11 year olds after schools re-opened, but this has since declined. Hospitalisations have declined overall but hospitalisation trends are not available by age.
 - In the province of British Columbia, infections increased in children 5-11 years of age during the first two weeks of school reopening in September 2021, primarily in areas of lower vaccine coverage. Infections in this age group were trending downwards and now remain relatively stable. The increase in infections in September was partly due to a significant increase in testing among children. Serious illness in children has been rare in this province. British Columbia data has not been updated since report #1 (3 December 2021).
 - Since November, all 5-11 year old children are offered COVID-19 vaccine with an eight week interval between doses. Canada has vaccinated ~18% of this age group with a single dose.
- In **Europe and North America**, schools returned after the summer break in September 2021. Cases are on the rise across all age groups in many European countries.

¹ Russell FM, Anderson V, Crawford N, Curtis N, Danchin M, Goldfeld S, Hart J, Keeble T, Medley T, Mulholland K, Ranganathan S, Suryawijaya Ong D, Overmars I, Perrett K, Steer A. COVID-19 in Early Childhood Education and Care & Schools. Research Brief Number 1, Version 1: 14 October 2021. Parkville, Victoria, Australia: Murdoch Children's Research Institute, The Royal Children's Hospital, University of Melbourne Department of Paediatrics; 2021.

² American Academy of Pediatrics (AAP). Children and COVID-19: State-Level Data Report 14 October 2021. Illinois, US: AAP; 2021.

³ <https://www.who.int/news/item/28-11-2021-update-on-omicron>

⁴ <https://www.gisaid.org/hcov19-variants/>



- In **Denmark**, all mitigation measures in schools were lifted in early October 2021 except for a recommendation of weekly testing for staff and students aged 9 years and older who are unvaccinated.
 - Public Health and Social Measures (PHSM) including a three week lockdown has been introduced due to a rapid rise in COVID-19 cases due to Omicron.
 - Total infection and hospitalisation rates are on a steep upward trend, with the Omicron variant increasingly being detected in positive cases. Within a span of 19 days, Omicron is now responsible for ~20% of infections.
 - Children and adolescents have the lowest rate of Omicron infections so far.
 - Schools have closed early for the holiday period and the 5-11 year old vaccination program has commenced.
- In **England**, following school re-opening, infections increased mostly in 12-15 year olds followed by primary school ages.
 - Infection then decreased particularly in children 10-19 years of age, but also in children aged 5-9 years, before increasing slightly again, and now decreasing.
 - Infections in children 5-9 and 10-14 years are the highest of all ages, and aged 0-4 years remained amongst the lowest of all age groups.
 - Vaccine uptake is low in 12-15 year olds (~46% single dose, which was the recommended schedule for this age group in the UK until late November 2021) and ~62% single dose in 16-17 year olds. Infections declined in children aged 5-19 years, following the extension of the vaccination program to 12-17 year olds in mid-September 2021.
 - There was an initial increase in hospitalisations in the 5-14 year age group but this is now stable and rates in children this age remain the lowest compared to all other age groups. Hospitalisations include children who test positive, irrespective of the reason for admission, so is an overestimate of hospitalisations for COVID-19.
 - Mandatory mask wearing indoors, work from home and proof of vaccination have been re-introduced due to an increase in COVID-19 cases across Europe. Close contacts who are fully vaccinated or under 18 years and six months of age and produce a negative PCR test result are not required to isolate, unless they are close contacts of a case with the Omicron variant.
- In **Finland**, where ~76% of 12-15 year olds and ~83% of 16-19 year olds have received at least one dose of vaccine, there has been an increase in infections in all age groups, especially in children aged <15 years.
 - Hospitalisations remain very low in children and adolescents (up until the last report on 10 Dec 2021). There have been no deaths in anyone <30 years old.
 - There are far fewer infections and hospitalisations in the vaccinated compared to the unvaccinated.
 - 5-11 year old children who have underlying medical conditions or live with clinically vulnerable people are now offered COVID-19 vaccine.
- In **Scotland**, infections and hospitalisations increased in children with the return to in-person learning but then declined. There is now an increase in cases with unvaccinated 12-15 year olds having the highest rates of infection of all ages.
 - Hospitalisations include children who test positive, irrespective of the reason for admission, so is an overestimate of hospitalisations for COVID-19.
 - There has been a total of three deaths due to COVID-19 amongst children aged 0-14 years old throughout the entire pandemic.
 - Masks are recommended in secondary schools in Scotland.
 - The country has vaccinated ~62% of 12-15 year olds with a single dose.
- In **Singapore**, schools re-opened with <70% total vaccine coverage in July 2021.
 - Currently there is a downward trend in infections with ~500 cases per day.
 - There has been one ICU admission due to MIS-C and no deaths in children for the entire pandemic.
 - A total of five cases of MIS-C have been reported, all from the recent Delta wave.
 - Mitigation measures now include vaccination of 12+ years, mask wearing, cohorting and screening with rapid antigen testing (RAT).
- In **South Africa**, restrictions including a partial curfew and mandatory masks for those aged six years and older have been in place since early October 2021.
 - Infections in children aged 5-19 years old increased following the re-opening of schools in early August 2021, before decreasing in early September.
 - Infections across all age groups are now on the rise, with Omicron becoming the predominant variant, and there has been an increase in overall hospitalisations. However, many admissions are incidental (admitted for other reasons and subsequently test positive).
 - The Omicron case fatality rate, which means the proportion of infected people who die, in all ages is much lower than previous waves. For children it is very low and is 0 for children 5-9 years old.
 - A total of 671 deaths in children with COVID-19 have been reported, accounting for <0.1% of all COVID-19 deaths in the country.



- In the **United States**, there are large differences in infection and hospitalisation rates (up to four-fold differences) and the number of deaths in children between States and Territories most likely due to differences in vaccination coverage and adherence to PHSM.
 - Where there is high uptake of PHSM, such as in San Francisco, there are low infection and hospitalisation rates in children, and infections have declined in all age groups with school reopening.
 - There is currently a downward trend in infections and hospitalisations in most US states including in unvaccinated children <12 years.
 - Hospitalisations include children who test positive, irrespective of the reason for admission, so is an overestimate of hospitalisations for COVID-19.
 - There have been 655 deaths in children with COVID-19 throughout the pandemic, accounting for <0.2% of all COVID-19 deaths in the US.
 - Texas has had the highest number of child deaths (115) and there are six States that have reported 0 deaths throughout the entire pandemic⁵ (data up to report #2).
 - A total of 5973 cases of MIS-C have been reported, including 52 deaths (data up to report #1).
 - Since November, all 5-11 year old children are offered COVID-19 vaccine with a three week interval between doses.

Summary of COVID-19 epidemiology in children and adolescents

Country	Cases	Hospitalisations	MIS-C/PIMS-TS	Total deaths [^]
VIC, Australia	Stable	Not available	Not available	2 ^b
NSW, Australia	↑	Stable*	Not available	1 ^b
Canada	Stable	↓*	Not available	19 ^b
Denmark	↑	↑*	Not available	3 ^b
England, UK	↓	Stable	Not available	71 ^b
Finland	↑	↑*	Not available	0
Scotland, UK	↓	Stable	Not available	3 ^a
Singapore	↓	↓	5 cases	0
South Africa	↑	↑*	Not available	671 ^b
USA	↓	↓	5973 cases	655 ^b

Note: Trends and values are for children only, unless otherwise specified.
**Available data includes both children and adults.*
[^]Age range for child deaths between 0-19y except Scotland (0-14y) and USA (0-17y). Deaths ^adue to COVID-19 or ^bwith COVID-19.

⁵ <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/children-and-covid-19-state-level-data-report/>



List of abbreviations

Abbreviation	Term
MIS-C	Multisystem inflammatory syndrome in children
NSW	New South Wales, Australia
PCR	Polymerase chain reaction
PHSM	Public health & social measures
PIMS-TS	Paediatric inflammatory multisystem syndrome
RAT	Rapid antigen testing
TTIQ	Test, trace, isolate, quarantine



Australia: Victoria (population 6.6 million)

PHSM ⁶	Schools & mitigation ⁷	Vaccination coverage ⁸																																																						
<p>As of 19 Nov 2021: Phase D All gathering limits, capacity and density limits removed, masks only required in limited high-risk or low-vaccinated settings including retail, onsite work can return for fully vaccinated people, all shops open, TTIQ, QR check-in, proof of vaccination to attend some premises</p>	<p>All students returned to onsite fulltime schooling from 1 Nov 2021 and all closed for holidays from 18 Dec</p> <p>Standard PHSM, staggered return, cohorting, masks in primary & secondary, mandatory vaccination for staff from 18 Oct, RAT available for students and staff who are close contacts at an educational setting, all educational contacts can return to school after a negative standard PCR following exposure</p> <p>Mandatory vaccination for staff</p>	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>2nd dose (%)</th> </tr> </thead> <tbody> <tr> <td>12-15</td> <td>87.8</td> <td>82.0</td> </tr> <tr> <td>16+</td> <td>93.7</td> <td>92.0</td> </tr> </tbody> </table> <p>Third dose for immunocompromised available from early Oct 2021, booster dose available to all eligible adults aged 18y+. Coverage data not available. Vaccination for 5-11y will become available from 10 Jan 2022.</p>	Age group (years)	1 st dose (%)	2 nd dose (%)	12-15	87.8	82.0	16+	93.7	92.0																																													
Age group (years)	1 st dose (%)	2 nd dose (%)																																																						
12-15	87.8	82.0																																																						
16+	93.7	92.0																																																						
Infections by age group ^{9, 10}	Hospitalisations in children ¹¹	Deaths by age group ¹²																																																						
<p>Weekly cases in Victoria by age group</p> <p>A total of 13 cases of the Omicron variant have been detected as of 16 December 2021</p>	<table border="1"> <thead> <tr> <th>Current cases in hospital</th> <th>cases in hospital</th> <th>cases in ICU</th> </tr> </thead> <tbody> <tr> <td></td> <td>315</td> <td>52</td> </tr> </tbody> </table> <p>No age breakdown</p> <p>Victorian hospitalisation and ICU counts exclude COVID-19 patients who are still in hospital but no longer infectious</p>	Current cases in hospital	cases in hospital	cases in ICU		315	52	<p>People who have passed away with COVID-19</p> <p>16/12/2021</p> <table border="1"> <thead> <tr> <th>Age group</th> <th>Male</th> <th>Female</th> <th>Total</th> </tr> </thead> <tbody> <tr><td>00-09</td><td>0</td><td>1</td><td>1</td></tr> <tr><td>10-19</td><td>0</td><td>1</td><td>1</td></tr> <tr><td>20-29</td><td>2</td><td>1</td><td>3</td></tr> <tr><td>30-39</td><td>5</td><td>0</td><td>5</td></tr> <tr><td>40-49</td><td>11</td><td>4</td><td>15</td></tr> <tr><td>50-59</td><td>26</td><td>20</td><td>46</td></tr> <tr><td>60-69</td><td>69</td><td>39</td><td>108</td></tr> <tr><td>70-79</td><td>187</td><td>114</td><td>301</td></tr> <tr><td>80-89</td><td>289</td><td>255</td><td>544</td></tr> <tr><td>90+</td><td>155</td><td>247</td><td>402</td></tr> <tr><td>Total</td><td>754</td><td>682</td><td>1436</td></tr> </tbody> </table> <p>One 15 year old and one child under 10 with multiple underlying conditions and in palliative care died with COVID-19</p>	Age group	Male	Female	Total	00-09	0	1	1	10-19	0	1	1	20-29	2	1	3	30-39	5	0	5	40-49	11	4	15	50-59	26	20	46	60-69	69	39	108	70-79	187	114	301	80-89	289	255	544	90+	155	247	402	Total	754	682	1436
Current cases in hospital	cases in hospital	cases in ICU																																																						
	315	52																																																						
Age group	Male	Female	Total																																																					
00-09	0	1	1																																																					
10-19	0	1	1																																																					
20-29	2	1	3																																																					
30-39	5	0	5																																																					
40-49	11	4	15																																																					
50-59	26	20	46																																																					
60-69	69	39	108																																																					
70-79	187	114	301																																																					
80-89	289	255	544																																																					
90+	155	247	402																																																					
Total	754	682	1436																																																					

⁶ <https://www.coronavirus.vic.gov.au/coronavirus-covidsafe-settings>
⁷ <https://www.coronavirus.vic.gov.au/education-information-about-coronavirus-covid-19>
⁸ <https://www.health.vic.gov.au/resources/collections/covid-19-vaccination-daily-rollout-update>
⁹ <https://www.coronavirus.vic.gov.au/victorian-coronavirus-covid-19-data>
¹⁰ <https://www.health.vic.gov.au/media-releases/coronavirus-updates-for-victoria-16-december-2021>
¹¹ <https://www.coronavirus.vic.gov.au/victorian-coronavirus-covid-19-data>
¹² <https://www.coronavirus.vic.gov.au/additional-covid-19-case-data#cases-in-hospital>



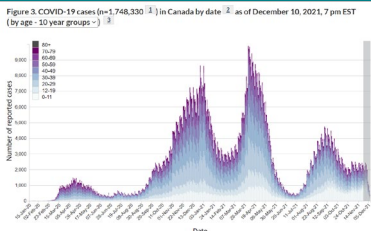
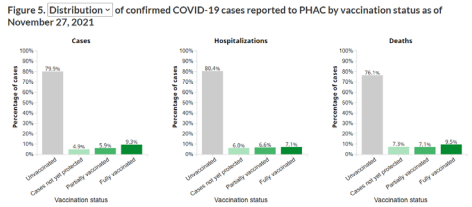
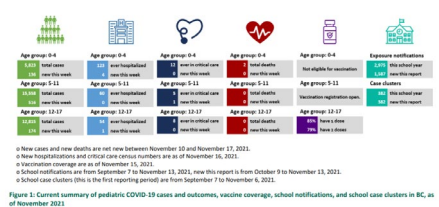
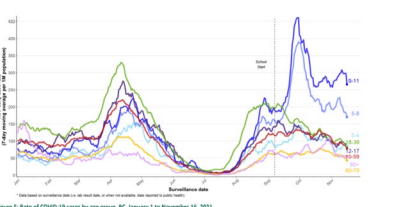
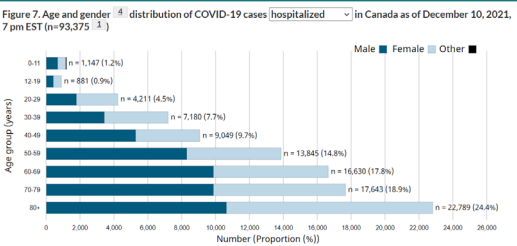
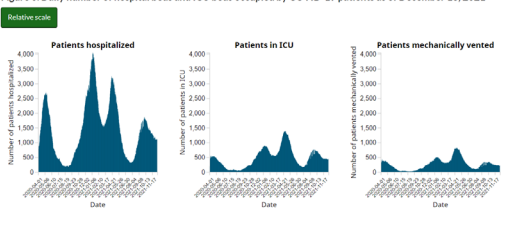
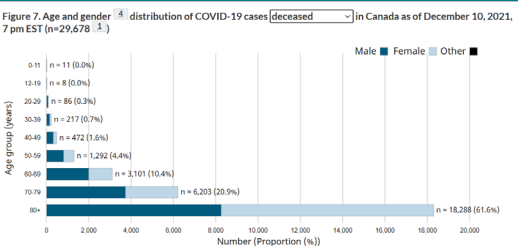
Australia: New South Wales (population 8.2 million)

<p>PHSM¹³</p> <p>Mandatory masks indoors and on public transport, TTIQ, QR check-in, all shops open, proof of vaccination to attend some premises</p>	<p>Schools & mitigation^{14, 15}</p> <p>All students returned to onsite fulltime schooling from 8 Nov 2021 and all closed for holidays from 18 Dec</p> <p>Standard PHSM, RAT home testing for educational contacts</p> <p>Mandatory vaccination for staff from 8 Nov 2021</p>	<p>Vaccination coverage¹⁶</p> <table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>2nd dose (%)</th> </tr> </thead> <tbody> <tr> <td>12-15</td> <td>81.4</td> <td>77.9</td> </tr> <tr> <td>16+</td> <td>94.8</td> <td>93.3</td> </tr> </tbody> </table> <p>Third dose for immunocompromised available from early Oct 2021, booster dose available to all eligible adults aged 18y+. Coverage data not available. Vaccination for 5-11y will become available from 10 Jan 2022.</p>	Age group (years)	1 st dose (%)	2 nd dose (%)	12-15	81.4	77.9	16+	94.8	93.3																																																																																																																																																																																																																																																																																																							
Age group (years)	1 st dose (%)	2 nd dose (%)																																																																																																																																																																																																																																																																																																																
12-15	81.4	77.9																																																																																																																																																																																																																																																																																																																
16+	94.8	93.3																																																																																																																																																																																																																																																																																																																
<p>Infections by age group¹⁷</p> <p>Figure 3. Seven day backward rolling average of COVID-19 cases rate per 100,000 population by age and notification date, NSW, from 16 June 2021 to 04 December 2021</p> <p>Table 3. Demographics of confirmed Omicron infections by gender, age, vaccination status and source of infection, NSW, 26 November to 04 December, 2021</p> <table border="1"> <thead> <tr> <th></th> <th>Week ending 04 Dec 2021</th> <th>27 Nov 2021</th> <th>26 Nov to 04 Dec 2021</th> </tr> </thead> <tbody> <tr> <td>Gender</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Female</td> <td>12 (52.2%)</td> <td>--</td> <td>12 (52.2%)</td> </tr> <tr> <td>Male</td> <td>11 (47.8%)</td> <td>--</td> <td>11 (47.8%)</td> </tr> <tr> <td>Age group</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0-9</td> <td>2 (8.7%)</td> <td>--</td> <td>2 (8.7%)</td> </tr> <tr> <td>10-19</td> <td>9 (39.1%)</td> <td>--</td> <td>9 (39.1%)</td> </tr> <tr> <td>20-29</td> <td>1 (4.3%)</td> <td>--</td> <td>1 (4.3%)</td> </tr> <tr> <td>30-39</td> <td>2 (8.7%)</td> <td>--</td> <td>2 (8.7%)</td> </tr> <tr> <td>40-49</td> <td>5 (21.7%)</td> <td>--</td> <td>5 (21.7%)</td> </tr> <tr> <td>50-59</td> <td>3 (13.0%)</td> <td>--</td> <td>3 (13.0%)</td> </tr> <tr> <td>60-69</td> <td>1 (4.3%)</td> <td>--</td> <td>1 (4.3%)</td> </tr> <tr> <td>70-79</td> <td>0</td> <td>--</td> <td>0</td> </tr> <tr> <td>80-89</td> <td>0</td> <td>--</td> <td>0</td> </tr> <tr> <td>Vaccination status</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fully vaccinated</td> <td>14 (60.9%)</td> <td>--</td> <td>14 (60.9%)</td> </tr> <tr> <td>Partially vaccinated</td> <td>4 (17.4%)</td> <td>--</td> <td>4 (17.4%)</td> </tr> <tr> <td>No effective dose</td> <td>3 (13.0%)</td> <td>--</td> <td>3 (13.0%)</td> </tr> <tr> <td>Under investigation*</td> <td>0</td> <td>--</td> <td>0</td> </tr> <tr> <td>Not eligible (aged 0-11 years)</td> <td>2 (8.7%)</td> <td>--</td> <td>2 (8.7%)</td> </tr> <tr> <td>Source of infection</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Overseas acquired</td> <td>8 (34.8%)</td> <td>--</td> <td>8 (34.8%)</td> </tr> <tr> <td>Locally acquired</td> <td>15 (65.2%)</td> <td>--</td> <td>15 (65.2%)</td> </tr> <tr> <td>Clinical Severity</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Hospitalised</td> <td>0</td> <td>--</td> <td>0</td> </tr> <tr> <td>ICU</td> <td>0</td> <td>--</td> <td>0</td> </tr> <tr> <td>Deaths</td> <td>0</td> <td>--</td> <td>0</td> </tr> <tr> <td>Total</td> <td>23 (100%)</td> <td>--</td> <td>23 (100%)</td> </tr> </tbody> </table> <p>* Vaccination status is updated regularly using both the Australian Immunisation Register and the patient's interview.</p>		Week ending 04 Dec 2021	27 Nov 2021	26 Nov to 04 Dec 2021	Gender				Female	12 (52.2%)	--	12 (52.2%)	Male	11 (47.8%)	--	11 (47.8%)	Age group				0-9	2 (8.7%)	--	2 (8.7%)	10-19	9 (39.1%)	--	9 (39.1%)	20-29	1 (4.3%)	--	1 (4.3%)	30-39	2 (8.7%)	--	2 (8.7%)	40-49	5 (21.7%)	--	5 (21.7%)	50-59	3 (13.0%)	--	3 (13.0%)	60-69	1 (4.3%)	--	1 (4.3%)	70-79	0	--	0	80-89	0	--	0	Vaccination status				Fully vaccinated	14 (60.9%)	--	14 (60.9%)	Partially vaccinated	4 (17.4%)	--	4 (17.4%)	No effective dose	3 (13.0%)	--	3 (13.0%)	Under investigation*	0	--	0	Not eligible (aged 0-11 years)	2 (8.7%)	--	2 (8.7%)	Source of infection				Overseas acquired	8 (34.8%)	--	8 (34.8%)	Locally acquired	15 (65.2%)	--	15 (65.2%)	Clinical Severity				Hospitalised	0	--	0	ICU	0	--	0	Deaths	0	--	0	Total	23 (100%)	--	23 (100%)	<p>Hospitalisations in children¹⁸</p> <p>Hospitalisations among people diagnosed with COVID-19, by age group, NSW</p> <table border="1"> <thead> <tr> <th rowspan="2">Age-group (years)</th> <th colspan="2">Since 16 Jun 2021</th> <th colspan="2">Jan 2020 – 15 Jun 2021</th> </tr> <tr> <th>Hospitalised</th> <th>Percentage of cases hospitalised¹</th> <th>Hospitalised</th> <th>Percentage of cases hospitalised¹</th> </tr> </thead> <tbody> <tr> <td>0-9</td> <td>289</td> <td>2%</td> <td>4</td> <td>2%</td> </tr> <tr> <td>10-19</td> <td>362</td> <td>3%</td> <td>10</td> <td>3%</td> </tr> <tr> <td>20-29</td> <td>980</td> <td>7%</td> <td>27</td> <td>2%</td> </tr> <tr> <td>30-39</td> <td>1,258</td> <td>10%</td> <td>46</td> <td>4%</td> </tr> <tr> <td>40-49</td> <td>1,293</td> <td>14%</td> <td>48</td> <td>7%</td> </tr> <tr> <td>50-59</td> <td>1,271</td> <td>19%</td> <td>78</td> <td>11%</td> </tr> <tr> <td>60-69</td> <td>1,046</td> <td>27%</td> <td>117</td> <td>18%</td> </tr> <tr> <td>70-79</td> <td>773</td> <td>40%</td> <td>92</td> <td>23%</td> </tr> <tr> <td>80-89</td> <td>514</td> <td>53%</td> <td>52</td> <td>43%</td> </tr> <tr> <td>90+</td> <td>129</td> <td>52%</td> <td>16</td> <td>38%</td> </tr> <tr> <td>Total</td> <td>7,915</td> <td>10%</td> <td>490</td> <td>9%</td> </tr> </tbody> </table> <p>Figure 5b. Number of cases in hospital, in ICU and ventilated by date, NSW, from 16 June to 04 December 2021</p> <p>Figure 5c. Proportion of cases with a severe outcome (ICU and/or death) amongst all cases, by age, time of infection, and vaccination status, NSW, 1 January 2020 to 04 December 2021</p> <table border="1"> <thead> <tr> <th rowspan="2">Age-group (years)</th> <th colspan="3">% cases with severe outcomes (ICU and/or death)</th> </tr> <tr> <th>Jan 2020 - 15 Jun 2021</th> <th>16 Jun - 04 Dec 2021: Fully vaccinated</th> <th>16 Jun - 04 Dec 2021: Un-vaccinated¹</th> </tr> </thead> <tbody> <tr> <td>0-9</td> <td>0%</td> <td>(0 / 251)</td> <td>--</td> </tr> <tr> <td>10-19</td> <td><1%</td> <td>(1 / 325)</td> <td>0%</td> </tr> <tr> <td>20-29</td> <td><1%</td> <td>(4 / 1,115)</td> <td><1%</td> </tr> <tr> <td>30-39</td> <td>1%</td> <td>(15 / 1,098)</td> <td><1%</td> </tr> <tr> <td>40-49</td> <td>2%</td> <td>(12 / 718)</td> <td><1%</td> </tr> <tr> <td>50-59</td> <td>4%</td> <td>(30 / 710)</td> <td>1%</td> </tr> <tr> <td>60-69</td> <td>7%</td> <td>(44 / 656)</td> <td>2%</td> </tr> <tr> <td>70-79</td> <td>12%</td> <td>(46 / 394)</td> <td>6%</td> </tr> <tr> <td>80-89</td> <td>21%</td> <td>(26 / 122)</td> <td>11%</td> </tr> <tr> <td>90+</td> <td>38%</td> <td>(16 / 42)</td> <td>21%</td> </tr> <tr> <td>Total</td> <td>4%</td> <td>(194 / 5,431)</td> <td>2%</td> </tr> </tbody> </table> <p>¹ For this table, un-vaccinated includes those with no effective dose, and those who are ineligible for vaccination (aged 0-11 years).</p> <p>Many admissions in <12y children are for social reasons as parents are hospitalised for treatment of COVID-19. ~1% of primary school age cases are admitted for treatment of COVID-19. Graph is not available by age group.</p>	Age-group (years)	Since 16 Jun 2021		Jan 2020 – 15 Jun 2021		Hospitalised	Percentage of cases hospitalised ¹	Hospitalised	Percentage of cases hospitalised ¹	0-9	289	2%	4	2%	10-19	362	3%	10	3%	20-29	980	7%	27	2%	30-39	1,258	10%	46	4%	40-49	1,293	14%	48	7%	50-59	1,271	19%	78	11%	60-69	1,046	27%	117	18%	70-79	773	40%	92	23%	80-89	514	53%	52	43%	90+	129	52%	16	38%	Total	7,915	10%	490	9%	Age-group (years)	% cases with severe outcomes (ICU and/or death)			Jan 2020 - 15 Jun 2021	16 Jun - 04 Dec 2021: Fully vaccinated	16 Jun - 04 Dec 2021: Un-vaccinated ¹	0-9	0%	(0 / 251)	--	10-19	<1%	(1 / 325)	0%	20-29	<1%	(4 / 1,115)	<1%	30-39	1%	(15 / 1,098)	<1%	40-49	2%	(12 / 718)	<1%	50-59	4%	(30 / 710)	1%	60-69	7%	(44 / 656)	2%	70-79	12%	(46 / 394)	6%	80-89	21%	(26 / 122)	11%	90+	38%	(16 / 42)	21%	Total	4%	(194 / 5,431)	2%	<p>Deaths by age group¹⁹</p> <p>Table 6. Deaths following recent infection with COVID-19, by age group, from January 2020 to 04 December 2021</p> <table border="1"> <thead> <tr> <th rowspan="2">Age-group (years)</th> <th colspan="3">Since 16 Jun 2021</th> <th colspan="2">Jan 2020 – 15 Jun 2021</th> </tr> <tr> <th>Number of deaths</th> <th>Case fatality rate</th> <th>Fatality rate per 100,000 population²</th> <th>Number of deaths</th> <th>Case fatality rate²</th> </tr> </thead> <tbody> <tr> <td>0-9</td> <td>0</td> <td>0%</td> <td>0.0</td> <td>0</td> <td>0%</td> </tr> <tr> <td>10-19</td> <td>1</td> <td><1%</td> <td>0.1</td> <td>0</td> <td>0%</td> </tr> <tr> <td>20-29</td> <td>6</td> <td><1%</td> <td>0.5</td> <td>0</td> <td>0%</td> </tr> <tr> <td>30-39</td> <td>15</td> <td><1%</td> <td>1.3</td> <td>0</td> <td>0%</td> </tr> <tr> <td>40-49</td> <td>27</td> <td><1%</td> <td>2.6</td> <td>0</td> <td>0%</td> </tr> <tr> <td>50-59</td> <td>66</td> <td>1%</td> <td>6.8</td> <td>1</td> <td><1%</td> </tr> <tr> <td>60-69</td> <td>103</td> <td>3%</td> <td>12.3</td> <td>4</td> <td>1%</td> </tr> <tr> <td>70-79</td> <td>132</td> <td>7%</td> <td>22.7</td> <td>15</td> <td>4%</td> </tr> <tr> <td>80-89</td> <td>164</td> <td>17%</td> <td>59.8</td> <td>20</td> <td>16%</td> </tr> <tr> <td>90+</td> <td>62</td> <td>25%</td> <td>89.4</td> <td>16</td> <td>38%</td> </tr> <tr> <td>Total</td> <td>576</td> <td>1%</td> <td>7.1</td> <td>56</td> <td>1%</td> </tr> </tbody> </table>	Age-group (years)	Since 16 Jun 2021			Jan 2020 – 15 Jun 2021		Number of deaths	Case fatality rate	Fatality rate per 100,000 population ²	Number of deaths	Case fatality rate ²	0-9	0	0%	0.0	0	0%	10-19	1	<1%	0.1	0	0%	20-29	6	<1%	0.5	0	0%	30-39	15	<1%	1.3	0	0%	40-49	27	<1%	2.6	0	0%	50-59	66	1%	6.8	1	<1%	60-69	103	3%	12.3	4	1%	70-79	132	7%	22.7	15	4%	80-89	164	17%	59.8	20	16%	90+	62	25%	89.4	16	38%	Total	576	1%	7.1	56	1%
	Week ending 04 Dec 2021	27 Nov 2021	26 Nov to 04 Dec 2021																																																																																																																																																																																																																																																																																																															
Gender																																																																																																																																																																																																																																																																																																																		
Female	12 (52.2%)	--	12 (52.2%)																																																																																																																																																																																																																																																																																																															
Male	11 (47.8%)	--	11 (47.8%)																																																																																																																																																																																																																																																																																																															
Age group																																																																																																																																																																																																																																																																																																																		
0-9	2 (8.7%)	--	2 (8.7%)																																																																																																																																																																																																																																																																																																															
10-19	9 (39.1%)	--	9 (39.1%)																																																																																																																																																																																																																																																																																																															
20-29	1 (4.3%)	--	1 (4.3%)																																																																																																																																																																																																																																																																																																															
30-39	2 (8.7%)	--	2 (8.7%)																																																																																																																																																																																																																																																																																																															
40-49	5 (21.7%)	--	5 (21.7%)																																																																																																																																																																																																																																																																																																															
50-59	3 (13.0%)	--	3 (13.0%)																																																																																																																																																																																																																																																																																																															
60-69	1 (4.3%)	--	1 (4.3%)																																																																																																																																																																																																																																																																																																															
70-79	0	--	0																																																																																																																																																																																																																																																																																																															
80-89	0	--	0																																																																																																																																																																																																																																																																																																															
Vaccination status																																																																																																																																																																																																																																																																																																																		
Fully vaccinated	14 (60.9%)	--	14 (60.9%)																																																																																																																																																																																																																																																																																																															
Partially vaccinated	4 (17.4%)	--	4 (17.4%)																																																																																																																																																																																																																																																																																																															
No effective dose	3 (13.0%)	--	3 (13.0%)																																																																																																																																																																																																																																																																																																															
Under investigation*	0	--	0																																																																																																																																																																																																																																																																																																															
Not eligible (aged 0-11 years)	2 (8.7%)	--	2 (8.7%)																																																																																																																																																																																																																																																																																																															
Source of infection																																																																																																																																																																																																																																																																																																																		
Overseas acquired	8 (34.8%)	--	8 (34.8%)																																																																																																																																																																																																																																																																																																															
Locally acquired	15 (65.2%)	--	15 (65.2%)																																																																																																																																																																																																																																																																																																															
Clinical Severity																																																																																																																																																																																																																																																																																																																		
Hospitalised	0	--	0																																																																																																																																																																																																																																																																																																															
ICU	0	--	0																																																																																																																																																																																																																																																																																																															
Deaths	0	--	0																																																																																																																																																																																																																																																																																																															
Total	23 (100%)	--	23 (100%)																																																																																																																																																																																																																																																																																																															
Age-group (years)	Since 16 Jun 2021		Jan 2020 – 15 Jun 2021																																																																																																																																																																																																																																																																																																															
	Hospitalised	Percentage of cases hospitalised ¹	Hospitalised	Percentage of cases hospitalised ¹																																																																																																																																																																																																																																																																																																														
0-9	289	2%	4	2%																																																																																																																																																																																																																																																																																																														
10-19	362	3%	10	3%																																																																																																																																																																																																																																																																																																														
20-29	980	7%	27	2%																																																																																																																																																																																																																																																																																																														
30-39	1,258	10%	46	4%																																																																																																																																																																																																																																																																																																														
40-49	1,293	14%	48	7%																																																																																																																																																																																																																																																																																																														
50-59	1,271	19%	78	11%																																																																																																																																																																																																																																																																																																														
60-69	1,046	27%	117	18%																																																																																																																																																																																																																																																																																																														
70-79	773	40%	92	23%																																																																																																																																																																																																																																																																																																														
80-89	514	53%	52	43%																																																																																																																																																																																																																																																																																																														
90+	129	52%	16	38%																																																																																																																																																																																																																																																																																																														
Total	7,915	10%	490	9%																																																																																																																																																																																																																																																																																																														
Age-group (years)	% cases with severe outcomes (ICU and/or death)																																																																																																																																																																																																																																																																																																																	
	Jan 2020 - 15 Jun 2021	16 Jun - 04 Dec 2021: Fully vaccinated	16 Jun - 04 Dec 2021: Un-vaccinated ¹																																																																																																																																																																																																																																																																																																															
0-9	0%	(0 / 251)	--																																																																																																																																																																																																																																																																																																															
10-19	<1%	(1 / 325)	0%																																																																																																																																																																																																																																																																																																															
20-29	<1%	(4 / 1,115)	<1%																																																																																																																																																																																																																																																																																																															
30-39	1%	(15 / 1,098)	<1%																																																																																																																																																																																																																																																																																																															
40-49	2%	(12 / 718)	<1%																																																																																																																																																																																																																																																																																																															
50-59	4%	(30 / 710)	1%																																																																																																																																																																																																																																																																																																															
60-69	7%	(44 / 656)	2%																																																																																																																																																																																																																																																																																																															
70-79	12%	(46 / 394)	6%																																																																																																																																																																																																																																																																																																															
80-89	21%	(26 / 122)	11%																																																																																																																																																																																																																																																																																																															
90+	38%	(16 / 42)	21%																																																																																																																																																																																																																																																																																																															
Total	4%	(194 / 5,431)	2%																																																																																																																																																																																																																																																																																																															
Age-group (years)	Since 16 Jun 2021			Jan 2020 – 15 Jun 2021																																																																																																																																																																																																																																																																																																														
	Number of deaths	Case fatality rate	Fatality rate per 100,000 population ²	Number of deaths	Case fatality rate ²																																																																																																																																																																																																																																																																																																													
0-9	0	0%	0.0	0	0%																																																																																																																																																																																																																																																																																																													
10-19	1	<1%	0.1	0	0%																																																																																																																																																																																																																																																																																																													
20-29	6	<1%	0.5	0	0%																																																																																																																																																																																																																																																																																																													
30-39	15	<1%	1.3	0	0%																																																																																																																																																																																																																																																																																																													
40-49	27	<1%	2.6	0	0%																																																																																																																																																																																																																																																																																																													
50-59	66	1%	6.8	1	<1%																																																																																																																																																																																																																																																																																																													
60-69	103	3%	12.3	4	1%																																																																																																																																																																																																																																																																																																													
70-79	132	7%	22.7	15	4%																																																																																																																																																																																																																																																																																																													
80-89	164	17%	59.8	20	16%																																																																																																																																																																																																																																																																																																													
90+	62	25%	89.4	16	38%																																																																																																																																																																																																																																																																																																													
Total	576	1%	7.1	56	1%																																																																																																																																																																																																																																																																																																													

¹³ <https://www.nsw.gov.au/covid-19/stay-safe/rules>
¹⁴ <https://education.nsw.gov.au/covid-19/advice-for-families/vaccination-requirements-for-school-students>
¹⁵ <https://education.nsw.gov.au/covid-19/advice-for-families>
¹⁶ <https://www.health.nsw.gov.au/resources/collections/covid-19-vaccination-daily-rollout-update>
¹⁷ <https://www.health.nsw.gov.au/infectious/covid-19/Pages/weekly-reports.aspx>
¹⁸ <https://www.health.nsw.gov.au/infectious/covid-19/Pages/weekly-reports.aspx>
¹⁹ <https://www.health.nsw.gov.au/infectious/covid-19/Pages/weekly-reports.aspx>



Canada (population 38 million)

PHSM ²⁰	Schools & mitigation ^{21, 22}	Vaccination coverage ²³												
<p>Standard PHSM including TTIQ and mask wearing encouraged in shared spaces and subject to local advice</p>	<p>Re-opened in Sep 2021 Standard PHSM and additional measures depending on local advice: physical distancing, cohorting, masks when required, screening tests</p>	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>Fully vaccinated* (%)</th> </tr> </thead> <tbody> <tr> <td>12+</td> <td>89.6</td> <td>86.7</td> </tr> <tr> <td>5-11</td> <td>17.5</td> <td>0.6</td> </tr> <tr> <td>12-17</td> <td>86.5</td> <td>82.0</td> </tr> </tbody> </table> <p>*Canada also uses the J&J/Janssen vaccine which is a single-dose vaccine. Third/booster doses have been available to high-risk individuals in phases since Sep 2021, coverage data not available. Vaccination of 12y+ commenced mid-May 2021 and 5-11y in mid-Nov.</p>	Age group (years)	1 st dose (%)	Fully vaccinated* (%)	12+	89.6	86.7	5-11	17.5	0.6	12-17	86.5	82.0
Age group (years)	1 st dose (%)	Fully vaccinated* (%)												
12+	89.6	86.7												
5-11	17.5	0.6												
12-17	86.5	82.0												
<h3>Infections by age group^{24, 25}</h3> <p>Figure 3. COVID-19 cases (n=1,748,330²⁴) in Canada by date²⁴ as of December 10, 2021, 7 pm EST (By age - 10 year groups -)²⁵</p>  <p>Figure 5. Distribution²⁵ of confirmed COVID-19 cases reported to PHAC by vaccination status as of November 27, 2021</p>  <p>British Columbia (pop. 5.1 million): <i>Note: This data has not been updated since the previous report (3 Dec 2021)</i></p>  <p>Figure 1. Current summary of pediatric COVID-19 cases and outcomes, vaccine coverage, school notifications, and school case clusters in BC, as of November 2021.</p>  <p>Figure 3. Rate of COVID-19 cases by age group, BC, January 1 to November 16, 2021.</p>	<h3>Hospitalisations in children²⁶</h3> <p>Figure 7. Age and gender²⁶ distribution of COVID-19 cases [hospitalized] in Canada as of December 10, 2021, 7 pm EST (n=93,375²⁶)</p>  <p>Figure 6. Daily number of hospital beds and ICU beds occupied by COVID-19 patients as of December 13, 2021</p> 	<h3>Deaths by age group²⁷</h3> <p>Figure 7. Age and gender²⁷ distribution of COVID-19 cases [deceased] in Canada as of December 10, 2021, 7 pm EST (n=29,678²⁷)</p>  <p>There have been 19 deaths with COVID-19 in children aged 0-19y throughout the pandemic</p>												

²⁰ <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/prevention-risks.html>
²¹ <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/guidance-documents/planning-2021-2022-school-year-vaccination.html>
²² <https://www.canada.ca/en/public-health/services/vaccination-children/covid-19.html>
²³ <https://health-infobase.canada.ca/covid-19/vaccination-coverage/>
²⁴ <https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html>
²⁵ <http://www.bccdc.ca/schools/news-resources/data-for-k12>
²⁶ <https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html>
²⁷ <https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html>



Denmark

(population 5.9 million)

PHSM ²⁸	Schools & mitigation ²⁹	Vaccination coverage ³⁰																																																																																																																																																																																																																																																																																									
<p>Reinstatement of certain measures in late Nov 2021, including indoor mask wearing and digital pass (proof of vaccination or negative COVID-19 test) for shops and restaurants; partial lockdown reinstated from 19 Dec</p> <p>Previously all PHSM lifted on 8 Oct 2021, except for mask wearing in airports & hospitals</p>	<p>Re-opened in May 2021 and closed early for winter holidays</p> <p>Standard PHSM; PCR or RAT screening tests: Recommended weekly for staff & students from grade 1 unless fully vaccinated or previously infected with COVID-19 in the last 6 months, twice weekly tests recommended for areas with high infection rates. Schools closed early for winter holiday.</p>	<p>Age group (years) 1st dose (%) 2nd dose (%)</p> <p>12+ 79.7 76.6</p> <p>Commenced 3rd/booster vaccination for people 65+y in late Oct 2021 and for all adults from late Nov, coverage data not available. Vaccination for 5-11y age group commenced late Nov 2021, coverage data not available.</p>																																																																																																																																																																																																																																																																																									
Infections by age group ^{31, 32, 33}	Hospitalisations in children ^{34, 35}	Deaths by age group ³⁶																																																																																																																																																																																																																																																																																									
<p>Denmark: 14-day age-specific COVID-19 case notification rate</p> <p>Figure 2. Number of cases with other SARS-CoV-2 variants and Omicron by age group. Data included in the figure are from 22 November to 18 December 2021</p> <p>Table 2. Number of confirmed COVID-19 and Omicron cases per day*</p> <table border="1"> <thead> <tr> <th>Date</th> <th>No. of confirmed SARS-CoV-2 cases</th> <th>No. of Omicron cases</th> <th>Percentage of confirmed SARS-CoV-2 cases (%)</th> <th>95% confidence interval</th> </tr> </thead> <tbody> <tr><td>22-11-2021</td><td>4,514</td><td>1</td><td>0.0%</td><td>0%-0.1%</td></tr> <tr><td>23-11-2021</td><td>4,718</td><td>1</td><td>0.0%</td><td>0%-0.1%</td></tr> <tr><td>24-11-2021</td><td>4,033</td><td>0</td><td>0.0%</td><td>0%-0.1%</td></tr> <tr><td>25-11-2021</td><td>4,106</td><td>2</td><td>0.0%</td><td>0%-0.2%</td></tr> <tr><td>26-11-2021</td><td>4,163</td><td>4</td><td>0.1%</td><td>0%-0.3%</td></tr> <tr><td>27-11-2021</td><td>3,852</td><td>2</td><td>0.1%</td><td>0%-0.2%</td></tr> <tr><td>28-11-2021</td><td>3,893</td><td>10</td><td>0.3%</td><td>0.1%-0.5%</td></tr> <tr><td>29-11-2021</td><td>5,096</td><td>11</td><td>0.2%</td><td>0.1%-0.4%</td></tr> <tr><td>30-11-2021</td><td>5,425</td><td>25</td><td>0.5%</td><td>0.3%-0.7%</td></tr> <tr><td>01-12-2021</td><td>4,552</td><td>74</td><td>1.6%</td><td>1.3%-2.0%</td></tr> <tr><td>02-12-2021</td><td>4,595</td><td>60</td><td>1.3%</td><td>1.0%-1.7%</td></tr> <tr><td>03-12-2021</td><td>5,175</td><td>73</td><td>1.4%</td><td>1.1%-1.6%</td></tr> <tr><td>04-12-2021</td><td>5,099</td><td>102</td><td>2.0%</td><td>1.6%-2.4%</td></tr> <tr><td>05-12-2021</td><td>4,805</td><td>165</td><td>3.4%</td><td>2.9%-4.0%</td></tr> <tr><td>06-12-2021</td><td>7,110</td><td>348</td><td>4.9%</td><td>4.4%-5.4%</td></tr> <tr><td>07-12-2021</td><td>7,340</td><td>565</td><td>7.7%</td><td>7.1%-8.4%</td></tr> <tr><td>08-12-2021</td><td>6,894</td><td>704</td><td>10.2%</td><td>9.8%-11.3%</td></tr> <tr><td>09-12-2021</td><td>6,643</td><td>756</td><td>11.4%</td><td>10.6%-12.2%</td></tr> <tr><td>10-12-2021</td><td>6,975</td><td>884</td><td>12.7%</td><td>11.9%-13.5%</td></tr> <tr><td>11-12-2021</td><td>6,717</td><td>1,109</td><td>16.5%</td><td>15.0%-17.4%</td></tr> <tr><td>12-12-2021</td><td>7,177</td><td>1,410</td><td>19.6%</td><td>18.7%-20.6%</td></tr> <tr><td>13-12-2021</td><td>Data pending</td><td>2,001</td><td>Data pending</td><td>Data pending</td></tr> <tr><td>14-12-2021</td><td>Data pending</td><td>760</td><td>Data pending</td><td>Data pending</td></tr> <tr><td>15-12-2021</td><td>Data pending</td><td>1</td><td>Data pending</td><td>Data pending</td></tr> </tbody> </table> <p>*The number of cases for the past few days are associated with some uncertainty due to data delays. *Antal tilfælde for de sidste dage forudsigt med en del usikkerhed, da de kun baseres på koronarapporter i data.</p> <p>Number of school outbreaks by school level since return to school:</p> <p>Grades: 0-3, 4-6, 7-9, 10, 10+</p>	Date	No. of confirmed SARS-CoV-2 cases	No. of Omicron cases	Percentage of confirmed SARS-CoV-2 cases (%)	95% confidence interval	22-11-2021	4,514	1	0.0%	0%-0.1%	23-11-2021	4,718	1	0.0%	0%-0.1%	24-11-2021	4,033	0	0.0%	0%-0.1%	25-11-2021	4,106	2	0.0%	0%-0.2%	26-11-2021	4,163	4	0.1%	0%-0.3%	27-11-2021	3,852	2	0.1%	0%-0.2%	28-11-2021	3,893	10	0.3%	0.1%-0.5%	29-11-2021	5,096	11	0.2%	0.1%-0.4%	30-11-2021	5,425	25	0.5%	0.3%-0.7%	01-12-2021	4,552	74	1.6%	1.3%-2.0%	02-12-2021	4,595	60	1.3%	1.0%-1.7%	03-12-2021	5,175	73	1.4%	1.1%-1.6%	04-12-2021	5,099	102	2.0%	1.6%-2.4%	05-12-2021	4,805	165	3.4%	2.9%-4.0%	06-12-2021	7,110	348	4.9%	4.4%-5.4%	07-12-2021	7,340	565	7.7%	7.1%-8.4%	08-12-2021	6,894	704	10.2%	9.8%-11.3%	09-12-2021	6,643	756	11.4%	10.6%-12.2%	10-12-2021	6,975	884	12.7%	11.9%-13.5%	11-12-2021	6,717	1,109	16.5%	15.0%-17.4%	12-12-2021	7,177	1,410	19.6%	18.7%-20.6%	13-12-2021	Data pending	2,001	Data pending	Data pending	14-12-2021	Data pending	760	Data pending	Data pending	15-12-2021	Data pending	1	Data pending	Data pending	<p>For the entire pandemic, a total of 36 children in ICU, which included 12 children with comorbidities</p> <table border="1"> <thead> <tr> <th>Age group</th> <th>Confirmed cases</th> <th>Total hospitalised (%)</th> <th>Comorbid. (%)</th> <th>Short hospital stay</th> <th>Hospitalised females</th> <th>Hospitalised males</th> </tr> </thead> <tbody> <tr><td>0-9</td><td>64,287</td><td>469 (1)</td><td>101 (22)</td><td>221</td><td>218</td><td>251</td></tr> <tr><td>10-19</td><td>99,587</td><td>415 (0)</td><td>136 (33)</td><td>158</td><td>229</td><td>186</td></tr> <tr><td>20-29</td><td>105,166</td><td>1,402 (1)</td><td>587 (42)</td><td>512</td><td>858</td><td>544</td></tr> <tr><td>30-39</td><td>79,217</td><td>1,972 (2)</td><td>863 (44)</td><td>701</td><td>1,161</td><td>811</td></tr> <tr><td>40-49</td><td>82,102</td><td>2,428 (3)</td><td>1,183 (49)</td><td>726</td><td>1,187</td><td>1,241</td></tr> <tr><td>50-59</td><td>67,762</td><td>3,229 (5)</td><td>1,908 (59)</td><td>699</td><td>1,430</td><td>1,799</td></tr> <tr><td>60-69</td><td>37,418</td><td>3,131 (8)</td><td>2,253 (72)</td><td>444</td><td>1,274</td><td>1,857</td></tr> <tr><td>70-79</td><td>23,344</td><td>4,325 (19)</td><td>3,707 (86)</td><td>379</td><td>1,806</td><td>2,519</td></tr> <tr><td>80-89</td><td>9,219</td><td>5,373 (57)</td><td>3,012 (89)</td><td>273</td><td>1,661</td><td>1,712</td></tr> <tr><td>90+</td><td>2,400</td><td>892 (37)</td><td>811 (91)</td><td>56</td><td>521</td><td>371</td></tr> <tr><td>I alt</td><td>570,502</td><td>21,636 (4)</td><td>14,561 (67)</td><td>4169</td><td>10,345</td><td>11,291</td></tr> </tbody> </table> <p>Denmark: rate of new hospital COVID-19 admissions</p> <p>Graph is not available by age group</p>	Age group	Confirmed cases	Total hospitalised (%)	Comorbid. (%)	Short hospital stay	Hospitalised females	Hospitalised males	0-9	64,287	469 (1)	101 (22)	221	218	251	10-19	99,587	415 (0)	136 (33)	158	229	186	20-29	105,166	1,402 (1)	587 (42)	512	858	544	30-39	79,217	1,972 (2)	863 (44)	701	1,161	811	40-49	82,102	2,428 (3)	1,183 (49)	726	1,187	1,241	50-59	67,762	3,229 (5)	1,908 (59)	699	1,430	1,799	60-69	37,418	3,131 (8)	2,253 (72)	444	1,274	1,857	70-79	23,344	4,325 (19)	3,707 (86)	379	1,806	2,519	80-89	9,219	5,373 (57)	3,012 (89)	273	1,661	1,712	90+	2,400	892 (37)	811 (91)	56	521	371	I alt	570,502	21,636 (4)	14,561 (67)	4169	10,345	11,291	<p>Deaths by age group³⁶</p> <table border="1"> <thead> <tr> <th>Age group</th> <th>Confirmed cases</th> <th>Deaths (%)</th> <th>Comorbid. (%)</th> <th>Hospitalised females</th> <th>Hospitalised males</th> </tr> </thead> <tbody> <tr><td>0-9</td><td>64,287</td><td>2 (0)</td><td>2 (100)</td><td>0</td><td>2</td></tr> <tr><td>10-19</td><td>99,587</td><td>1 (0)</td><td>0 (0)</td><td>0</td><td>1</td></tr> <tr><td>20-29</td><td>105,166</td><td>6 (0)</td><td>3 (50)</td><td>3</td><td>3</td></tr> <tr><td>30-39</td><td>79,217</td><td>9 (0)</td><td>4 (44)</td><td>5</td><td>4</td></tr> <tr><td>40-49</td><td>82,102</td><td>25 (0)</td><td>18 (72)</td><td>8</td><td>17</td></tr> <tr><td>50-59</td><td>67,762</td><td>90 (0)</td><td>70 (78)</td><td>34</td><td>56</td></tr> <tr><td>60-69</td><td>37,418</td><td>257 (1)</td><td>222 (86)</td><td>96</td><td>161</td></tr> <tr><td>70-79</td><td>23,344</td><td>794 (3)</td><td>743 (94)</td><td>292</td><td>502</td></tr> <tr><td>80-89</td><td>9,219</td><td>1,185 (13)</td><td>1,118 (94)</td><td>544</td><td>641</td></tr> <tr><td>90+</td><td>2,400</td><td>661 (28)</td><td>610 (92)</td><td>392</td><td>269</td></tr> <tr><td>I alt</td><td>570,502</td><td>3030 (1)</td><td>2790 (92)</td><td>1374</td><td>1656</td></tr> </tbody> </table> <p>Total of 3 deaths with COVID-19 in children aged 0-19y throughout the pandemic</p>	Age group	Confirmed cases	Deaths (%)	Comorbid. (%)	Hospitalised females	Hospitalised males	0-9	64,287	2 (0)	2 (100)	0	2	10-19	99,587	1 (0)	0 (0)	0	1	20-29	105,166	6 (0)	3 (50)	3	3	30-39	79,217	9 (0)	4 (44)	5	4	40-49	82,102	25 (0)	18 (72)	8	17	50-59	67,762	90 (0)	70 (78)	34	56	60-69	37,418	257 (1)	222 (86)	96	161	70-79	23,344	794 (3)	743 (94)	292	502	80-89	9,219	1,185 (13)	1,118 (94)	544	641	90+	2,400	661 (28)	610 (92)	392	269	I alt	570,502	3030 (1)	2790 (92)	1374	1656
Date	No. of confirmed SARS-CoV-2 cases	No. of Omicron cases	Percentage of confirmed SARS-CoV-2 cases (%)	95% confidence interval																																																																																																																																																																																																																																																																																							
22-11-2021	4,514	1	0.0%	0%-0.1%																																																																																																																																																																																																																																																																																							
23-11-2021	4,718	1	0.0%	0%-0.1%																																																																																																																																																																																																																																																																																							
24-11-2021	4,033	0	0.0%	0%-0.1%																																																																																																																																																																																																																																																																																							
25-11-2021	4,106	2	0.0%	0%-0.2%																																																																																																																																																																																																																																																																																							
26-11-2021	4,163	4	0.1%	0%-0.3%																																																																																																																																																																																																																																																																																							
27-11-2021	3,852	2	0.1%	0%-0.2%																																																																																																																																																																																																																																																																																							
28-11-2021	3,893	10	0.3%	0.1%-0.5%																																																																																																																																																																																																																																																																																							
29-11-2021	5,096	11	0.2%	0.1%-0.4%																																																																																																																																																																																																																																																																																							
30-11-2021	5,425	25	0.5%	0.3%-0.7%																																																																																																																																																																																																																																																																																							
01-12-2021	4,552	74	1.6%	1.3%-2.0%																																																																																																																																																																																																																																																																																							
02-12-2021	4,595	60	1.3%	1.0%-1.7%																																																																																																																																																																																																																																																																																							
03-12-2021	5,175	73	1.4%	1.1%-1.6%																																																																																																																																																																																																																																																																																							
04-12-2021	5,099	102	2.0%	1.6%-2.4%																																																																																																																																																																																																																																																																																							
05-12-2021	4,805	165	3.4%	2.9%-4.0%																																																																																																																																																																																																																																																																																							
06-12-2021	7,110	348	4.9%	4.4%-5.4%																																																																																																																																																																																																																																																																																							
07-12-2021	7,340	565	7.7%	7.1%-8.4%																																																																																																																																																																																																																																																																																							
08-12-2021	6,894	704	10.2%	9.8%-11.3%																																																																																																																																																																																																																																																																																							
09-12-2021	6,643	756	11.4%	10.6%-12.2%																																																																																																																																																																																																																																																																																							
10-12-2021	6,975	884	12.7%	11.9%-13.5%																																																																																																																																																																																																																																																																																							
11-12-2021	6,717	1,109	16.5%	15.0%-17.4%																																																																																																																																																																																																																																																																																							
12-12-2021	7,177	1,410	19.6%	18.7%-20.6%																																																																																																																																																																																																																																																																																							
13-12-2021	Data pending	2,001	Data pending	Data pending																																																																																																																																																																																																																																																																																							
14-12-2021	Data pending	760	Data pending	Data pending																																																																																																																																																																																																																																																																																							
15-12-2021	Data pending	1	Data pending	Data pending																																																																																																																																																																																																																																																																																							
Age group	Confirmed cases	Total hospitalised (%)	Comorbid. (%)	Short hospital stay	Hospitalised females	Hospitalised males																																																																																																																																																																																																																																																																																					
0-9	64,287	469 (1)	101 (22)	221	218	251																																																																																																																																																																																																																																																																																					
10-19	99,587	415 (0)	136 (33)	158	229	186																																																																																																																																																																																																																																																																																					
20-29	105,166	1,402 (1)	587 (42)	512	858	544																																																																																																																																																																																																																																																																																					
30-39	79,217	1,972 (2)	863 (44)	701	1,161	811																																																																																																																																																																																																																																																																																					
40-49	82,102	2,428 (3)	1,183 (49)	726	1,187	1,241																																																																																																																																																																																																																																																																																					
50-59	67,762	3,229 (5)	1,908 (59)	699	1,430	1,799																																																																																																																																																																																																																																																																																					
60-69	37,418	3,131 (8)	2,253 (72)	444	1,274	1,857																																																																																																																																																																																																																																																																																					
70-79	23,344	4,325 (19)	3,707 (86)	379	1,806	2,519																																																																																																																																																																																																																																																																																					
80-89	9,219	5,373 (57)	3,012 (89)	273	1,661	1,712																																																																																																																																																																																																																																																																																					
90+	2,400	892 (37)	811 (91)	56	521	371																																																																																																																																																																																																																																																																																					
I alt	570,502	21,636 (4)	14,561 (67)	4169	10,345	11,291																																																																																																																																																																																																																																																																																					
Age group	Confirmed cases	Deaths (%)	Comorbid. (%)	Hospitalised females	Hospitalised males																																																																																																																																																																																																																																																																																						
0-9	64,287	2 (0)	2 (100)	0	2																																																																																																																																																																																																																																																																																						
10-19	99,587	1 (0)	0 (0)	0	1																																																																																																																																																																																																																																																																																						
20-29	105,166	6 (0)	3 (50)	3	3																																																																																																																																																																																																																																																																																						
30-39	79,217	9 (0)	4 (44)	5	4																																																																																																																																																																																																																																																																																						
40-49	82,102	25 (0)	18 (72)	8	17																																																																																																																																																																																																																																																																																						
50-59	67,762	90 (0)	70 (78)	34	56																																																																																																																																																																																																																																																																																						
60-69	37,418	257 (1)	222 (86)	96	161																																																																																																																																																																																																																																																																																						
70-79	23,344	794 (3)	743 (94)	292	502																																																																																																																																																																																																																																																																																						
80-89	9,219	1,185 (13)	1,118 (94)	544	641																																																																																																																																																																																																																																																																																						
90+	2,400	661 (28)	610 (92)	392	269																																																																																																																																																																																																																																																																																						
I alt	570,502	3030 (1)	2790 (92)	1374	1656																																																																																																																																																																																																																																																																																						

²⁸ <https://en.coronasmitte.dk/rules-and-regulations>
²⁹ <https://en.coronasmitte.dk/rules-and-regulations>
³⁰ https://experience.arcgis.com/experience/9824b03b114244348ef0b10f69f490b4/page/page_3/
³¹ <https://covid19-country-overviews.ecdc.europa.eu/countries/Denmark.html>
³² <https://covid19.ssi.dk/overvaagningsdata/ugentlige-opgorelser-med-overvaagningsdata>
³³ <https://www.ssi.dk/-/media/cdn/files/covid19/omikron/statusrapport/rapport-omikronvarianten-16122021-fk3t.pdf?la=da>
³⁴ <https://covid19.ssi.dk/overvaagningsdata/ugentlige-opgorelser-med-overvaagningsdata>
³⁵ <https://covid19-country-overviews.ecdc.europa.eu/countries/Denmark.html>
³⁶ <https://covid19.ssi.dk/overvaagningsdata/ugentlige-opgorelser-med-overvaagningsdata>





England, UK

(population 56.6 million)

PHSM ³⁷	Schools & mitigation ³⁸	Vaccination coverage ³⁹																
<p>Standard PHSM including TTIQ and mandatory mask wearing indoors, work from home default, proof of vaccination/negative test required for certain venues; previously most PHSM lifted until re-introduced in late Nov 2021</p> <p>Close contacts of a case with the Omicron variant must isolate for 10 days</p>	<p>Re-opened after summer holiday in mid-Sep 2021</p> <p>Standard PHSM, cohorting, mask wearing recommended for adults and students from year 7 onwards, twice-weekly RAT screening for staff and secondary school students, vaccination of 16-17y commenced mid-Aug & 12-15y commenced mid-Sep 2021 (single dose)</p> <p>Close contacts who are fully vaccinated or under 18.5y and produce a negative PCR test result do not need to isolate; contacts of a case with the Omicron variant must isolate</p>	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>2nd dose (%)</th> <th>3rd/booster (%)</th> </tr> </thead> <tbody> <tr> <td>12+</td> <td>89.1</td> <td>81.3</td> <td>44.1</td> </tr> <tr> <td>12-15</td> <td>45.5</td> <td>0.9</td> <td>-</td> </tr> <tr> <td>16-17</td> <td>61.6</td> <td>30.2</td> <td>1.4</td> </tr> </tbody> </table> <p>Third/booster dose available for all 18y+ and other high-risk groups</p>	Age group (years)	1 st dose (%)	2 nd dose (%)	3 rd /booster (%)	12+	89.1	81.3	44.1	12-15	45.5	0.9	-	16-17	61.6	30.2	1.4
Age group (years)	1 st dose (%)	2 nd dose (%)	3 rd /booster (%)															
12+	89.1	81.3	44.1															
12-15	45.5	0.9	-															
16-17	61.6	30.2	1.4															
Infections by age group ^{40, 41}	Hospitalisations in children ^{42, 43}	Deaths by age group ⁴⁴																
<p>Figure 5: Weekly confirmed COVID-19 case rates per 100,000, tested under Pillar 1 and Pillar 2, by age group</p> <p>Estimated daily percentage of the population testing positive for coronavirus (COVID-19) on nose and throat swabs by age group, England, 21 October 2021 to 1 December 2021</p>	<p>Figure 43: Weekly hospital admission rate by age group for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch</p> <p>COVID-19-positive hospital admissions as a percentage of the rate during the January peak (rate in week ending 17 January = 100%), by age, England</p>	<p>Figure 55: Age-sex pyramid of laboratory confirmed COVID-19 deaths, for the past year</p> <p>Deaths with COVID-19 in the past year:</p> <ul style="list-style-type: none"> <5y: 13 5-9y: 9 10-19y: 49 																

³⁷ <https://www.gov.uk/guidance/covid-19-coronavirus-restrictions-what-you-can-and-cannot-do>
³⁸ <https://www.gov.uk/government/publications/actions-for-schools-during-the-coronavirus-outbreak/schools-covid-19-operational-guidance>
³⁹ <https://coronavirus.data.gov.uk/details/vaccinations?areaType=nation&areaName=England>
⁴⁰ <https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports-2021-to-2022-season>
⁴¹ <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurvey/pilot/previousReleases>
⁴² <https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports-2021-to-2022-season>
⁴³ <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19latestinsights/hospitals>
⁴⁴ <https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports-2021-to-2022-season>



Finland

(population 5.5 million)

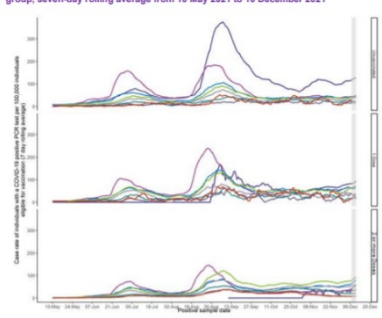
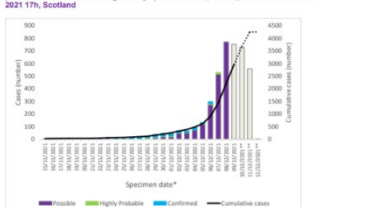
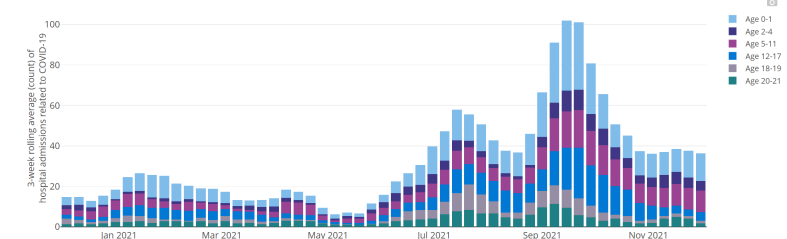
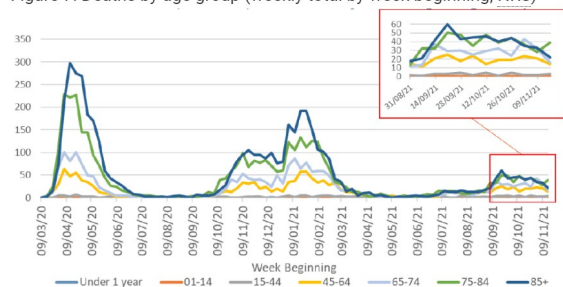
<p>PHSM⁴⁵</p> <p>Mask wearing encouraged in crowded areas, TTIQ, physical distancing, hand hygiene and respiratory etiquette</p>	<p>Schools & mitigation⁴⁶</p> <p>Many schools have reopened from Sep 2021</p> <p>Standard PHSM, cohorting, masks, vaccination of 12y+ commenced early Aug 2021</p>	<p>Vaccination coverage^{47,48}</p> <table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>2nd dose (%)</th> <th>3rd/booster (%)</th> </tr> </thead> <tbody> <tr> <td>12+</td> <td>87.4</td> <td>83.0</td> <td>12.3</td> </tr> <tr> <td>12-15</td> <td>76.0</td> <td>66.7</td> <td>0.2</td> </tr> <tr> <td>16-19</td> <td>83.2</td> <td>75.4</td> <td>0.4</td> </tr> </tbody> </table> <p>Third/booster dose is recommended for females 12y+, males 30y+ and high-risk individuals. Vaccine available to 5-11y children in high-risk groups.</p>	Age group (years)	1 st dose (%)	2 nd dose (%)	3 rd /booster (%)	12+	87.4	83.0	12.3	12-15	76.0	66.7	0.2	16-19	83.2	75.4	0.4
Age group (years)	1 st dose (%)	2 nd dose (%)	3 rd /booster (%)															
12+	87.4	83.0	12.3															
12-15	76.0	66.7	0.2															
16-19	83.2	75.4	0.4															
<p>Infections by age group^{49,50}</p> <p>Finland: 14-day age-specific COVID-19 case notification rate</p> <p>ECDC. Figure produced 16 December 2021. Source: TSBY COVID-19</p> <p>Infections by age group (14-day average):</p> <p>COVID-19-tartuntojen ilmaantuvuus 14 päivän liukuva ajankohalla ikäryhmittäin ja rokotusstatuksen mukaan</p> <p>Note: This graph has not been updated since report #2 (10 Dec 2021)</p> <p>Pink (unvaccinated) Dark blue (1 dose) Light blue (2 doses)</p>	<p>Hospitalisations in children^{51,52}</p> <p>Finland: hospital occupancy by COVID-19 cases</p> <p>ECDC. Figure produced 16 December 2021. Source: ECDC database compiled from public online sources</p> <p>Incidence of hospitalisation by age group (14-day average):</p> <p>COVID-19-tartunnan vuorokausittainen ilmaantuvuus 14 päivän liukuva ajankohalla ikäryhmittäin rokotusstatuksen mukaan</p> <p>Note: This graph has not been updated since report #2 (10 Dec 2021)</p> <p>Pink (unvaccinated) Dark blue (1 dose) Light blue (2 doses)</p>	<p>Deaths by age group⁵³</p> <p>Deaths by age group (for the whole period)</p> <p>There have been 0 deaths in children throughout the entire pandemic</p>																

⁴⁵ <https://thl.fi/en/web/infectious-diseases-and-vaccinations/what-s-new/coronavirus-covid-19-latest-updates/transmission-and-protection-coronavirus>
⁴⁶ <https://thl.fi/en/web/thlfi-en/-/okm-and-thl-new-covid-19-recommendations-for-early-childhood-education-and-care-educational-institutions-and-higher-education-institutions>
⁴⁷ https://sampo.thl.fi/pivot/prod/en/vaccreg/cov19cov/summary_cov19ageareacov
⁴⁸ https://www.thl.fi/episeuranta/rokotukset/koronarokotusten_edistyminen.html
⁴⁹ <https://thl.fi/web/infektioauditit-ja-rokotukset/ajankohtaista/ajankohtaista-koronaviruksesta-covid-19/tilannekatsaus-koronaviruksesta/koronaviruksen-seuranta>
⁵⁰ <https://covid19-country-overviews.ecdc.europa.eu/countries/Finland.html>
⁵¹ <https://thl.fi/web/infektioauditit-ja-rokotukset/ajankohtaista/ajankohtaista-koronaviruksesta-covid-19/tilannekatsaus-koronaviruksesta/koronaviruksen-seuranta>
⁵² <https://covid19-country-overviews.ecdc.europa.eu/countries/Finland.html>
⁵³ <https://experience.arcgis.com/experience/92e9bb33fac744c9a084381fc35aa3c7>



Scotland, UK

(population 5.5 million)

PHSM ⁵⁴	Schools & mitigation ⁵⁵	Vaccination coverage ⁵⁶																
<p>Mandatory masks indoors, TTIQ, screening tests, work from home encouraged, regular asymptomatic lateral flow tests encouraged</p>	<p>Re-opened after summer holiday in mid-Sep 2021 Standard PHSM, cohorting, mask wearing recommended for adults and students from year 7 onwards, twice-weekly RAT screening for staff and secondary school students, vaccination of 16-17y commenced mid-Aug & 12-15y commenced mid-Sep 2021 (single dose)</p> <p>Close contacts who are fully vaccinated or under 18.5y and produce a negative PCR test result do not need to isolate</p>	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>2nd dose (%)</th> <th>3rd/booster (%)</th> </tr> </thead> <tbody> <tr> <td>12+</td> <td>91.3</td> <td>83.3</td> <td>48.4</td> </tr> <tr> <td>12-15</td> <td>62.0</td> <td>3.0</td> <td>0.4</td> </tr> <tr> <td>16-17</td> <td>79.2</td> <td>31.8</td> <td>3.1</td> </tr> </tbody> </table> <p>Third/booster dose for 40y+ and other high-risk individuals, commenced Sep 2021.</p>	Age group (years)	1 st dose (%)	2 nd dose (%)	3 rd /booster (%)	12+	91.3	83.3	48.4	12-15	62.0	3.0	0.4	16-17	79.2	31.8	3.1
Age group (years)	1 st dose (%)	2 nd dose (%)	3 rd /booster (%)															
12+	91.3	83.3	48.4															
12-15	62.0	3.0	0.4															
16-17	79.2	31.8	3.1															
Infections by age group ⁵⁷	Hospitalisations in children ⁵⁸	Deaths by age group ^{59, 60}																
<p>Figure 14: COVID-19 case rate per 100,000 individuals by vaccination status and age group, seven-day rolling average from 10 May 2021 to 10 December 2021</p>  <p>Figure 3: Confirmed Omicron variant of COVID-19 cases or highly probable or possible cases under investigation by specimen date (n=4252, as of 12 December 2021 17h), Scotland</p> 	<p>Hospital admissions related to COVID-19 (3-week rolling average)</p> <p>Download chart data</p>  <p>Any admitted child who is COVID-19 positive is included, so this overestimates the number of children being admitted and needing treatment for COVID-19</p>	<p>Figure 7: Deaths by age group (weekly total by week beginning, NRS)</p>  <p>Note: This graph has not been updated since report #2 (10 Dec 2021)</p> <p>There have been 3 deaths due to COVID-19 in children aged 0-14y throughout the pandemic</p>																

⁵⁴ <https://www.gov.scot/coronavirus-covid-19/>
⁵⁵ <https://www.gov.uk/government/publications/actions-for-schools-during-the-coronavirus-outbreak/schools-covid-19-operational-guidance>
⁵⁶ <https://coronavirus.data.gov.uk/details/vaccinations?areaType=nation&areaName=Scotland>
⁵⁷ <https://www.publichealthscotland.scot/publications/show-all-releases?id=20580>
⁵⁸ <https://scotland.shinyapps.io/phs-covid19-education/> w. 852fb58e7
⁵⁹ <https://www.gov.scot/collections/coronavirus-covid-19-the-state-of-the-epidemic/>
⁶⁰ <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/general-publications/weekly-and-monthly-data-on-births-and-deaths/deaths-involving-coronavirus-covid-19-in-scotland>



Singapore

(population 5.5 million)

PHSM ⁶¹	Schools & mitigation ⁶²	Vaccination coverage ⁶³								
<p>Restrictions re-introduced on 27 Sep 2021 after temporary easing</p> <p>Mandatory masks indoors & outdoors, TTIQ, work from home, shops open with density limits and digital check-in, vaccination requirements to enter some premises, limits on guests at home</p>	<p>Re-opened in Jul 2021 with temporary home-based learning so exams could be undertaken without interruption; secondary schools continue to study onsite; phased return of primary schools from 11 Oct 2021</p> <p>Standard PHSM, cohorting, RAT & temperature screening, mandatory masks 6y+ with exceptions, vaccination of 12y+ commenced early Jun 2021s</p>	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>2nd dose (%)</th> <th>3rd/booster (%)</th> </tr> </thead> <tbody> <tr> <td>Total pop.</td> <td>87.0</td> <td>87.0</td> <td>32.0</td> </tr> </tbody> </table> <p>Third/booster dose for 30y+ and other high-risk individuals from Sep 2021.</p>	Age group (years)	1 st dose (%)	2 nd dose (%)	3 rd /booster (%)	Total pop.	87.0	87.0	32.0
Age group (years)	1 st dose (%)	2 nd dose (%)	3 rd /booster (%)							
Total pop.	87.0	87.0	32.0							
Infections by age group ⁶⁴	Hospitalisations in children ⁶⁵	Deaths by age group ⁶⁶								
<p>Number of Community Cases by Age</p> <p>SOURCE: DATA.GOV/SG</p>	<p>Hospitalised Patients by Age Groups</p> <p>SOURCE: DATA.GOV/SG</p> <p>One child was admitted to ICU due to MIS-C for the entire pandemic</p> <p>There have been five cases of MIS-C throughout the entire pandemic, last reported 8 Nov 2021</p>	<p>Deaths by Age Groups</p> <p>There have been 0 deaths in children throughout the entire pandemic</p>								

⁶¹ <https://www.moh.gov.sg/covid-19-phase-advisory>
⁶² <https://www.moe.gov.sg/faqs-covid-19-infection>
⁶³ <https://www.moh.gov.sg/>
⁶⁴ <https://www.moh.gov.sg/>
⁶⁵ <https://www.moh.gov.sg/covid-19/statistics>
⁶⁶ <https://www.moh.gov.sg/covid-19/statistics>

South Africa

(population 60.4 million)

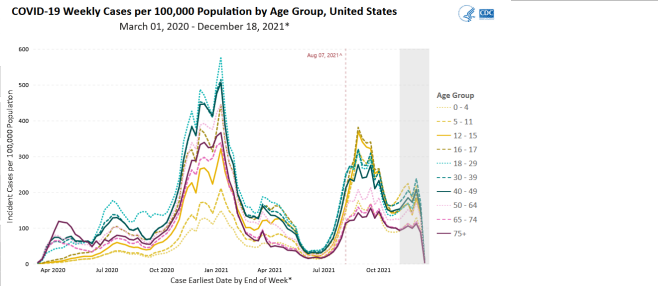
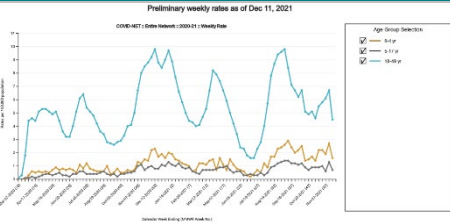
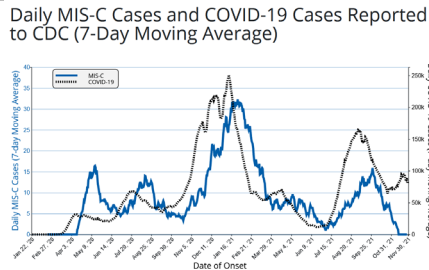
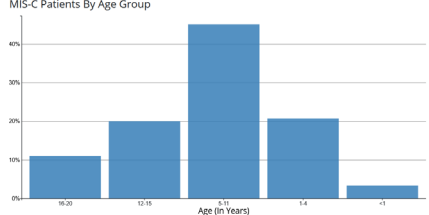
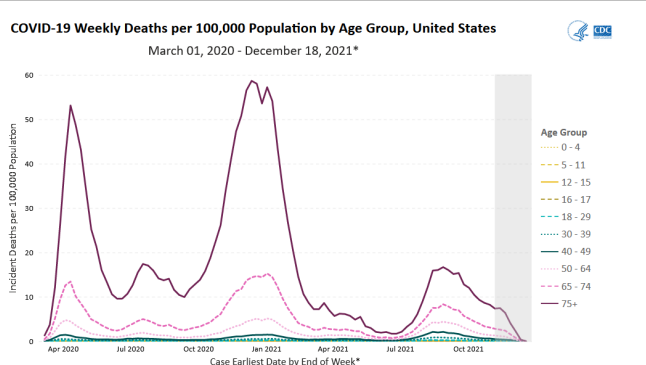
<p>PHSM⁶⁷</p> <p>Since 1 Oct 2021, restrictions including partial curfew, mandatory masks 6y+ with exceptions, density limits</p>	<p>Schools & mitigation⁶⁸</p> <p>Re-opened in Aug 2021 Standard PHSM, ventilation, symptom screening, mandatory masks 6y+ with exceptions, visitor limits, vaccination of 12y+ commenced mid Oct 2021</p>	<p>Vaccination coverage⁶⁹</p> <p>Age group (years) Fully vaccinated* (%)</p> <p>18+ 38.4</p> <p>*Note: South Africa also uses the J&J/Janssen vaccine which is a single-dose vaccine. Coverage data for 12-17y not available.</p>
<p>Infections by age group⁷⁰</p> <p>Characteristics of COVID-19 cases in South Africa by age and sex</p> <p>Figure 4. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, South Africa, 3 March 2020 - 31 December 2021 (n=3 127 775, 29 782 missing age).</p>	<p>Hospitalisations in children and deaths by age group^{71,72}</p> <p>Hospital admissions of COVID-19 cases, by health sector, by epidemiological week</p> <p>● Private ● Public Total: 453.08K</p> <p>The number of reported admissions may change day-to-day as new facilities enroll in this sentinel surveillance. The current epidemiological week may have fewer admissions as it is incomplete.</p> <p>Admissions to date by age group and sex Total: 453.08K</p> <p>Deaths to date by age group and sex Total: 95.22K</p> <p>COVID-19 in-hospital case fatality ratio in first 25 days of second, third and fourth wave, amongst patients with outcome, by age group in years, City of Tshwane Metro, 15 November-9 December 2020, 29 November-9 January 2021, 9 May-10 July 2021 and 7 November-4 December 2021</p> <p>Total of 671 deaths with COVID-19 in children 0-19y throughout the entire pandemic Deaths in children account for <0.1% of all deaths in South Africa</p>	<p>Genomic surveillance⁷³</p> <p>Detection Rates: Beta, Delta, C.1.2 and Omicron</p> <p>Detection rates of variants being monitored in South Africa</p> <p>C.1.2 has been detected at ≤ 4% of sequences monthly. Beta prevalence increased slightly in October and has also been detected in November. Omicron first detected in South Africa on November 8th, accounting for 78% (n=493/630) genomes.</p> <p>Proportion and number of clades by epiweek in South Africa, 2021 (N= 18 383)</p> <p>Delta dominated South Africa's third wave with >80% frequency in October, with C.1.2 detection remaining <4%. Omicron appears to dominate November sequencing data but sequencing is ongoing to determine its prevalence.</p>

⁶⁷ <https://www.gov.za/covid-19/resources/regulations-and-guidelines-coronavirus-covid-19>
⁶⁸ <https://www.gov.za/covid-19/resources/regulations-and-guidelines-coronavirus-covid-19>
⁶⁹ <https://sacoronavirus.co.za/latest-vaccine-statistics/>
⁷⁰ <https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/surveillance-reports/weekly-epidemiological-brief/>
⁷¹ <https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/surveillance-reports/daily-hospital-surveillance-datcov-report/>
⁷² <https://www.youtube.com/watch?app=desktop&v=e4Y2sXkt-cw>
⁷³ <https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/sars-cov-2-genomic-surveillance-update/>



USA

(population 332.8 million)

PHSM ⁷⁴	Schools & mitigation ⁷⁵	Vaccination coverage ^{76,77}																
<p>Varies by state</p> <p>The US CDC recommends indoor mask wearing for all unvaccinated and aged 2y+, physical distancing, hand & surface hygiene, TTIQ, but adoption varies by State</p>	<p>Many schools have reopened from Sep 2021</p> <p>Standard PHSM, cohorting, masks, PCR & RAT screening, vaccination commenced mid-May for 12+y and early Nov 2021 for 5-11y, but adoption varies by State</p>	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>Fully vaccinated* (%)</th> <th>3rd/booster (%)</th> </tr> </thead> <tbody> <tr> <td>5-11</td> <td>20.1</td> <td>11.3</td> <td>-</td> </tr> <tr> <td>12-17</td> <td>62.3</td> <td>52.5</td> <td>-</td> </tr> <tr> <td>18+</td> <td>84.7</td> <td>72.3</td> <td>30.5</td> </tr> </tbody> </table> <p>*Note: The US also uses the J&J/Janssen vaccine which is a single-dose vaccine. Third/booster dose for 65y+ and other high-risk individuals from Sep 2021, expanded to all 18y+ from late Nov 2021.</p>	Age group (years)	1 st dose (%)	Fully vaccinated* (%)	3 rd /booster (%)	5-11	20.1	11.3	-	12-17	62.3	52.5	-	18+	84.7	72.3	30.5
Age group (years)	1 st dose (%)	Fully vaccinated* (%)	3 rd /booster (%)															
5-11	20.1	11.3	-															
12-17	62.3	52.5	-															
18+	84.7	72.3	30.5															
<h3>Infections by age group⁷⁸</h3>  <h3>Hospitalisations in children⁸³</h3>  <p>Any admitted child who is COVID-19 positive is likely to be included, so this is likely to be an overestimation of the number of children needing treatment for COVID-19</p>	<h3>MIS-C⁷⁹</h3>  <h3>MIS-C Patients By Age Group</h3>  <p>Note: This data has not been updated since report #1 (3 Dec 2021) There have been 5973 cases of MIS-C throughout the entire pandemic, including 52 deaths The median age of MIS-C cases was 9y and half were between 5-13y</p>	<h3>Deaths by age group^{80, 81}</h3>  <p>Total 655 deaths with COVID-19 in children 0-17y throughout the entire pandemic, accounting for <0.2% of all deaths in the US</p> <p>There is marked variation by State/Territory and case fatality rates are between 0-0.01% for the vast majority of States and Territories⁸²: e.g. Texas (n=115); Arizona (n=50); California (n=42); Tennessee (n=26); Puerto Rico (n=9); Guam (n=6); Hawaii (n=1); Alaska (n=0) Note: State-specific data has not been updated since report #2 (10 Dec 2021)</p>																

⁷⁴ <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>
⁷⁵ <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html>
⁷⁶ https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-rate-total
⁷⁷ <https://covid.cdc.gov/covid-data-tracker/#vaccination-demographics-trends>
⁷⁸ <https://covid.cdc.gov/covid-data-tracker/#demographicsovertime>
⁷⁹ <https://covid.cdc.gov/covid-data-tracker/#mis-national-surveillance>
⁸⁰ <https://covid.cdc.gov/covid-data-tracker/#demographicsovertime>
⁸¹ https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.html
⁸² <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/children-and-covid-19-state-level-data-report/>
⁸³ https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html





USA: Comparison of states

A comparison of select US states based on 7-day incidence per 100,000 population and PHSM

INDICATOR	MONTANA (pop. 1.1 million)	TENNESSEE (pop. 6.8 million)	CALIFORNIA (pop. 39.5 million)																																													
7-day incidence per 100,000 population⁸⁴	104.8	183.2	111.1																																													
PHSM	Mask wearing encouraged, physical distancing, TTIQ ⁸⁵	Mask wearing encouraged, physical distancing, TTIQ ⁸⁶	Indoor mask wearing mandatory in many indoor venues for all aged 2+, TTIQ ⁸⁷																																													
Schools & mitigation	Schools reopened from Aug 2021 Standard PHSM as recommended by US CDC, school-based mask mandates with option for parents to opt-out, vaccination encouraged, vaccination of 12+y commenced mid-May and 5-11y in early Nov 2021 ⁸⁸	Schools reopened from Aug 2021 Standard PHSM as recommended by US CDC, mask wearing and vaccination encouraged, vaccination of 12+y commenced mid-May and 5-11y in early Nov 2021 ⁸⁹	Schools reopened from Sep 2021 Standard PHSM as recommended by US CDC, mask wearing mandatory for all aged 2+, PCR & RAT screening, vaccination of 12+y commenced mid-May and 5-11y in early Nov 2021, mandatory staff vaccination or weekly testing ⁹⁰																																													
Vaccination coverage⁹¹	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>Fully vacc.* (%)</th> </tr> </thead> <tbody> <tr> <td>5-11</td> <td>16.6</td> <td>7.1</td> </tr> <tr> <td>12-17</td> <td>47.0</td> <td>39.7</td> </tr> <tr> <td>18-64</td> <td>64.9</td> <td>56.4</td> </tr> <tr> <td>65+</td> <td>99.9</td> <td>90.8</td> </tr> </tbody> </table> <p>*The US also uses the J&J/Janssen vaccine which is a single-dose vaccine. State-specific data on 3rd/booster dose coverage not available.</p>	Age group (years)	1 st dose (%)	Fully vacc.* (%)	5-11	16.6	7.1	12-17	47.0	39.7	18-64	64.9	56.4	65+	99.9	90.8	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>Fully vacc.* (%)</th> </tr> </thead> <tbody> <tr> <td>5-11</td> <td>10.3</td> <td>4.5</td> </tr> <tr> <td>12-17</td> <td>40.9</td> <td>34.0</td> </tr> <tr> <td>18-64</td> <td>64.2</td> <td>55.8</td> </tr> <tr> <td>65+</td> <td>95.3</td> <td>87.3</td> </tr> </tbody> </table>	Age group (years)	1 st dose (%)	Fully vacc.* (%)	5-11	10.3	4.5	12-17	40.9	34.0	18-64	64.2	55.8	65+	95.3	87.3	<table border="1"> <thead> <tr> <th>Age group (years)</th> <th>1st dose (%)</th> <th>Fully vacc.* (%)</th> </tr> </thead> <tbody> <tr> <td>5-11</td> <td>23.4</td> <td>12.2</td> </tr> <tr> <td>12-17</td> <td>77.0</td> <td>62.9</td> </tr> <tr> <td>18-64</td> <td>90.1</td> <td>73.7</td> </tr> <tr> <td>65+</td> <td>99.9</td> <td>91.6</td> </tr> </tbody> </table>	Age group (years)	1 st dose (%)	Fully vacc.* (%)	5-11	23.4	12.2	12-17	77.0	62.9	18-64	90.1	73.7	65+	99.9	91.6
Age group (years)	1 st dose (%)	Fully vacc.* (%)																																														
5-11	16.6	7.1																																														
12-17	47.0	39.7																																														
18-64	64.9	56.4																																														
65+	99.9	90.8																																														
Age group (years)	1 st dose (%)	Fully vacc.* (%)																																														
5-11	10.3	4.5																																														
12-17	40.9	34.0																																														
18-64	64.2	55.8																																														
65+	95.3	87.3																																														
Age group (years)	1 st dose (%)	Fully vacc.* (%)																																														
5-11	23.4	12.2																																														
12-17	77.0	62.9																																														
18-64	90.1	73.7																																														
65+	99.9	91.6																																														

⁸⁴ https://covid.cdc.gov/covid-data-tracker/#cases_casesper100klast7days

⁸⁵ <https://covid19.mt.gov/index>

⁸⁶ <https://covid19.tn.gov/prevention/>

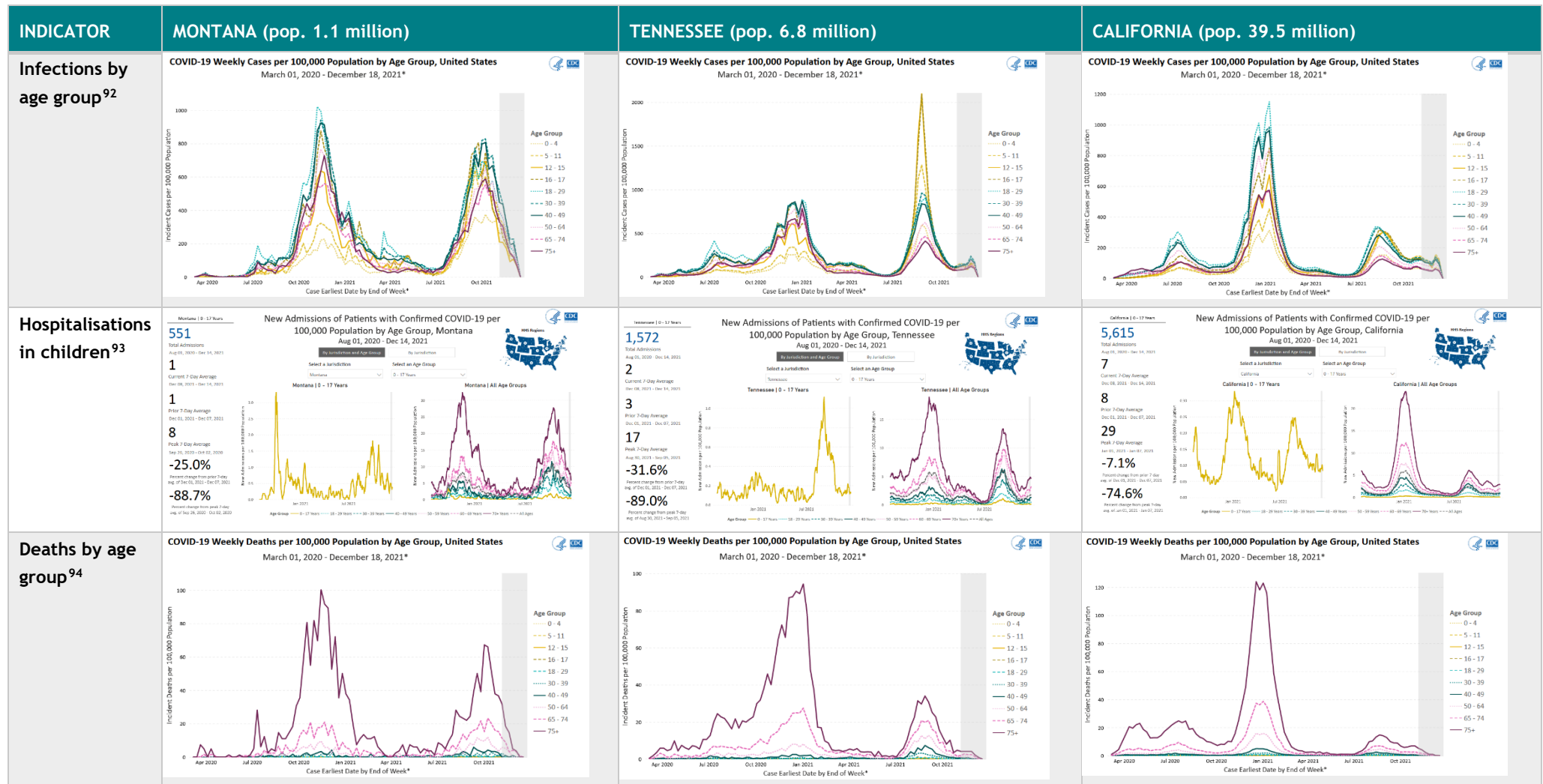
⁸⁷ <https://covid19.ca.gov/masks-and-ppe/>

⁸⁸ <https://dphhs.mt.gov/publichealth/cdepi/diseases/CoronavirusMT/index>

⁸⁹ <https://www.tn.gov/health/cdepi/ncov/educational-resources.html>

⁹⁰ <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/K-12-Guidance-2021-22-School-Year.aspx>

⁹¹ <https://www.mavoclinic.org/coronavirus-covid-19/vaccine-tracker>



Note: Comparative graphs may have different scales on the y-axis.

⁹² <https://covid.cdc.gov/covid-data-tracker/#demographicsovertime>
⁹³ <https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions>
⁹⁴ <https://covid.cdc.gov/covid-data-tracker/#demographicsovertime>



USA: Impact of vaccination on disease incidence

Seven-day incidence per 100,000 population in people who received at least one dose of vaccine, by age group⁹⁵



Currently, children under age five are not eligible to be vaccinated.

Last Updated: Dec 16, 2021

Data source: VTricks, IIS, Federal Pharmacy Program, Federal Entities Program, U.S. Census Bureau 10-year July 2019 National Population Estimates; Visualization: CDC CPR DEO Situational Awareness Public Health Science Team

⁹⁵ <https://covid.cdc.gov/covid-data-tracker/#vaccinations-cases-trends>



Authors

Darren Suryawijaya Ong

Research Assistant, Asia-Pacific Health, Murdoch Children's Research Institute

Dr John Hart

Research Clinician, Asia-Pacific Health, Murdoch Children's Research Institute

Professor Fiona Russell

Director, Child and Adolescent Health PhD Program, Department of Paediatrics, The University of Melbourne
Group Leader, Asia-Pacific Health, Murdoch Children's Research Institute

To subscribe and receive the weekly reports, please email: asiapacific.health@mcri.edu.au

Murdoch Children's Research Institute

50 Flemington Rd, Parkville
Victoria 3052 Australia
ABN 21 006 566 972

<https://www.mcri.edu.au/research/themes/infection-and-immunity/asia-pacific-health>