Public Health Spotlight

Communicable and Non-Communicable Diseases

Issue 11 | 11 August 2022
Monkeypox

Overview

Internationally, 29,833 confirmed cases of monkeypox have been reported, from 90 different countries (data as of 10 August 2022). Over the past week, the number of monkeypox cases reported has increased by 25%, and in the America’s the number of monkeypox cases reported increased by 41%. The total number of monkeypox deaths reported to WHO is 11. There were four deaths reported during the past week; one in Brazil, two in Spain and one in India. Jamaica has reported three cases of monkeypox to date and the first two had recently travelled. However the third case was locally-acquired, which means the individual had not recently travelled abroad and had no epidemiological link to the previous two cases.

Cayman Islands

There continue to be no known cases of monkeypox virus detected in the Cayman Islands, and there are no suspected cases currently being investigated.

Alzheimer's Disease

Alzheimer’s disease is a progressive disease, which affects memory and cognitive skills. In the early stages, it can present as mild memory loss particularly for recently learned information, and in late stage can develop where individuals are unable to manage a conversation. Activities such as driving a car, cooking a meal or paying the bills can prove challenging to individuals with Alzheimer’s. It typically occurs among individuals over the age of 65 years. There is currently no cure available. Globally, Alzheimer’s disease is attributed to be the cause for 60-70% of dementia cases.

According to the recent 2021 Census in the Cayman Islands, 193 Alzheimer cases were reported in Cayman which was slightly higher in females than males, 111 cases compared to 82 cases. This equates to an incidence of 3 cases per 100,000 population. The most commonly reported difficulties in everyday life among individuals with Alzheimer’s were remembering or concentrating, walking or climbing stairs, and washing all over. There are no known approaches that have been shown effective in preventing Alzheimer’s disease. However, some factors such as increased physical activity, blood pressure control (among those with high blood pressures) and cognitive training may reduce the risk of cognitive decline.
COVID-19 - Epidemiological Week 31
31 July - 6 August 2022 (Data as of 08-08-2022)

International Situation
The reported weekly cases globally remained stable during Epi Week 31, and the reported weekly number of deaths decreased by 9%.

Cayman Islands Local Trends
Detection of cases continues to decline by 25% with 240 cases detected in Epi Week 31 compared to 322 in the previous week. The case rate has fallen to 345 per 100,000 population from 464 cases per 100,000 population. PCR testing has decreased by 22% with a testing rate of 785 tests per 100,000. Genomic sequencing data indicates the dominant variant circulating is BA.5 and its subvariants (data from early July).

Hospital Admissions
Eight new hospital admissions were registered during Epi Week 31, the same as the previous week. Of the nine new admissions, 4 were admitted due to COVID-19 morbidity and 4 patients were detected on screening. A total of 11 patients required inpatient treatment, the same as the previous week.

Vaccination
During Epi Week 31, there were 88 adults who received a COVID-19 vaccine (34 first dose and 54 second dose) and 10 children (8 first dose and 2 second dose).

Key Message
COVID-19 case detection and testing continue to decline in the Cayman Islands. Measures to reduce your risk of catching COVID-19 and passing it on to others include good hand hygiene, staying home when symptomatic or positive and getting your booster vaccination.
COVID-19 - Epidemiological Week 30

Table 1: COVID-19 case numbers

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Current EpiWeek</th>
<th>Previous EpiWeek</th>
<th>Percentage change</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newly confirmed cases(^1)</td>
<td>240</td>
<td>322</td>
<td>-25%</td>
<td>29,653</td>
</tr>
<tr>
<td>Case rate(^2) per 100,000 population</td>
<td>346</td>
<td>464</td>
<td>-25%</td>
<td>41,512</td>
</tr>
<tr>
<td>Daily average (7-day rolling average)</td>
<td>34</td>
<td>46</td>
<td>-25%</td>
<td></td>
</tr>
<tr>
<td>Number of PCR tests conducted</td>
<td>561</td>
<td>715</td>
<td>-22%</td>
<td></td>
</tr>
<tr>
<td>New positive PCR test results</td>
<td>240</td>
<td>322</td>
<td>-25%</td>
<td>29,653</td>
</tr>
<tr>
<td>Test positivity(^3)</td>
<td>43%</td>
<td>45%</td>
<td>-4%</td>
<td></td>
</tr>
<tr>
<td>Testing rate per 100,000 population</td>
<td>785</td>
<td>1,001</td>
<td>-22%</td>
<td></td>
</tr>
<tr>
<td>Deaths</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>29</td>
</tr>
</tbody>
</table>

\(^1\) Newly confirmed cases (PCR) reported to Public Health with a sample collection date between 00:00 to 23:59 on 31 July 2022 – 6 August 2022.

\(^2\) Case Rate = proportion of persons who tested positive over population standardized to 100K population (New cases/total population)*100,000

\(^3\) Number of new positive PCR results over total number of PCR tests done (new positive PCR results/total number of PCRs conducted)*100

Figure 1: Total COVID-19 cases since March 2020 by specimen date
Figure 2: Number of COVID-19 cases in the last 30 days by specimen date

Orange bars indicate PCR results are pending thus figures may change.

Figure 3: Number of PCR tests conducted, new PCR positive results and test positivity rate for the last 30 days by test date

Data refers to the percentage of patients who tested positive via PCR in the prior 30 days.
Figure 4: Case age and sex distribution for the reporting Epi Week

Table 2: COVID-19 patients admitted to hospital

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Current EpiWeek</th>
<th>Previous EpiWeek</th>
<th>Percentage change</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>362</td>
</tr>
<tr>
<td>New COVID-19 patients admitted</td>
<td>8</td>
<td>8</td>
<td>0%</td>
<td>362</td>
</tr>
<tr>
<td>By age, vaccination, and reason for admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New admissions &lt;10 years</td>
<td>0</td>
<td>1</td>
<td>-</td>
<td>28</td>
</tr>
<tr>
<td>New admissions &gt;10 years</td>
<td>8</td>
<td>7</td>
<td>+14%</td>
<td>334</td>
</tr>
<tr>
<td>New admissions with ≥ 2 doses of a COVID-19 vaccine</td>
<td>7</td>
<td>7</td>
<td>0%</td>
<td>140</td>
</tr>
<tr>
<td>Admitted for COVID-19 morbidity</td>
<td>4</td>
<td>3</td>
<td>+33%</td>
<td>-</td>
</tr>
<tr>
<td>Admitted with COVID-19, detected by screening</td>
<td>4</td>
<td>5</td>
<td>-20%</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 3: COVID-19 inpatients

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Current EpiWeek</th>
<th>Previous EpiWeek</th>
<th>Percentage change</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of inpatients</td>
<td>11</td>
<td>11</td>
<td>0%</td>
<td>362</td>
</tr>
<tr>
<td>Supplemental O2 inpatients</td>
<td>2</td>
<td>3</td>
<td>-33%</td>
<td>-</td>
</tr>
<tr>
<td>ICU inpatients</td>
<td>3</td>
<td>2</td>
<td>+50%</td>
<td>-</td>
</tr>
<tr>
<td>Ventilated inpatients</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Figure 5: Weekly hospitalisations and deaths (since 8 September 2021*)

*First COVID-19 patient was in March 2020, but hospitalisation figures begin September 2021 for graphical reasons.

Table 4: Hospitalisation and Death statistics March 2020 – Present.

<table>
<thead>
<tr>
<th>Vaccination Status</th>
<th>Hospitalisations</th>
<th>Proportion</th>
<th>Deaths</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvaccinated</td>
<td>211</td>
<td>58%</td>
<td>24</td>
<td>83%</td>
</tr>
<tr>
<td>Partially Vaccinated</td>
<td>11</td>
<td>3%</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Fully vaccinated</td>
<td>109</td>
<td>30%</td>
<td>4</td>
<td>14%</td>
</tr>
<tr>
<td>Fully vaccinated +1 Booster</td>
<td>30</td>
<td>8%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Fully vaccinated +2 Boosters</td>
<td>1</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>362</strong></td>
<td><strong>100%</strong></td>
<td><strong>29</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Figure 6: Weekly COVID-19 hospital admissions stratified by those aged above and below 10

Table 5: COVID-19 vaccine uptake and coverage reporting previous Epi Week

<table>
<thead>
<tr>
<th>Dose Number</th>
<th>Number administered in the week</th>
<th>Total Count</th>
<th>Coverage of Total Population*</th>
<th>Coverage of population over 5*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42</td>
<td>61,607</td>
<td>86.2%</td>
<td>95.1%</td>
</tr>
<tr>
<td>2</td>
<td>56</td>
<td>60,057</td>
<td>84.1%</td>
<td>92.8%</td>
</tr>
<tr>
<td>3</td>
<td>54</td>
<td>23,842</td>
<td>33.4%</td>
<td>36.8%</td>
</tr>
<tr>
<td>4</td>
<td>121</td>
<td>2,268</td>
<td>3.2%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

Based on total population of 71,432
Table 6: COVID-19 paediatric vaccine doses administered and booster coverage reporting previous Epi Week

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of paediatric 1st doses administered within the EpiWeek</td>
<td>8</td>
</tr>
<tr>
<td>Number of paediatric 2nd doses administered within the EpiWeek</td>
<td>2</td>
</tr>
<tr>
<td>Number of children (5-11) immunized with the paediatric vaccine</td>
<td>810</td>
</tr>
<tr>
<td>Booster (3rd dose) coverage for population &gt;20 (Fig.7)</td>
<td>43.5%</td>
</tr>
</tbody>
</table>

Figure 7: Vaccine coverage
Further genomic sequencing data of positive SARS-CoV2 isolates shows that Omicron BA.5 and its subvariants attribute the highest proportion among isolates sequenced (41%). This aligns to the genomic landscape reported internationally. As this is a relatively small sample of 188 isolates that have been sequenced and PCR testing is falling, this provides an indication of what is circulating in the population however cannot determine prevalence. The variant BA.2.75 recently included under WHO monitoring has not been detected to date in Cayman Islands.