Weekly pertussis update for Washington State
2018 year to date (YTD) confirmed and probable cases reported through 12/15/2018 (week 50)

This update summarizes reports of pertussis in persons with 2018 onsets received by local health jurisdictions (LHJs) during weeks 1-50 made visible to Washington State Department of Health (DOH) - Communicable Disease Epidemiology, and containing sufficient information for a DOH case classification to have been assigned.

- There have been a total of 570 cases reported statewide through week 50, compared 719 cases reported in 2017 during the same time period. Dates for the 2018/2017 comparison were based on LHJ notification date.

**Number of Pertussis Cases Reported in Washington State by Notification Week, 2018 vs. 2017**

**WA State Pertussis Cases Reported by Month and Year with Projected Baseline and Epidemic Thresholds, 2007-2017 and 2018 (YTD)**

*Monthly data values from the 2012 epidemic period were not used to project the baseline and epidemic threshold.*
Among twenty-four counties with pertussis activity in 2018, the number of pertussis cases reported in a given county ranged from 1 to 101 and the year to date rate of disease in a given county ranged from 2.4 to 34.0 per 100,000 persons (see Table 1).

- The median and mean county rates per 100,000 persons in counties reporting pertussis activity are 6.8 and 9.6, respectively.

- Fifteen counties have reported no pertussis this year.

- The overall incidence year to date is 7.9 pertussis cases per 100,000 Washington residents with a rate in infants under one year of age reported as having whooping cough, forty-six were old enough to have received a first dose of pertussis-containing vaccine but only twenty-one had received one. Ten infants were hospitalized, and all ten were under 3 months of age.

### Table 1. WA State pertussis cases by county, 2018 YTD

<table>
<thead>
<tr>
<th>County</th>
<th>2017 OFM Population</th>
<th>Number of cases</th>
<th>Rate per 100,000 persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benton</td>
<td>193,500</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td>Chelan</td>
<td>76,830</td>
<td>10</td>
<td>13.0</td>
</tr>
<tr>
<td>Clark</td>
<td>471,000</td>
<td>101</td>
<td>21.4</td>
</tr>
<tr>
<td>Cowlitz</td>
<td>105,900</td>
<td>36</td>
<td>34.0</td>
</tr>
<tr>
<td>Douglas</td>
<td>41,420</td>
<td>6</td>
<td>4.8</td>
</tr>
<tr>
<td>Franklin</td>
<td>90,330</td>
<td>6</td>
<td>6.6</td>
</tr>
<tr>
<td>Grant</td>
<td>95,630</td>
<td>13</td>
<td>13.6</td>
</tr>
<tr>
<td>Grays Harbor</td>
<td>72,970</td>
<td>4</td>
<td>5.5</td>
</tr>
<tr>
<td>Island</td>
<td>82,790</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>King</td>
<td>2,153,700</td>
<td>98</td>
<td>4.6</td>
</tr>
<tr>
<td>Kitsap</td>
<td>264,300</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>Kittitas</td>
<td>44,730</td>
<td>14</td>
<td>31.3</td>
</tr>
<tr>
<td>Lewis</td>
<td>77,440</td>
<td>6</td>
<td>7.7</td>
</tr>
<tr>
<td>Okanogan</td>
<td>42,110</td>
<td>4</td>
<td>9.5</td>
</tr>
<tr>
<td>Pend Oreille</td>
<td>13,370</td>
<td>1</td>
<td>7.5</td>
</tr>
<tr>
<td>Pierce</td>
<td>859,400</td>
<td>65</td>
<td>7.6</td>
</tr>
<tr>
<td>Skagit</td>
<td>124,100</td>
<td>3</td>
<td>2.4</td>
</tr>
<tr>
<td>Skamania</td>
<td>11,690</td>
<td>1</td>
<td>8.6</td>
</tr>
<tr>
<td>Snohomish</td>
<td>789,400</td>
<td>37</td>
<td>4.7</td>
</tr>
<tr>
<td>Spokane</td>
<td>499,800</td>
<td>65</td>
<td>13.0</td>
</tr>
<tr>
<td>Thurston</td>
<td>276,900</td>
<td>26</td>
<td>9.4</td>
</tr>
<tr>
<td>Walla Walla</td>
<td>61,400</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Whatcom</td>
<td>216,300</td>
<td>50</td>
<td>23.1</td>
</tr>
<tr>
<td>Yakima</td>
<td>253,000</td>
<td>10</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Note.** Counties with no reported cases classified as confirmed or probable, 2018: Adams, Asotin, Clallam, Columbia, Ferry, Garfield, Jefferson, Klickitat, Lincoln, Mason, Pacific, San Juan, Stevens, Wahkiakum, and Whitman.

### Table 2. WA State pertussis cases by age group, 2018 YTD

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>2017 OFM Population</th>
<th>Number of Cases</th>
<th>Rate per 100,000 persons</th>
<th>% cases by age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>90,084</td>
<td>66</td>
<td>73.3</td>
<td>11.6</td>
</tr>
<tr>
<td>1-4</td>
<td>364,050</td>
<td>117</td>
<td>32.1</td>
<td>20.5</td>
</tr>
<tr>
<td>5-9</td>
<td>465,666</td>
<td>65</td>
<td>34.0</td>
<td>14.2</td>
</tr>
<tr>
<td>10-13</td>
<td>366,199</td>
<td>65</td>
<td>17.7</td>
<td>11.4</td>
</tr>
<tr>
<td>14-18</td>
<td>455,519</td>
<td>141</td>
<td>31.0</td>
<td>24.7</td>
</tr>
<tr>
<td>19-24</td>
<td>579,933</td>
<td>28</td>
<td>4.8</td>
<td>4.9</td>
</tr>
<tr>
<td>25-44</td>
<td>1,958,807</td>
<td>37</td>
<td>1.9</td>
<td>6.5</td>
</tr>
<tr>
<td>45-64</td>
<td>1,908,263</td>
<td>37</td>
<td>1.9</td>
<td>6.5</td>
</tr>
<tr>
<td>65+</td>
<td>1,121,780</td>
<td>13</td>
<td>1.2</td>
<td>2.3</td>
</tr>
<tr>
<td>All ages</td>
<td>7,183,700</td>
<td>263</td>
<td>7.9</td>
<td></td>
</tr>
</tbody>
</table>

**WA State Pertussis Rates by Age Group 2006-2017**

- Incidence per 100,000
- Onset Year
- Age Group (Yrs) 1 1.6 2.0 4.0 5.0 11.14 15.18 19+