Metrics for Case Investigation and Contact Tracing Conducted by Washington State Centralized Investigations

Washington State Department of Health

May 5, 2021
Publication Number 420-291

For more information or additional copies of this report:

Disease Control and Health Statistics
Public Health Outbreak Coordination, Information, and Surveillance
1610 NE 150th Street, MS: K17-9
Shoreline, WA 98155

Phone: 206-418-5700 (24-hour contact for local health jurisdictions only)
Email: CommDisEpi@doh.wa.gov
Metrics for Case Investigation and Contact Tracing Conducted by Washington State Centralized Investigations

Washington State Department of Health

May 5, 2021

NOTE: Beginning December 16, 2020 probable cases are included in the metrics calculated for cases investigation and contact tracing. Probable cases are individuals with a positive antigen test for COVID-19. Also beginning on December 16, 2020, probable cases are included in all case, hospitalization, and death counts on the Washington State Department of Health COVID-19 dashboard. Probable cases since June 2020, when the first antigen results were reported in Washington, are now included in the dashboard. This places the Metrics for Case Investigation and Contact Tracing report in alignment with the Washington State Department of Health COVID-19 Data Dashboard.

Public health professionals perform case investigations and contact tracing to help slow and prevent the spread of infectious diseases like COVID-19. When public health learns that someone has tested positive with molecular or antigen testing for COVID-19, an interviewer reaches out to talk to that person, usually by phone. This is known as a case investigation. When talking to the person who tested positive with molecular or antigen testing for COVID-19, interviewers work to determine their close contacts. A close contact is anyone who was within 6 feet of an infected person (confirmed or probable COVID-19 case) for a cumulative total of 15 minutes or more over a 24-hour period starting from 2 days before illness onset (or, for asymptomatic patients, 2 days prior to test specimen collection) until the time the patient is isolated. Interviewers then reach out to inform close contacts of possible exposure. This is the next step to prevent the spread of disease, known as contact tracing. Interviewers do not reveal the name of the person who tested positive with molecular or antigen testing for COVID-19 when speaking with close contacts.

Local health departments lead case investigation and contact tracing work in Washington State. The Washington State Department of Health (DOH) and its partners support this work. In certain situations, local health departments may ask DOH to conduct case investigations and contact tracing on their behalf through the DOH centralized investigations team. These situations can include a local health department not having the capacity for conducting
investigations themselves either because of insufficient staffing or when experiencing a surge in cases. These requests vary day-to-day and week-to-week.

The purpose of this report is to show the timeliness of reaching COVID-19 confirmed and probable cases and their contacts for case investigation and contact tracing activities conducted by the DOH centralized investigations team.

The DOH centralized investigation targets for the timeliness of case investigation and contact tracing are:

- 90% of cases will be reached within 1 day of DOH receiving a positive molecular or antigen test result
- 80% of contacts be reached within 2 days of DOH receiving a positive molecular or antigen test result for the case

These targets represent our long-term goals and we expect to see improvement over time as we refine our processes for successfully contacting people. The most common barriers to successfully meeting these deadlines include missing phone numbers or other contact information and people who require additional follow-up due to an unanswered first call.

The following tables show how close DOH came to meeting these targets for case and contact investigations assigned to DOH centralized investigations for confirmed or probable cases reported to DOH between March 28, 2021 and April 24, 2021. During this time frame, 16 counties assigned cases to DOH. All contacts identified by those cases are included regardless of when the case was interviewed. Data on four investigation outcomes are presented below:

1. **The percent with a first call or contact attempt in the specified time frame:** This provides information on when the centralized investigations team made a first attempt to get in touch, regardless of the outcome. For cases, this is the date of the first phone call attempt. For contacts, this is either the date when a text message notification was sent, or when a first call attempt was made.

2. **The percent reached within the specified time frame:** This provides information on how successful we were at contacting an individual. For cases, reaching an individual includes a phone call outcome of: interview completed, partial interview completed, call-back later, or refused. For contacts, being reached also includes confirmation that a text message notification was received.

3. **The percent interviewed within the specified time frame:** This provides information on how often we are able to interview a case or contact. An interview is defined as a phone call that results in a full or partial interview. For contacts, their contact information is only collected during the case interviews. If DOH is unable to complete case interviews, their contacts are not reported to DOH.

4. **The percent of investigations that resulted in an interview:** This provides information on how successful we are at interviewing cases and contacts regardless of timeliness. An interview is defined as a phone call that results in a full or partial interview.
Table 1 below includes information on these metrics for all confirmed or probable cases assigned to the DOH centralized investigations. Cases are assigned to a week based on the report date, which is the date the positive PCR or antigen test result is reported to DOH. Table 2 below includes all contacts identified by cases with a report date in the specified week. This count includes all contacts identified, regardless of when the case interview was conducted. Many cases that are interviewed choose not to identify contacts, which is why the number of total contacts is less than the number of interviewed cases. The percentage of contacts reached within two days is generally higher because there are fewer contacts, and there is an extra day for them to be contacted.

**Table 1. Case investigations conducted by Washington State Department of Health centralized investigations team for cases reported between 03/28/2021 and 04/24/2021**

<table>
<thead>
<tr>
<th>Positive test report date range</th>
<th>Total cases assigned to DOH*</th>
<th>Percent of total cases with first call attempt made within 1 day of positive test report</th>
<th>Percent of total cases reached within 1 day of positive test report</th>
<th>Percent of total cases interviewed within 1 day of positive test report</th>
<th>Percent of total cases interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/28/2021 - 04/03/2021</td>
<td>1,377</td>
<td>90%</td>
<td>58%</td>
<td>49%</td>
<td>68%</td>
</tr>
<tr>
<td>04/04/2021 - 04/10/2021</td>
<td>1,485</td>
<td>70%</td>
<td>54%</td>
<td>46%</td>
<td>67%</td>
</tr>
<tr>
<td>04/11/2021 - 04/17/2021</td>
<td>2,844</td>
<td>69%</td>
<td>42%</td>
<td>34%</td>
<td>63%</td>
</tr>
<tr>
<td>04/18/2021 - 04/24/2021</td>
<td>2,705</td>
<td>76%</td>
<td>43%</td>
<td>34%</td>
<td>58%</td>
</tr>
</tbody>
</table>

*Total cases excluded 0 cases in long term care facilities assigned to centralized investigations. These cases are investigated in collaboration with the facilities and outcomes are tracked separately.
Table 2. Contact tracing conducted by Washington State Department of Health centralized investigations team for cases reported between 03/28/2021 and 04/24/2021

<table>
<thead>
<tr>
<th>Positive test report date range</th>
<th>Total contacts of cases assigned to DOH</th>
<th>Percent of total contacts with first contact attempt made within 2 days of case positive test report</th>
<th>Percent of total contacts reached within 2 days of case positive test report</th>
<th>Percent of total contacts interviewed within 2 days of case positive test report</th>
<th>Percent of total contacts interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/28/2021 - 04/03/2021</td>
<td>967</td>
<td>89%</td>
<td>76%</td>
<td>69%</td>
<td>82%</td>
</tr>
<tr>
<td>04/04/2021 - 04/10/2021</td>
<td>1,002</td>
<td>92%</td>
<td>80%</td>
<td>72%</td>
<td>84%</td>
</tr>
<tr>
<td>04/11/2021 - 04/17/2021</td>
<td>1,461</td>
<td>84%</td>
<td>71%</td>
<td>62%</td>
<td>82%</td>
</tr>
<tr>
<td>04/18/2021 - 04/24/2021</td>
<td>1,178</td>
<td>88%</td>
<td>72%</td>
<td>65%</td>
<td>79%</td>
</tr>
</tbody>
</table>