California Weekly Report
Influenza (Flu), RSV, and Other Respiratory Viruses
Week 52: December 24, 2023 – December 30, 2023

Influenza and RSV Highlights

- **Influenza positivity**: ▼ **16.8%**
- **Outpatient ILI activity**: ▲ **7.7%**
- **Hospital flu admissions**: ▲ **2.8%**
- **Deaths since 10/1/23 (new)**: **126 (+45)**
- **RSV positivity**: ▼ **8.6%**

Influenza Activity Levels

![Activity Levels Map]

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Statewide</td>
<td>Moderate</td>
</tr>
<tr>
<td>Northern Region</td>
<td>Moderate</td>
</tr>
<tr>
<td>Bay Area Region</td>
<td>Moderate</td>
</tr>
<tr>
<td>Central Region</td>
<td>Moderate</td>
</tr>
<tr>
<td>Upper Southern Region</td>
<td>Moderate</td>
</tr>
<tr>
<td>Lower Southern Region</td>
<td>High</td>
</tr>
</tbody>
</table>

Key Messages

- Influenza activity is elevated in California.
- Now is a good time to get your flu shot to protect yourself against flu, its potentially serious complications, and reduce strain on our healthcare system.
- Respiratory syncytial virus (RSV) activity remains elevated in California.
- Several products are available to prevent RSV infection.
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Influenza Laboratory Surveillance

Influenza Detections from Respiratory Laboratory Network and Clinical Sentinel Laboratories

Laboratory surveillance for influenza and other respiratory viruses involves the use of data from clinical sentinel laboratories and public health laboratories in the Respiratory Laboratory Network (RLN) located throughout California. These laboratories report the number of laboratory-confirmed influenza and other respiratory virus detections and isolations on a weekly basis.

The overall percentage of influenza detections in clinical sentinel laboratories during Week 52 was 16.8% compared to 18.8% during Week 51 (Figure 1). Additional details, including influenza typing and subtyping information from public health laboratories can be found in Figures 1 and 2 and Tables 1 and 2.

Figure 1. Percentage of Influenza Detections at Clinical Sentinel Laboratories, 2018–2024 Season to Date

![Graph showing percentage of influenza detections from October 2018 to September 2024.]

Note: Data have been shifted so that Week 1 aligns across seasons.

Table 1. Respiratory Specimens Testing Positive for Influenza — Clinical Sentinel Laboratories, Current Week and Season to Date

<table>
<thead>
<tr>
<th></th>
<th>Current Week Number</th>
<th>Current Week Percent</th>
<th>Season to Date Number</th>
<th>Season to Date Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Specimens Tested</td>
<td>28,815</td>
<td>16.8%</td>
<td>223,784</td>
<td>11.1%</td>
</tr>
<tr>
<td>Influenza Positive</td>
<td>4,830</td>
<td>16.8%</td>
<td>24,872</td>
<td>11.1%</td>
</tr>
<tr>
<td>A</td>
<td>4,519</td>
<td>93.6%</td>
<td>23,346</td>
<td>93.9%</td>
</tr>
<tr>
<td>B</td>
<td>311</td>
<td>6.4%</td>
<td>1,526</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

* Percentage of specimens positive for influenza
Figure 2. Number of Influenza Detections by Type and Subtype Detected in the Respiratory Laboratory Network, 2023–2024 Season to Date

Table 2. Respiratory Specimens Testing Positive for Influenza by Influenza Type and Subtype — Respiratory Laboratory Network, Current Week and Season to Date

<table>
<thead>
<tr>
<th>Influenza Positive</th>
<th>Current Week Number</th>
<th>Current Week Percent</th>
<th>Season to Date Number</th>
<th>Season to Date Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza Positive</td>
<td>80</td>
<td></td>
<td>889</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>73</td>
<td>91.3(^*)</td>
<td>824</td>
<td>92.7(^*)</td>
</tr>
<tr>
<td>A (H1)pdm09</td>
<td>63</td>
<td>86.3(^*)</td>
<td>648</td>
<td>78.6(^*)</td>
</tr>
<tr>
<td>A (H3)</td>
<td>4</td>
<td>5.5(^*)</td>
<td>107</td>
<td>13.0(^*)</td>
</tr>
<tr>
<td>A, not subtyped</td>
<td>6</td>
<td>8.2(^*)</td>
<td>69</td>
<td>8.4(^*)</td>
</tr>
<tr>
<td>B</td>
<td>7</td>
<td>8.8(^*)</td>
<td>65</td>
<td>7.3(^*)</td>
</tr>
<tr>
<td>B Victoria</td>
<td>6</td>
<td>85.7(^*)</td>
<td>43</td>
<td>66.2(^*)</td>
</tr>
<tr>
<td>B Yamagata</td>
<td>0</td>
<td>0.0(^*)</td>
<td>0</td>
<td>0.0(^*)</td>
</tr>
<tr>
<td>B, not lineage typed</td>
<td>1</td>
<td>14.3(^*)</td>
<td>22</td>
<td>33.8(^*)</td>
</tr>
</tbody>
</table>

\(^*\) Percentage of specimens positive for influenza A
\(^*\) Percentage of specimens positive for influenza B
Antiviral Resistance Testing

The Viral and Rickettsial Disease Laboratory (VRDL) assesses susceptibility of influenza viruses to antiviral drugs, including the neuraminidase inhibitors (oseltamivir, zanamivir, and peramivir) and the polymerase acidic (PA) endonuclease inhibitor (baloxavir), by using next-generation sequence analysis. Neuraminidase gene sequences are analyzed to detect the presence of well-known amino acid substitutions previously associated with reduced or inhibited activity to any of the three neuraminidase inhibitors. Susceptibility to baloxavir is assessed by identifying an amino acid substitution in the PA gene.

Of the influenza specimens tested by the CDPH-VRDL to date this season, none have been found to be resistant to neuraminidase and PA endonuclease inhibitors (Table 3).

Table 3. Number of Specimens Tested for Antiviral Resistance, 2023–2024 Season to Date

<table>
<thead>
<tr>
<th></th>
<th>Neuraminidase Inhibitor Resistance</th>
<th>PA Endonuclease Inhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A (H1)pdm09</td>
<td>0/22</td>
<td>0/22</td>
</tr>
<tr>
<td>Influenza A (H3)</td>
<td>0/8</td>
<td>0/8</td>
</tr>
<tr>
<td>Influenza B</td>
<td>0/6</td>
<td>0/6</td>
</tr>
</tbody>
</table>
Influenza Outpatient, Inpatient, and Death Surveillance

Sentinel Provider Outpatient Visits for Influenza-like Illness

Sentinel providers (physicians, nurse practitioners, physician assistants) throughout California report on a weekly basis the number of patients seen with influenza-like illness (ILI) and the total number of patients seen for any reason. ILI is defined as any illness with fever (≥100°F or 37.8°C) AND cough and/or sore throat. Methods for calculating the 2023–2024 season baseline can be found on the CDC website.

A total of 188 enrolled sentinel providers have reported data for Week 52. The percentage of visits for ILI during Week 52 was 7.7% compared to 7.3% during Week 51 and was above the baseline (Figure 3). Increases in ILI-related outpatient visits might also include people seeking care for other respiratory illnesses, including COVID-19.

Figure 3. Percentage of Influenza-like Illness Visits Among Patients Seen by California Sentinel Providers, 2018–2024 Season to Date

Note: Data have been shifted so that Week 1 aligns across seasons. The 2023–2024 baseline is developed by calculating the mean percentage of patient visits for ILI during non-influenza weeks for the most recent three seasons, excluding the COVID-19 pandemic, and adding two standard deviations. Additional information can be found on the CDC website.
Influenza Admissions at Kaiser Permanente Northern California Facilities

Inpatients at Kaiser Permanente Northern California facilities with an admission diagnosis including the keywords “flu,” “influenza,” or variants of the keywords are defined as influenza-related admissions. The number of influenza admissions is divided by the total number of hospital admissions occurring in the same time period to estimate the percentage of influenza admissions. Admissions for pregnancy, labor and delivery, birth, and outpatient procedures are excluded from the denominator. Influenza admission data is not comparable to previous seasons reports which included pneumonia and influenza (P&I) admissions.

The percentage of admissions for influenza in Kaiser Permanente Northern California facilities during Week 52 was 2.8% compared to 2.4% during Week 51 (Figure 4).

Figure 4. Percentage of Influenza Admissions at Kaiser Permanente Northern California Facilities, 2018-2024 Season to Date

Note: Data have been shifted so that Week 1 aligns across seasons.
To date, 435 non-intensive care unit (ICU) hospitalizations, 53 ICU admissions, and eight deaths have occurred among persons with influenza admission diagnoses. Most influenza admissions occurred among persons ≥65 years (Figure 5). Please note that influenza admissions serve as a proxy for influenza activity, but do not necessarily represent laboratory-confirmed influenza infections.

**Figure 5. Age Group Distribution of Non-ICU, ICU, and Deaths Associated with Influenza Admissions at Kaiser Permanente Northern California Facilities, 2023–2024 Season to Date**

- **Deaths ICU Non-ICU**
  - <18 years: 8
  - 18-49 years: 16
  - 50-64 years: 15
  - ≥65 years: 3

- **Severity of Hospitalization**
  - Deaths: 8 (8%)
  - ICU: 19 (19%)
  - Non-ICU: 275 (275%)

**Influenza Mortality Surveillance from Death Certificates**

Deaths occurring in California among residents who had influenza noted in any cause of death field on the death certificate (text or coded) are defined as “influenza-coded deaths.” The percentage of influenza-coded deaths is calculated by dividing the number of influenza-coded deaths by the total number of all-cause deaths during the same period. Influenza-coded deaths are not necessarily laboratory-confirmed and are an underestimate of all influenza-associated deaths. Please note that during the 2023–2024 season, an update to the methods used to identify influenza-coded deaths resulted in some changes to data from previous seasons.

During Week 52, 45 influenza-coded deaths were identified. To date during the 2023–2024 winter respiratory virus season, 126 influenza-coded deaths have been identified (Figure 6). The percentage of deaths coded as influenza during Week 52 was 0.6% compared to 0.5% during Week 51 (Figure 7).
Figure 6. Number of Influenza-coded Deaths Identified from Death Certificates by Week of Death, 2023–2024 Season to Date

![Bar chart showing the number of influenza-coded deaths by week of death, with two data sets: previously identified and newly identified. The chart shows a clear increase in deaths from October to December, with a peak in December and a decline in January.]

Note: Coding of deaths can be delayed by several weeks. Influenza-coded deaths will be included once enough information is available to identify them.

Figure 7. Percentage of Influenza-coded Deaths from Death Certificates, 2018–2024 Season to Date

![Line chart showing the percentage of influenza-coded deaths by week of death, with data for each season from 2018-2019 to 2023-2024. The chart shows a general increase in the percentage of deaths from October to December, with a peak in December and a decline in January.]

Note: Data have been shifted so that Week 1 aligns across seasons.
To date, 96 (76.2%) influenza-coded deaths have been identified among persons ≥65 years of age during the 2023–2024 winter respiratory virus season (Figure 8).

**Figure 8. Age Distribution of Influenza-coded Deaths from Death Certificates, 2018–2024 Season to Date**

<table>
<thead>
<tr>
<th></th>
<th>&lt;18 years</th>
<th>18-49 years</th>
<th>50-64 years</th>
<th>≥65 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-2019</td>
<td>355</td>
<td>141</td>
<td>99</td>
<td>17</td>
</tr>
<tr>
<td>2019-2020</td>
<td>530</td>
<td>208</td>
<td>124</td>
<td>23</td>
</tr>
<tr>
<td>2020-2021</td>
<td>38</td>
<td>12</td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>2021-2022</td>
<td>97</td>
<td>29</td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>2022-2023</td>
<td>518</td>
<td>121</td>
<td>57</td>
<td>16</td>
</tr>
<tr>
<td>2023-2024</td>
<td>96</td>
<td>17</td>
<td>10</td>
<td>3</td>
</tr>
</tbody>
</table>

* Methods used to identify pediatric influenza-coded deaths on death certificates do not consider laboratory testing and thus differ from those used to identify the influenza-associated pediatric deaths presented below, which require laboratory confirmation of influenza.

† One death during the 2018–2019 winter respiratory virus season has unknown age and is not included in the figure.


**Laboratory-confirmed Influenza-associated Pediatric Deaths**

Influenza-associated deaths in children <18 years of age are nationally notifiable. The weekly influenza report includes confirmed deaths formally reported to CDPH through December 30, 2023 (Week 52). Methods used to identify pediatric influenza-coded deaths on death certificates differ from those used to identify the influenza-associated pediatric deaths presented below, which require laboratory confirmation of influenza, and might not include the same individuals.

No laboratory-confirmed influenza-associated deaths in children <18 years of age were reported to CDPH during Week 52. To date, CDPH has received one report of a laboratory-confirmed influenza-associated death among persons <18 years of age during the 2023–2024 winter respiratory virus season.
Influenza-associated Outbreaks

Six laboratory-confirmed influenza outbreaks were reported during Week 52. During Week 51, three laboratory-confirmed influenza outbreaks were reported. To date, 22 laboratory-confirmed influenza outbreaks have been reported to CDPH during the 2023–2024 season. One previously reported outbreak was removed because it did not meet the outbreak definition.

Figure 9. Number of Laboratory-confirmed Influenza-associated Outbreaks by Week of First Onset, 2022–2024 Season to Date

*Earliest date associated with the outbreak was used for outbreaks without reported date of first patient's symptom onset.
**California Border Region Influenza Surveillance Network**

The border influenza surveillance network is comprised of outpatient sentinel provider sites whose geographical coverage extends approximately 100 kilometers (60 miles) north of the California-Baja California border and includes Imperial and San Diego Counties, as well as some parts of Riverside County.

**Syndromic Surveillance Update**

A total of 7 border region sentinel providers reported data during Week 52. The total number of patients screened by all sentinel sites for ILI during Week 52 was 8,165. Outpatient ILI activity was 3.0% in Week 52 (Figure 10). All influenza syndromic data summarized for the border region represent a subset of CDC influenza sentinel providers in California. Increases in ILI-related outpatient visits might also include people seeking care for other respiratory illness, including COVID-19. Methods for calculating the 2023–2024 season baseline can be found on the [CDC website](https://www.cdc.gov).

**Figure 10. Percentage of Influenza-like Illness Visits among Patients Seen by Sentinel Providers — California Border Region, 2018–2024 Season to Date**

![Percentage of Outpatient ILI Visits](chart)

Note: Data have been shifted so that Week 1 aligns across seasons. The 2023–2024 baseline is developed by calculating the mean percentage of patient visits for ILI during non-influenza weeks for the most recent three seasons, excluding the COVID-19 pandemic, and adding two standard deviations. Additional information can be found on the CDC website.

**Virologic Surveillance Update**

The percentage of influenza detections in border region clinical sentinel laboratories during Week 52 was 25.4% (Figure 11). Additional details, including influenza typing, subtyping, and lineage typing information from border region clinical sentinel laboratories and RLN laboratories can be found in Figure 11 and Table 4.
Figure 11. Number of Influenza Detections by Type and Subtype Detected in RLN Laboratories and the Percentage of Specimens Testing Positive at Clinical Sentinel Laboratories — California Border Region, 2023–2024 Season to Date

Table 4. Respiratory Specimens Testing Positive for Influenza by Influenza Type, Subtype, and Lineage Type — Clinical Sentinel Laboratories and RLN, California Border Region, Current Week and Season to Date

<table>
<thead>
<tr>
<th>Clinical Sentinel Laboratories</th>
<th>Current Week Number</th>
<th>Current Week Percent</th>
<th>Season to Date Number</th>
<th>Season to Date Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Specimens Tested</td>
<td>688</td>
<td></td>
<td>7,564</td>
<td></td>
</tr>
<tr>
<td>Influenza Positive</td>
<td>175</td>
<td>25.4</td>
<td>866</td>
<td>11.4</td>
</tr>
<tr>
<td>A</td>
<td>153</td>
<td>87.4(^*)</td>
<td>762</td>
<td>88.0(^*)</td>
</tr>
<tr>
<td>B</td>
<td>22</td>
<td>12.6(^*)</td>
<td>104</td>
<td>12.0(^*)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respiratory Laboratory Network</th>
<th>Current Week Number</th>
<th>Current Week Percent</th>
<th>Season to Date Number</th>
<th>Season to Date Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza Positive</td>
<td>19</td>
<td></td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>19</td>
<td>100.0(^*)</td>
<td>98</td>
<td>90.7(^*)</td>
</tr>
<tr>
<td>A (H1)pdm09</td>
<td>18</td>
<td>94.7(^*)</td>
<td>89</td>
<td>90.8(^*)</td>
</tr>
<tr>
<td>A (H3)</td>
<td>0</td>
<td>0.0(^*)</td>
<td>8</td>
<td>8.2(^*)</td>
</tr>
<tr>
<td>A, not subtyped</td>
<td>1</td>
<td>5.3(^*)</td>
<td>1</td>
<td>1.0(^*)</td>
</tr>
<tr>
<td>B</td>
<td>0</td>
<td>0.0(^*)</td>
<td>10</td>
<td>9.3(^*)</td>
</tr>
<tr>
<td>B Victoria</td>
<td>0</td>
<td>0.0(^*)</td>
<td>1</td>
<td>10.0(^*)</td>
</tr>
<tr>
<td>B Yamagata</td>
<td>0</td>
<td>0.0(^*)</td>
<td>0</td>
<td>0.0(^*)</td>
</tr>
<tr>
<td>B, not lineage typed</td>
<td>0</td>
<td>0.0(^*)</td>
<td>9</td>
<td>90.0(^*)</td>
</tr>
</tbody>
</table>
Respiratory Syncytial Virus Surveillance

RSV Detections from Clinical Sentinel Laboratories

The overall percentage of RSV detections in clinical sentinel laboratories during Week 52 was 8.6% compared to 9.1% during Week 51 (Figure 12).

Figure 12. Percentage of RSV Detections at Clinical Sentinel Laboratories, 2018–2024 Season to Date

Note: Data have been shifted so that Week 1 aligns across seasons.

RSV Admissions at Kaiser Permanente Northern California Facilities

Inpatients at Kaiser Permanente Northern California facilities with an admission diagnosis including the keywords “RSV,” “syncytial,” “bronchiolitis,” and variants of the keywords are defined as respiratory syncytial virus (RSV)-related admissions. The number of RSV admissions is divided by the total number of hospital admissions occurring in the same period to estimate the percentage of RSV admissions. Admissions for pregnancy, labor and delivery, birth, and outpatient procedures are excluded from the denominator.

The percentage of admissions for RSV in Kaiser Permanente facilities in northern California during Week 52 was 1.2% compared to 1.3% during Week 51 (Figure 13).
To date, 419 non-intensive care unit (ICU) hospitalizations, 77 ICU admissions, and ten deaths have occurred among persons with RSV admission diagnoses. Most RSV admissions occurred among persons $\geq 65$ years (Figure 14). Please note that RSV admissions serve as a proxy for RSV activity, but do not necessarily represent laboratory-confirmed RSV infections.

Figure 14: Age Group Distribution of Non-ICU, ICU, and Deaths Associated with RSV Admissions in Kaiser Permanente Northern California Facilities, 2023–2024 Season to Date

Note: Data have been shifted so that Week 1 aligns across seasons.
RSV Mortality Surveillance from Death Certificates

Deaths occurring in California among residents who had RSV noted in any cause of death field on the death certificate (text or coded) are defined as “RSV-coded deaths.” The percentage of RSV-coded deaths is calculated by dividing the number of RSV-coded deaths by the total number of all-cause deaths during the same period. RSV-coded deaths are not necessarily laboratory-confirmed and are likely to be an underestimate of all RSV-associated deaths.

During Week 52, 31 RSV-coded deaths were identified. To date during the 2023–2024 winter respiratory virus season, 64 RSV-coded deaths have been identified (Figure 15). The percentage of deaths coded as RSV during Week 52 was 0.46% compared to 0.47% during Week 51 (Figure 16).

Figure 15. Number of RSV-coded Deaths Identified from Death Certificates by Week of Death, 2023–2024 Season to Date

Note: Coding of deaths can be delayed by several weeks. RSV-coded deaths will be included once enough information is available to identify them.
To date, 56 (87.5%) RSV-coded deaths have been identified among persons ≥65 years of age during the 2023–2024 winter respiratory virus season (Figure 17).
Laboratory-confirmed Respiratory Syncytial Virus-associated Deaths

Currently, as mandated under Section 2500 of the California Code of Regulations, deaths among children aged 0–4 years with laboratory-confirmed RSV are reportable to CDPH. The weekly influenza report includes confirmed deaths formally reported to CDPH through December 30, 2023 (Week 52).

No laboratory-confirmed RSV-associated deaths in children <5 years of age were reported to CDPH during Week 52. To date, CDPH has received no reports of laboratory-confirmed RSV-associated deaths among children <5 years of age during the 2023–2024 winter respiratory virus season.

[The report continues on the next page.]
Other Respiratory Viruses Surveillance

The percentage of other respiratory viruses detections in clinical sentinel laboratories can be found in (Figure 18) and (Table 5).

**Figure 18. Percentage of Other Respiratory Pathogen Detections at Clinical Sentinel Laboratories, 2023-2024 Season to Date**

*Coronaviruses identified include common human coronaviruses 229E, NL63, OC43, and HKU1 and do NOT include SARS-CoV-2.

**Table 5. Respiratory Specimens Testing Positive for Other Respiratory Viruses — Clinical Sentinel Laboratories, Current Week and Previous Week**

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Current Week Percent</th>
<th>Previous Week Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adenovirus</td>
<td>3.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Coronavirus (non SARS-CoV-2)</td>
<td>3.8</td>
<td>3.4</td>
</tr>
<tr>
<td>Enterovirus/Rhinovirus</td>
<td>16.4</td>
<td>18.6</td>
</tr>
<tr>
<td>Human Metapneumovirus</td>
<td>1.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Parainfluenza types 1-4</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>SARS-CoV-2</td>
<td>11.0</td>
<td>8.9</td>
</tr>
</tbody>
</table>
**About This Report**

This report includes data from many sources of influenza and other respiratory virus surveillance, and it should be viewed as a preliminary “snapshot” of activity for each surveillance week. Because data are preliminary, the information may be updated in later reports as additional data are received. These data should not be considered population-based or representative of all California public health jurisdictions.

**More Information**

- An accessible Excel file with data for all figures can be downloaded from the CDPH Flu webpage (www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/Week2023-2452_DataTables.xlsx).
- For questions regarding influenza surveillance and reporting in California, please email InfluenzaSurveillance@cdph.ca.gov.
- To obtain additional information regarding influenza, please visit the CDPH Influenza website.
- For information about national influenza activity, please visit the U.S. Centers for Disease Control and Prevention’s FluView and FluView Interactive websites.
- For more information on respiratory virus surveillance, including COVID-19, please visit the CDPH Respiratory Virus Dashboard.

**Highlights Indicators**

Triangle symbols are used to indicate direction of change between the previous week and the current week for laboratory flu positivity, outpatient ILL activity, and hospital flu admissions: Increase (▲), decrease (▼), no change (►).

**Influenza Activity Levels**

- **Minimal**: The percentage of specimens positive for influenza is <2%.
- **Low**: The percentage of specimens positive for influenza is between 2% and <10%.
- **Moderate**: The percentage of specimens positive for influenza is between 10% and <20%.
- **High**: The percentage of specimens positive for influenza is between 20% and <40%.
- **Very High**: The percentage of specimens positive for influenza is ≥40%.
- **Insufficient Data**: Total number of specimens tested is below the threshold for activity level determination.

**California Regions**

- **Northern**: Alpine, Amador, Butte, Colusa, Del Norte, El Dorado, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yolo, and Yuba counties
- **Bay Area**: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma counties
- **Central Valley**: Calaveras, Fresno, Inyo, Kings, Madera, Mariposa, Merced, Mono, Monterey, San Benito, San Joaquin, Stanislaus, Tulare, and Tuolumne counties
- **Upper Southern**: Kern, Los Angeles, San Luis Obispo, Santa Barbara, and Ventura counties
- **Lower Southern**: Imperial, Orange, Riverside, San Bernardino, and San Diego counties

* Influenza activity levels are derived from the percentage of specimens from clinical sentinel laboratories that tested positive for influenza.