

Respiratory Virus Season: Local Data Insights and Community Risk Factors

KERN
COUNTY
PUBLIC HEALTH
Grounded in Health

Paul Rzucidlo
Assistant Division Director of
Health Services
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Learning Objectives

Understand the Sources of Surveillance Data: Describe the various sources of surveillance data for respiratory viruses, including laboratory reporting, syndromic data, and wastewater monitoring.

Interpret Local Respiratory Virus Data: Analyze local data insights on respiratory virus trends and their impact on community health.

Understand how population composition affects risk of severe disease.

Navigate Available Data Products and Dashboards: Understand where to access and interpret information from CDPH and KCPHD.

Sources of Surveillance Data

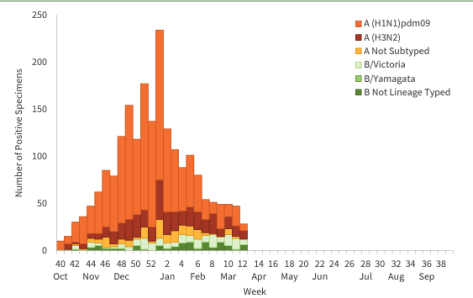
- CDPH
 - Clinical Sentinel Laboratories and Respiratory Laboratory Network - These laboratories report the number of laboratory-confirmed influenza and other respiratory virus detections and isolations on a weekly basis.
 - Syndromic data from the Sentinel Provider Program
 - A partnership between clinicians, local health departments (LHDs), the California Department of Public Health (CDPH), and the Centers for Disease Control and Prevention (CDC) to conduct surveillance for influenza-like illness (ILI).
 - Admission data from Kaiser
 - Historically only Northern California
 - Death Certificates
 - Wastewater

Sources of Surveillance Data

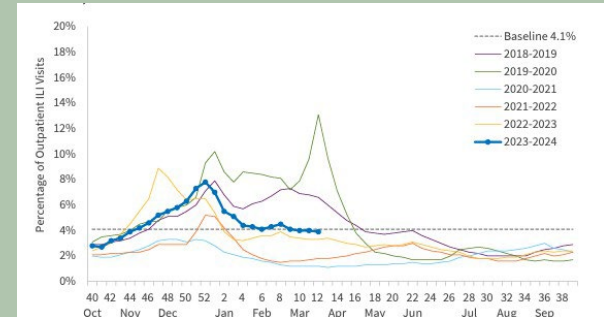
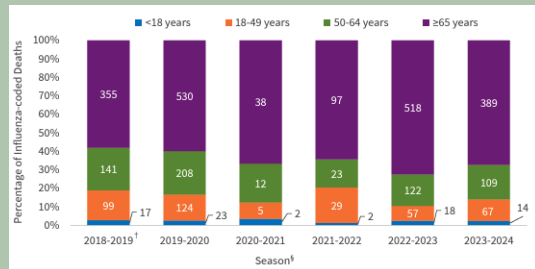
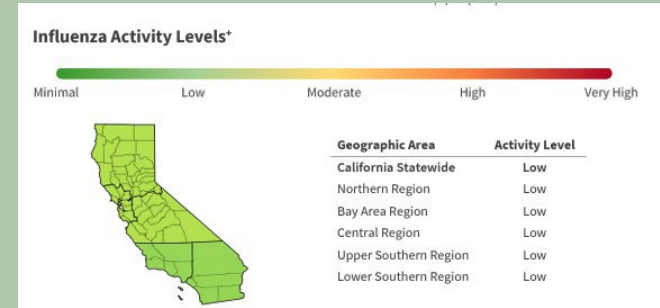
- Local Data comes from Title 17 reporting requirements
 - Laboratory reporting for COVID, RSV, and influenza
 - Facilities certified under CLIA must report all non-waived testing results including positive and non-positive results for all Nucleic Acid Amplification Tests (NAAT) and non-NAAT Tests.
 - Facilities conducting testing with a CLIA Certificate of Waiver are not required to report these results.
 - Provider reporting
 - COVID - Report hospitalizations and deaths
 - Flu - Deaths in lab confirmed cases less than 18 years of age and any novel strain
 - RSV - Deaths in lab confirmed cases less than five years of age.

Available Data Products – CDPH Weekly Respiratory Viruses Report

- Weekly report that includes: Regional influenza activity levels, testing positivity for influenza and RSV from sentinel labs, syndromic data, Kaiser admission data, and RSV and influenza deaths (including age distribution).



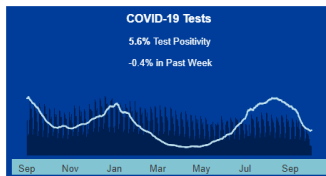
- Report can be found on CDPH's flu website:
<https://www.cdph.ca.gov/Programs/CID/DCDC/pages/immunization/flu-reports.aspx>



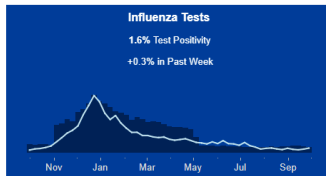
Available Data Products - CDPH Respiratory Virus Dashboard

- CDPH's Respiratory Virus Dashboard contains information on COVID and Influenza testing, including positivity and deaths.

COVID-19



Influenza



COVID-19

COVID-19 Deaths in California

Select Deaths Metric:

%

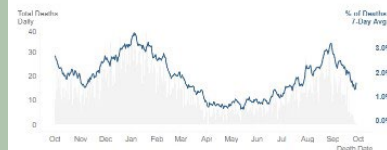
Per 100k

Select Date Range:

60 Day

Respiratory Virus Season

1.5% of Total Deaths were Due to COVID-19 (Most Recent 7 Days)
0.00 Deaths Due to COVID-19 Per 100k (Most Recent 7-Day Average)



Compare Previous Seasons? Yes No

Influenza

Influenza Deaths in California

Select Deaths Metric:

%

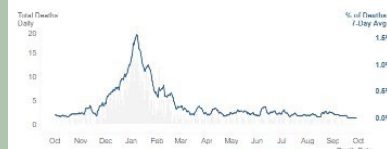
Per 100k

Select Date Range:

60 Day

Respiratory Virus Season

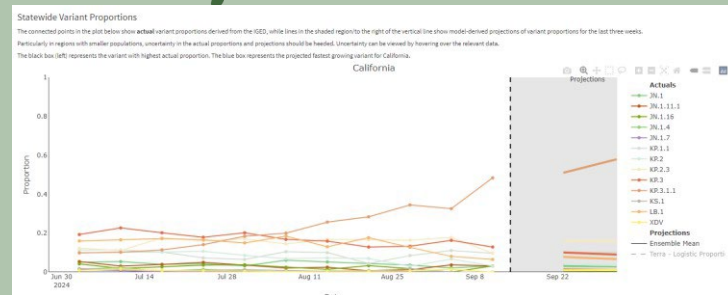
0.0% of Total Deaths were Due to Influenza (Most Recent 7 Days)
0.00 Deaths Due to Influenza Per 100k (Most Recent 7-Day Average)



Compare Previous Seasons? Yes No

Available Data Products - CDPH CalCAT Modeling

- Has models predicting hospitalizations for influenza, will have COVID once data stream is available. Also has estimates for COVID R-effective and variants.



Public Health Regions

Note: Please refer to the map on the left to see the counties in the selected Region.

Bay Area Central California Greater Sierra-Sacramento Los Angeles Rural North Southern California

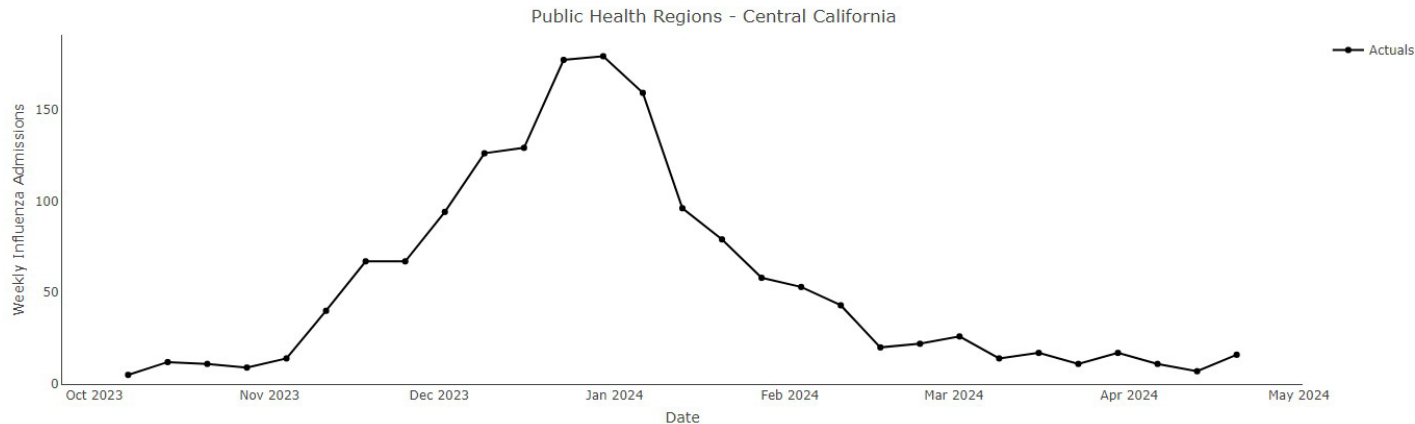


Current Weekly Hospital Admits:

16

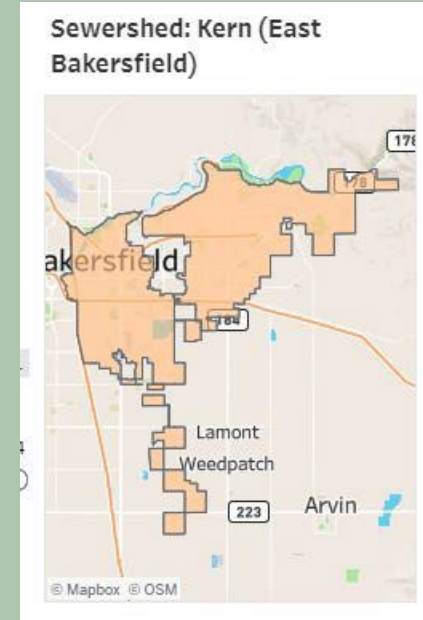
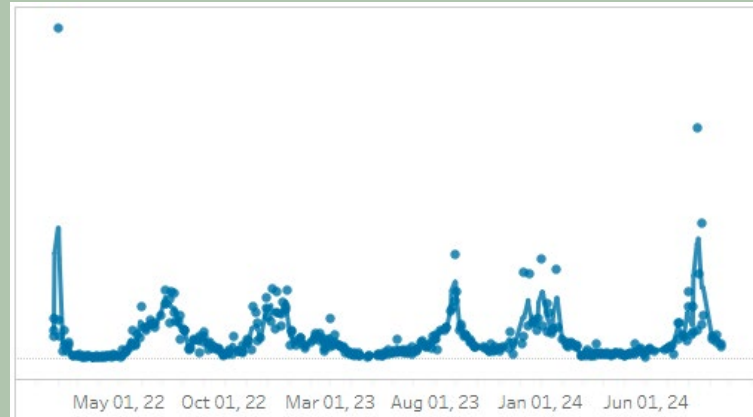
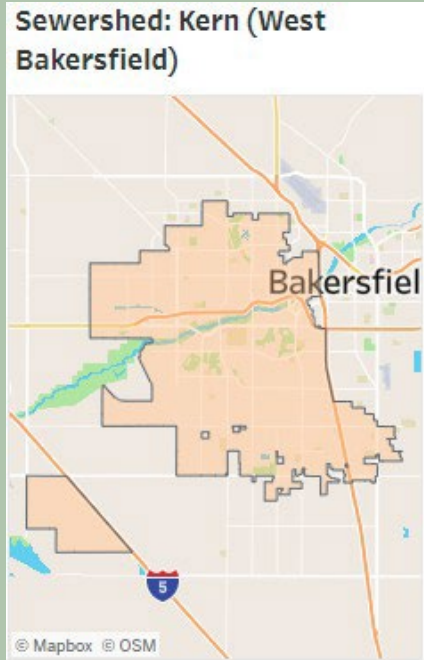
Actuals: 2024-04-20

Download Regional Admits Forecasts



Available Data Products – CDPH Wastewater Dashboard

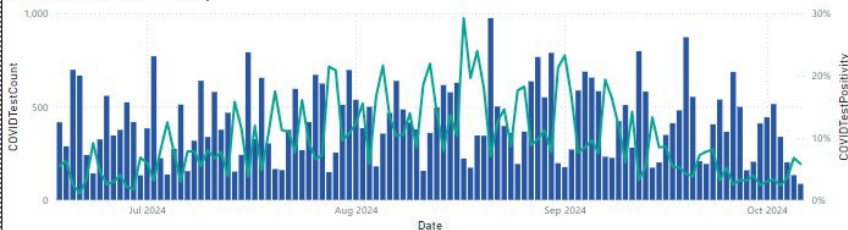
- Shows levels of COVID in wastewater. Kern has two sites both in Bakersfield.



Available Data Products - Kern County Respiratory Illness dashboard

COVID Chart

COVIDTestCount COVIDTestPositivity



7-Day COVID Test Positivity
with 7-day Lag

3.20% -25.2%▼

4 Weeks

8 Weeks

16 Weeks

Flu Chart

FluTestCount FluTestPositivity



7-Day Influenza Test Positivity
with 7-day Lag

0.58% 118.0%▲

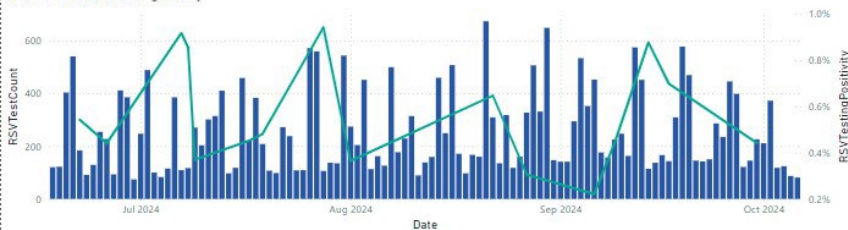
4 Weeks

8 Weeks

16 Weeks

RSV Chart

RSVTestCount RSVTestingPositivity



7-Day RSV Test Positivity with
7-day Lag

0.08% 0.0%▼

4 Weeks

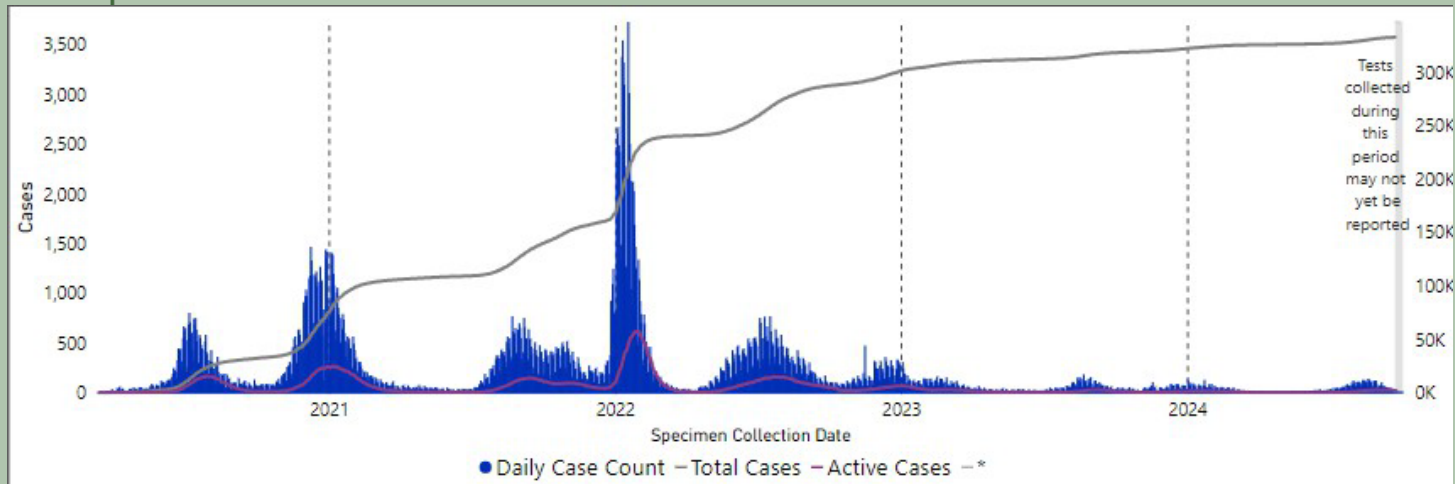
8 Weeks

16 Weeks

- Local testing positivity for COVID, influenza, and RSV. Updated weekly.

COVID Data

- COVID-19 shows a two peak season, with a peak in the summer and a larger peak in the winter.



- Available data shows that COVID vaccine coverage is low. According to CDPH only 5.4% of eligible residents are up-to-date on COVID vaccinations.

Flu data

- Available data is primarily at the state level
- Regional data on flu reports is closest to local data.
 - Usually moves from minimal activity at the end of October and increases through January, dropping off towards the end of March.
- Local data testing data is now more available with reporting requirements, but historic data will be limited.

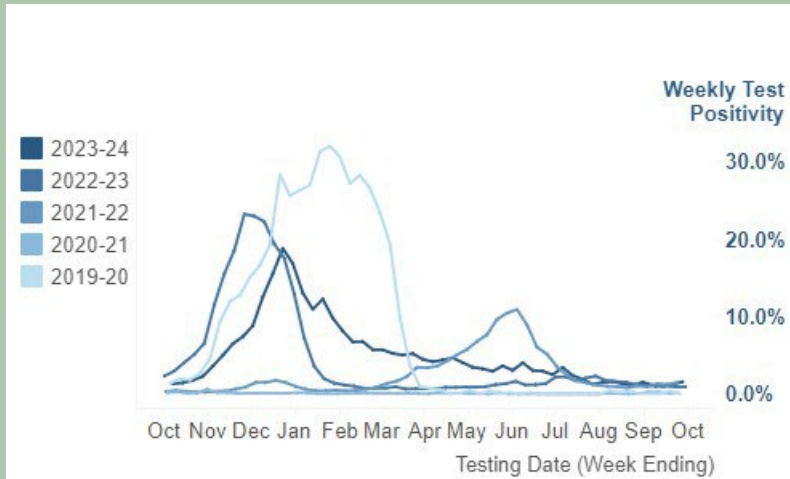
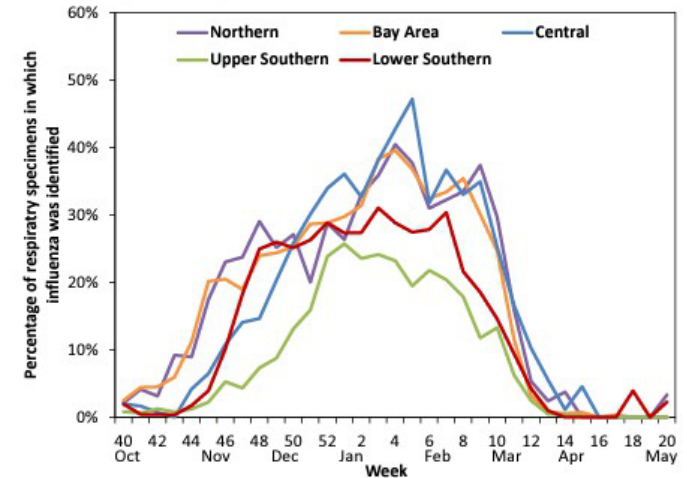


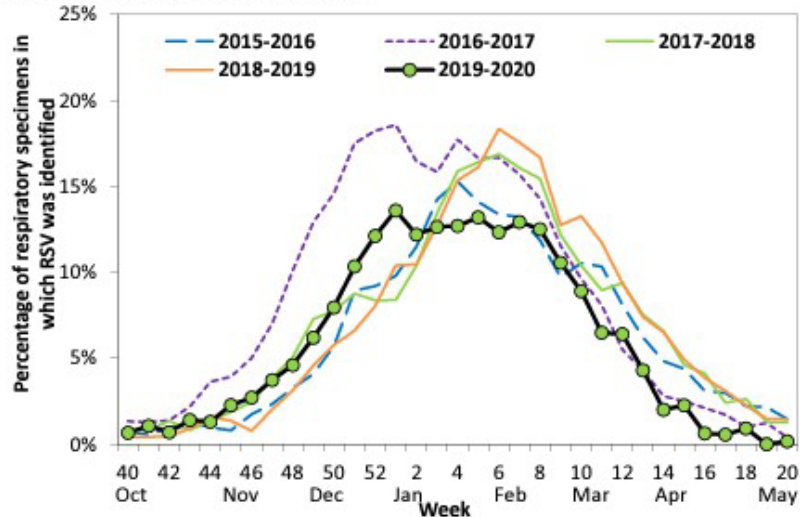
Figure 4. Percentage of specimens from which influenza was detected in clinical sentinel laboratories by California region, 2019–2020



RSV data

- State level data has historically been the main source of data.
- With test reporting requirements coming into effect in 2023 local data will be more available, but historic data is not.
- Similar to influenza in its seasonality.

Figure 5. Percentage of specimens from which respiratory syncytial virus (RSV) was detected in clinical sentinel laboratories, 2015–2020



Risks for Severe disease

- Risk factors for severe disease are mostly common between COVID, RSV, and influenza and include:
 - 65+ for influenza and COVID and 75+ for RSV
 - Less than 2 for influenza and RSV
 - Chronic organ diseases
 - Obesity
 - Smoker or Former Smoker
 - Pregnancy
 - Weakened Immune Systems
 - Asthma

Community Profile based on risk factors

- Kern's population has large proportions of groups at risk.
- 43.6% of Kern's adult population is obese.
- 14.1% of Kern's adult population has been diagnosed with diabetes.
- 10.1% of Kern's population has been diagnosed with diabetes
- 26.3% of adults indicate they smoke some days and 15.2% indicate they smoke daily.
- 4.1% of the population is less than 2 years of age.
- 13.1% of the population is 65 years of age or older.
- 5.26% of the population is 75 years of age or older.

Dashboard Dents

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Questions?