



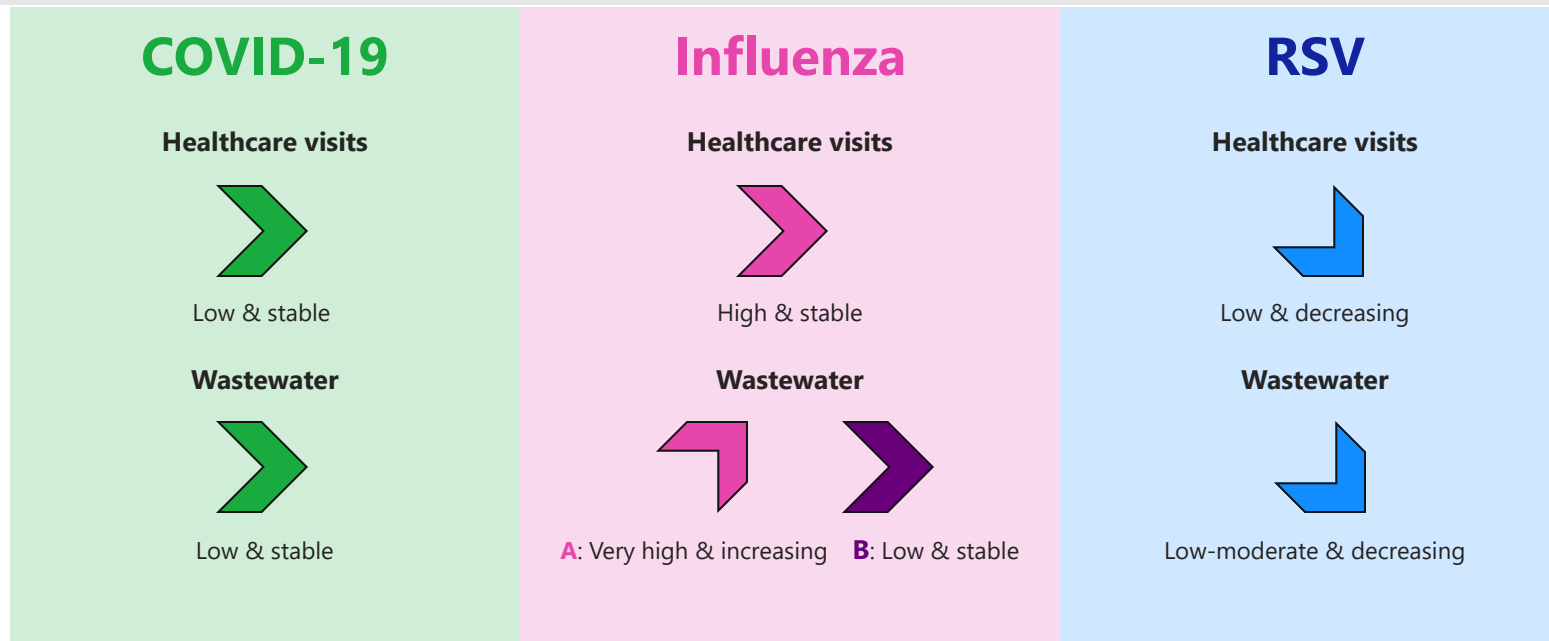
HOUSTON HEALTH
DEPARTMENT

Respiratory Diseases Surveillance Report

2024-2025 Influenza Season

MMWR Week 2025-05

Houston Health Department



Trends for the last 5 weeks (2025-01 to 2025-05):

- The number of **COVID-19 healthcare (HC) visits has been stable for the past 5 weeks** (neither increasing nor decreasing). The **mean weekly COVID-19 HC visit count** is about **239 related HC visits a week**, compared to 1319 related HC visits a week for the same time frame of the previous year (i.e., last year for this time frame, the Houston-area was averaging about 5.5x as many COVID-19 HC visits than it is currently averaging for the same weeks this year). **COVID-19 levels in wastewater are low and stable.**
- The number of **Influenza HC visits has been stable for the past 5 weeks** (neither increasing nor decreasing). The mean weekly influenza HC visits count is about **4062 related HC visits a week**, compared to 2389 related HC visits a week for the same time frame of the previous year (i.e., this year for the past 5 weeks, the Houston-area was averaging about 1.7x as many influenza related HC visits than it averaged for the same weeks the previous year). **Influenza A levels in wastewater are very high and increasing, while Influenza B levels remain low and stable.**
- The number of **RSV HC visits has been decreasing by 38 HC visits a week for the past 5 weeks**. The **mean weekly RSV HC visit count** is about **132 related HC visits a week**, compared to 108 related HC visits a week for the same time frame of the previous year (i.e., this year for the past 5 weeks, the Houston-area is averaging about 1.2x as many RSV related HC visits than it averaged for the same weeks the previous year). **RSV levels in wastewater are low-moderate and decreasing.**

*Demographic groups with the highest proportions of healthcare visits by respiratory illness (*indicates change from previous report):*

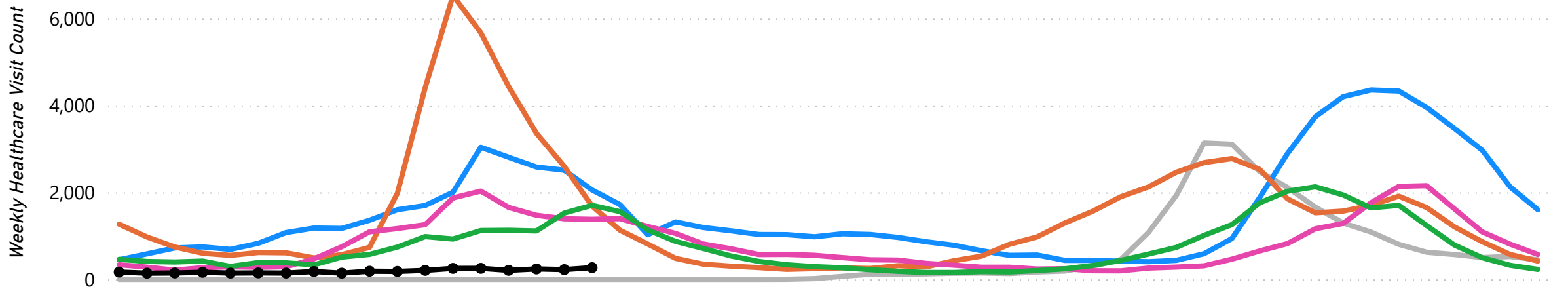
Respiratory Illness	Sex	Age Group	Race-ethnicity
COVID-19	Female	18-44	NH White
Influenza	Female	5-17	Hispanic
RSV	Male	Under 5	Hispanic

- Out of the schools sampled in the wastewater program, 1 school tested positive for COVID-19 (1 was inconclusive), 5 tested positive for influenza A or B (4 were inconclusive), and 1 tested positive for RSV (1 was inconclusive) for 2025-05.
- For the last few weeks, both CDC's national and Texas percentages of visits for ILI (influenza-like-illness) may be increasing again after an initial wave.

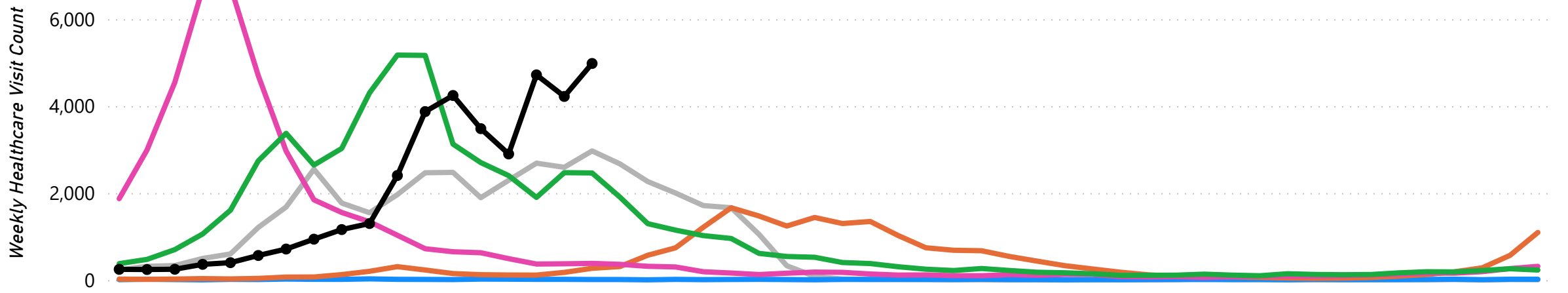
Respiratory Healthcare Visits by Influenza Season

Influenza Season: — 2019-2020 — 2020-2021 — 2021-2022 — 2022-2023 — 2023-2024 — 2024-2025 (Current)

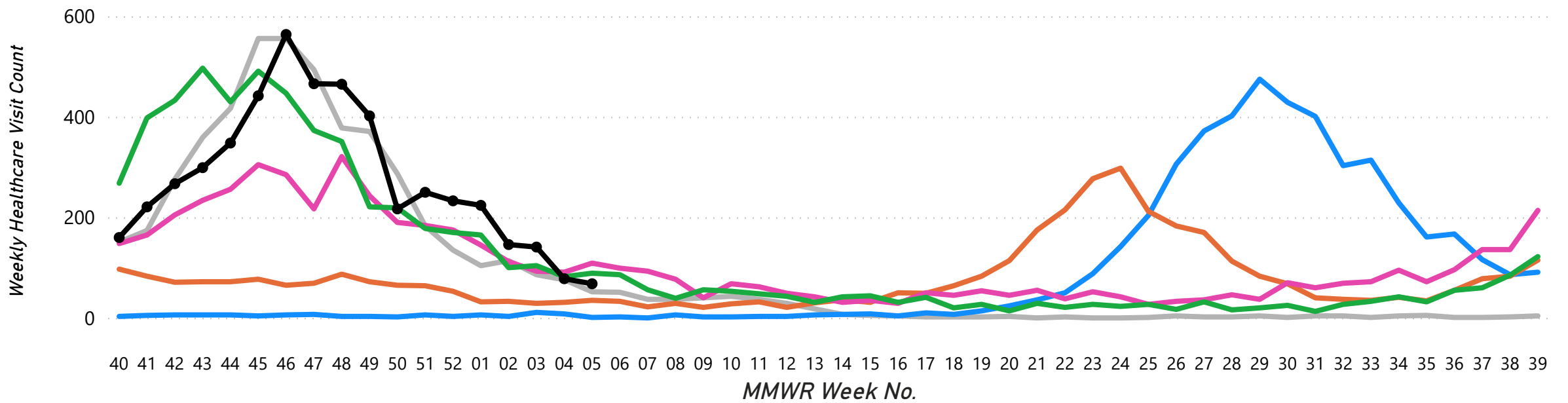
COVID-19



INFLUENZA

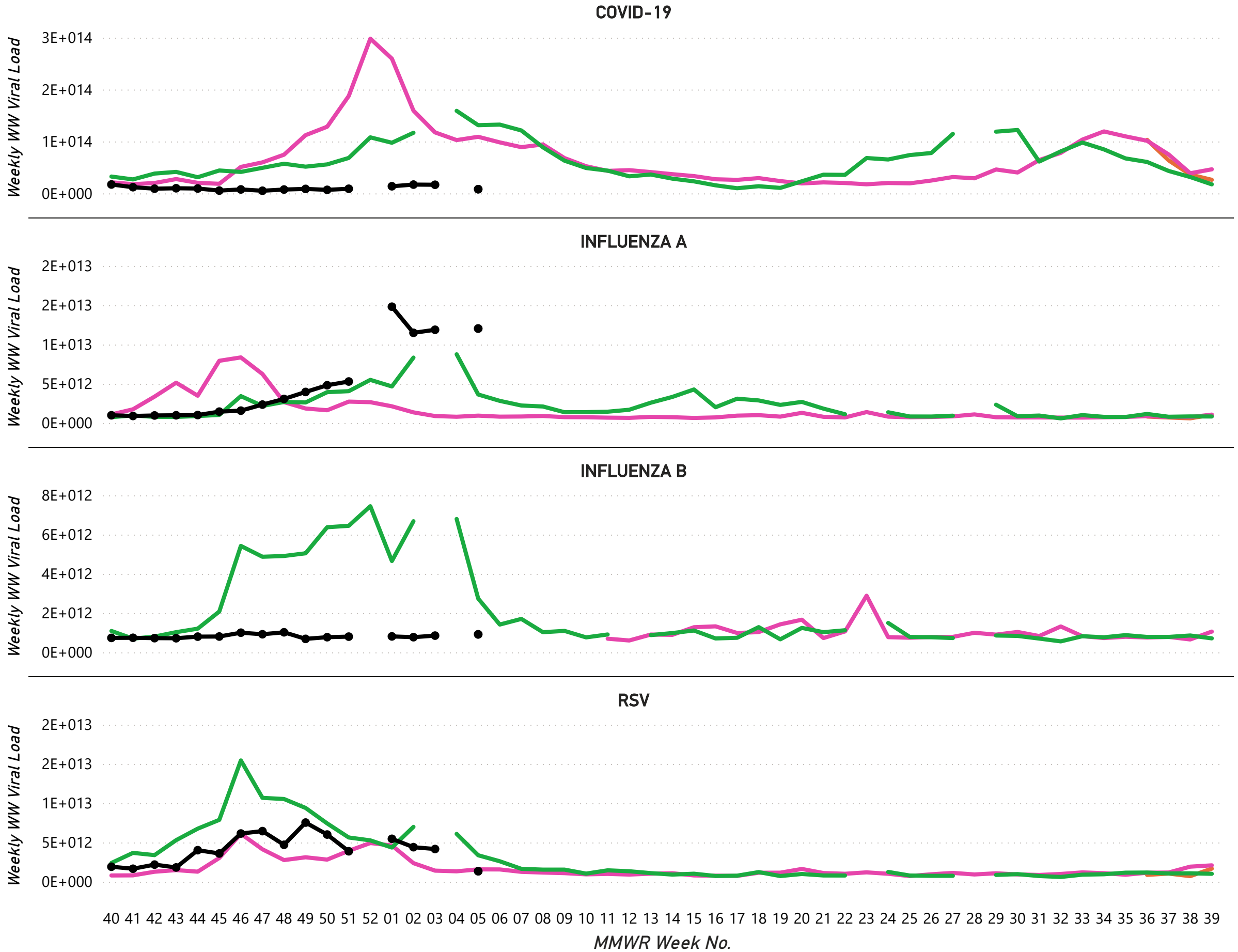


RSV



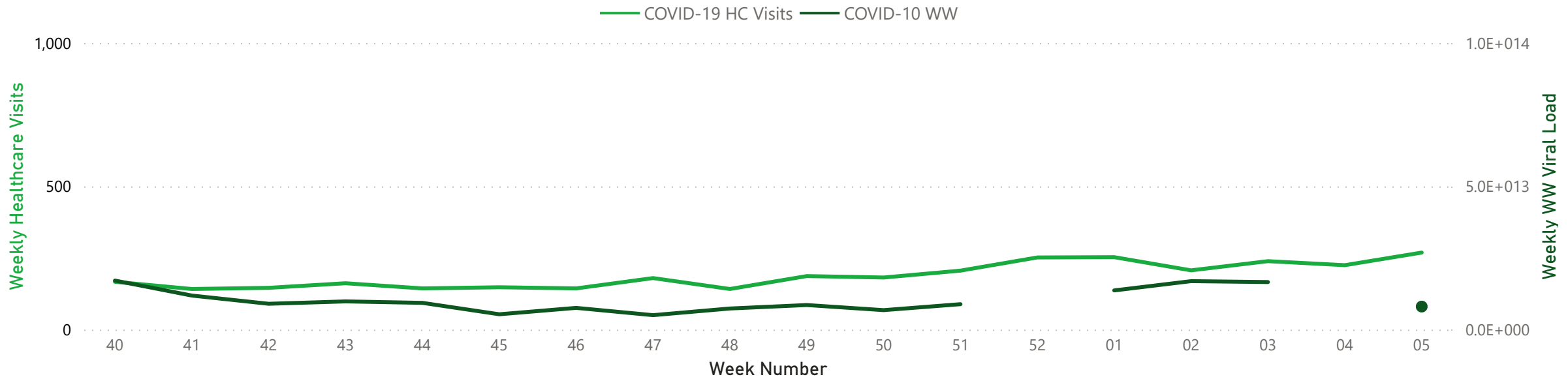
Respiratory Wastewater Viral Loads by Influenza Season

Influenza Season: 2021-2022 2022-2023 2023-2024 2024-2025

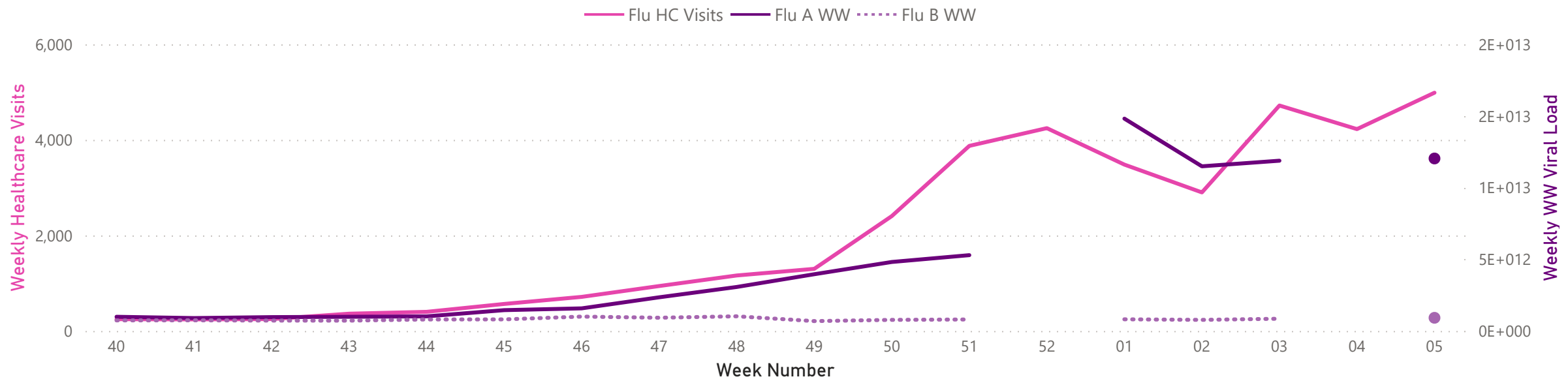


Current Season Respiratory Healthcare Visits & Wastewater (2024-2025)

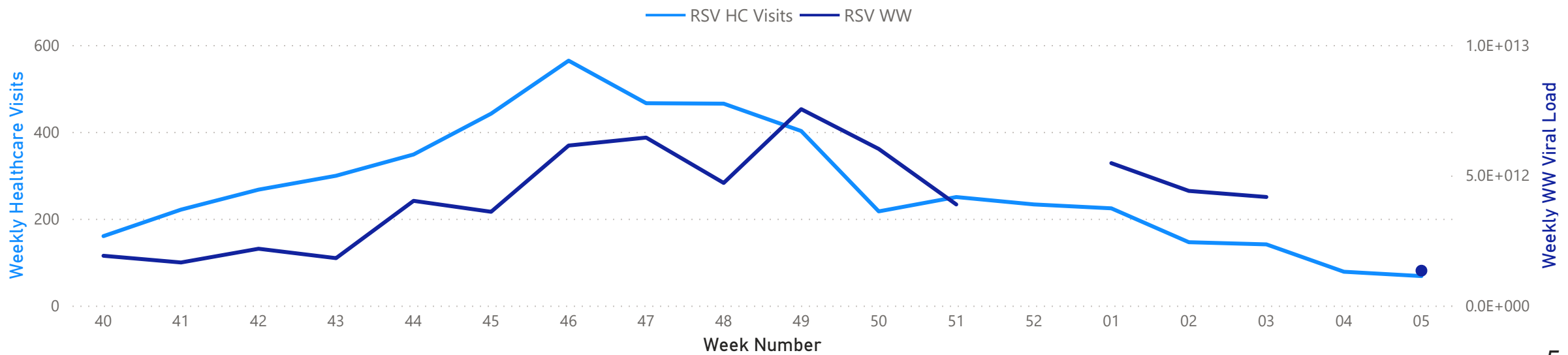
COVID-19



Influenza



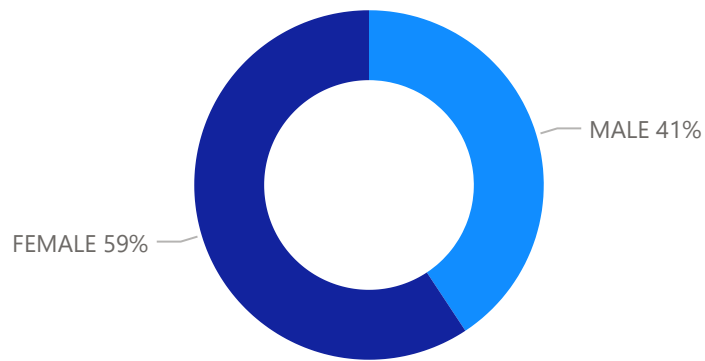
RSV



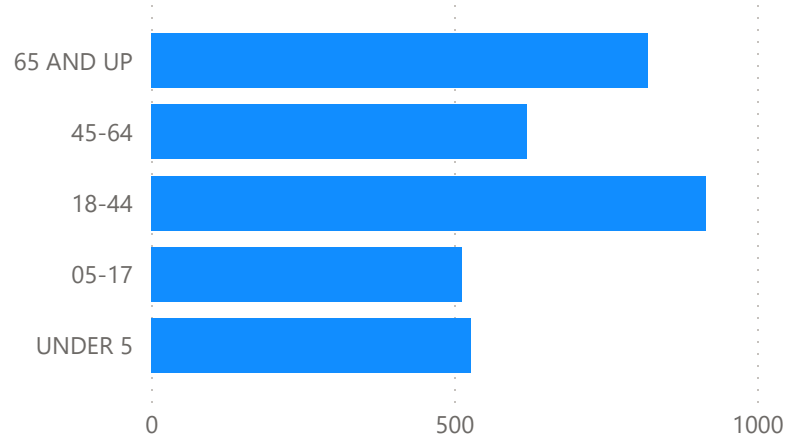
Demographics by Respiratory Disease (Current Season 2024-2025)

COVID-19 Healthcare Visits

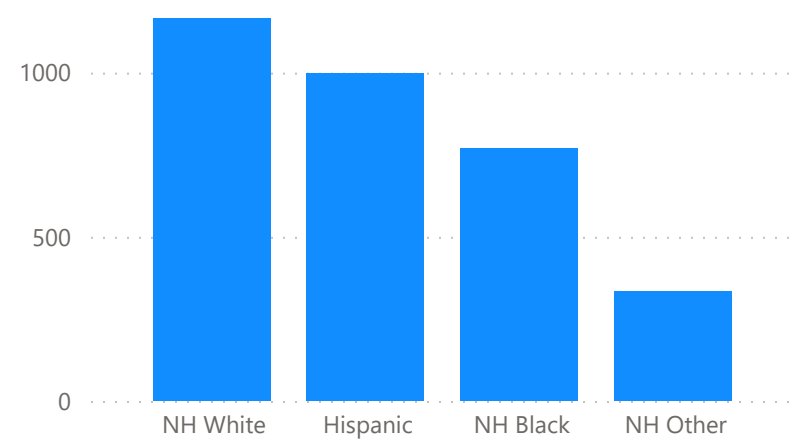
Sex



Age Group

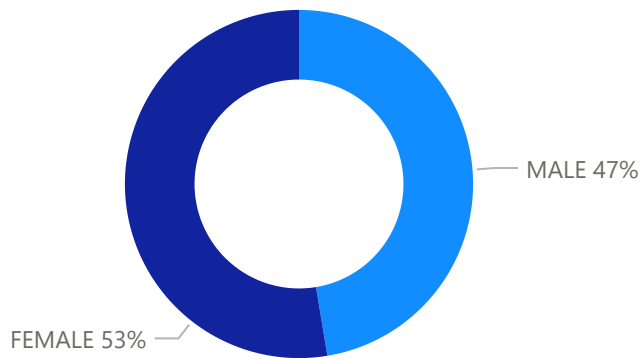


Race-Ethnicity

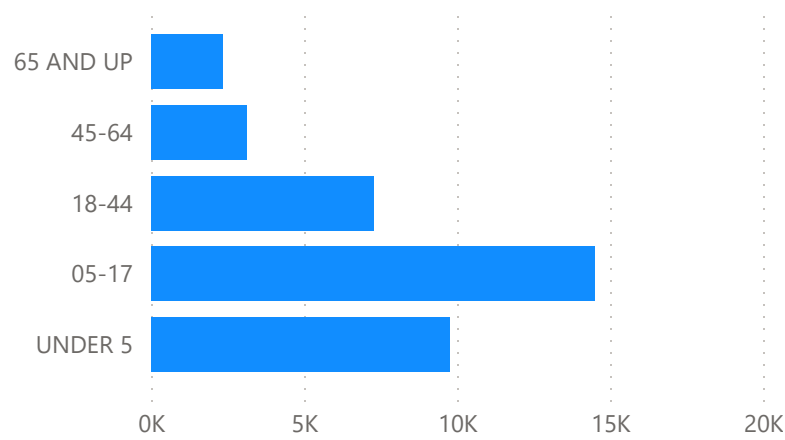


Influenza Healthcare Visits

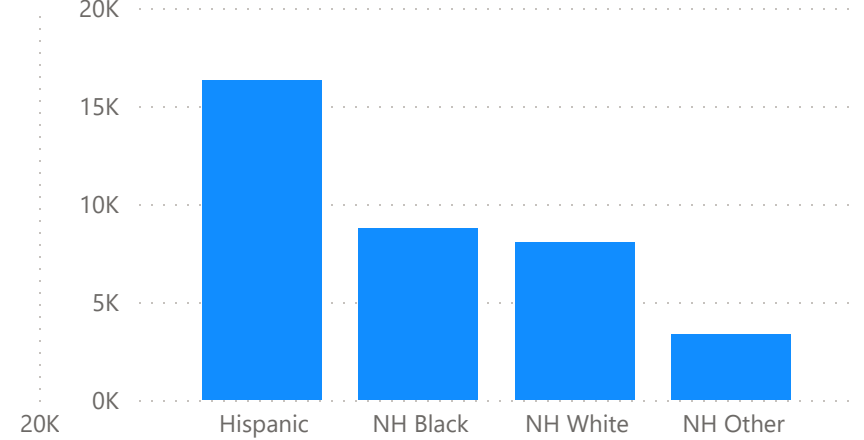
Sex



Age Group

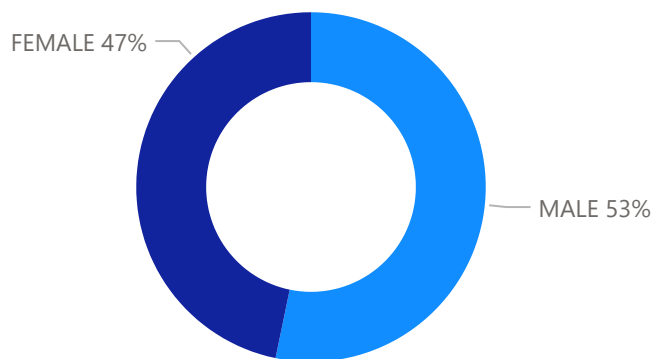


Race-Ethnicity

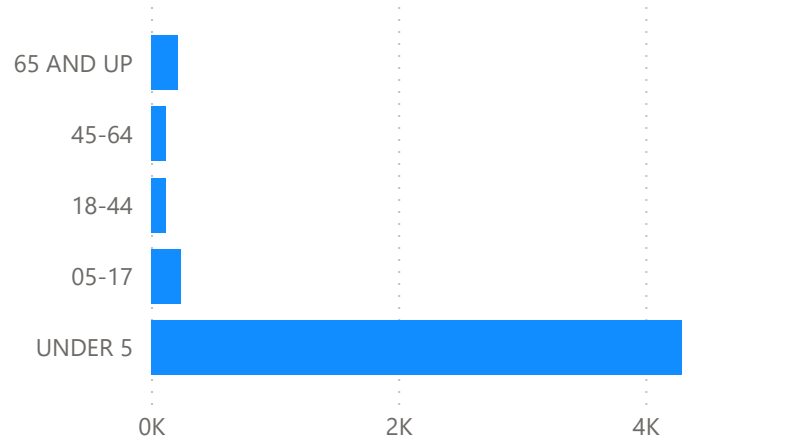


RSV Healthcare Visits

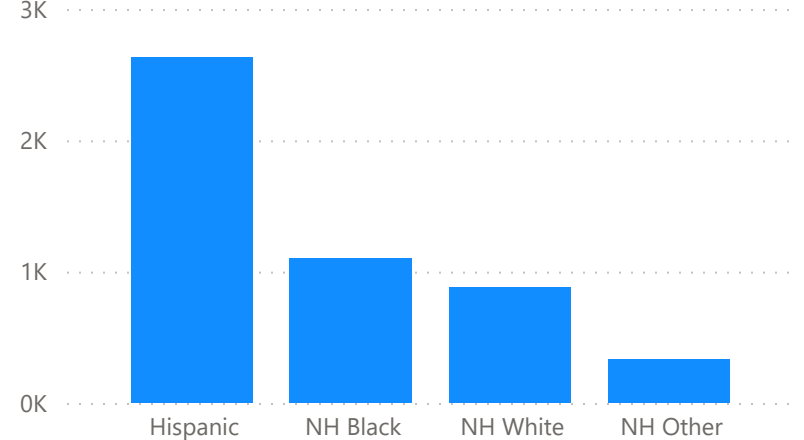
Sex

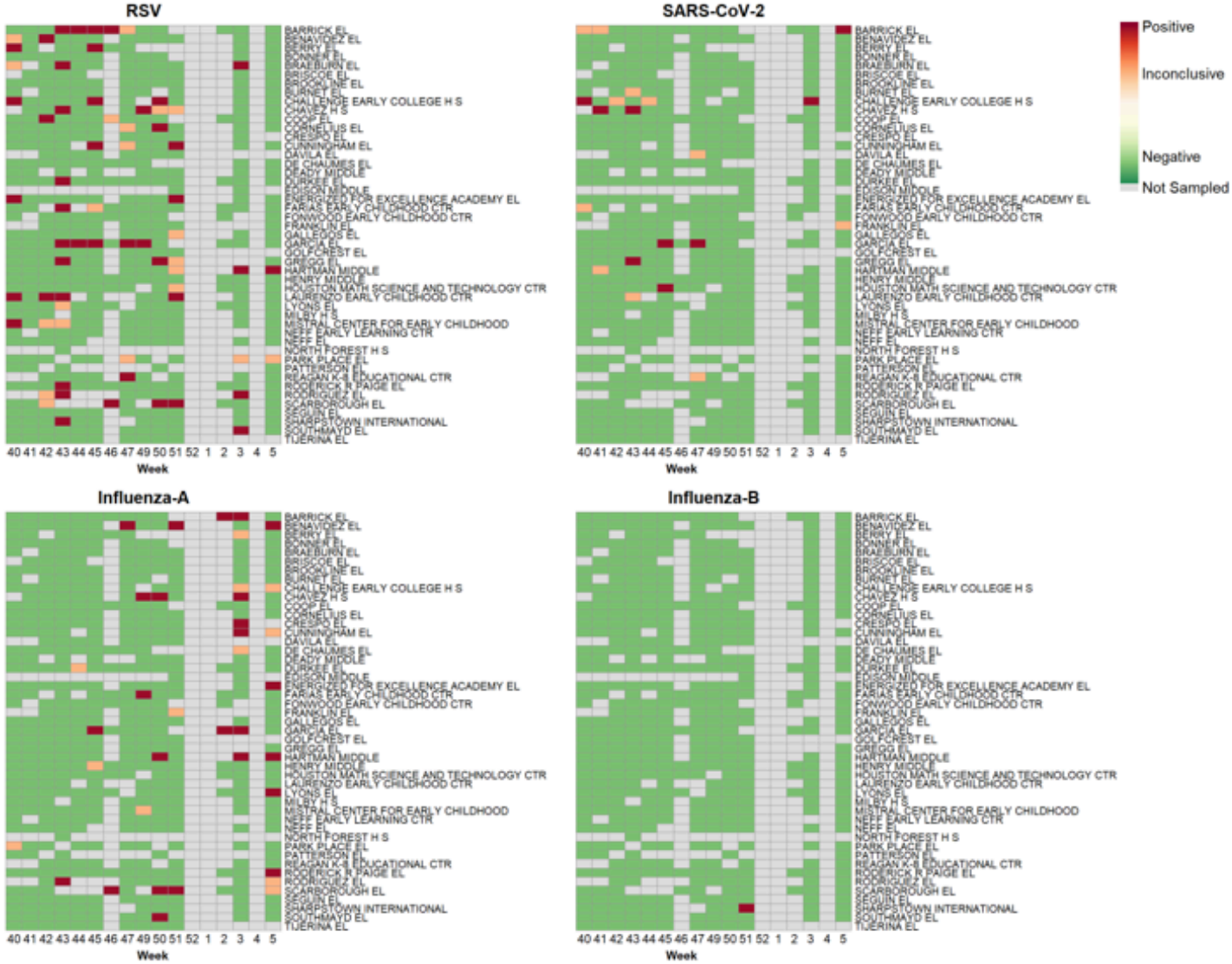


Age Group



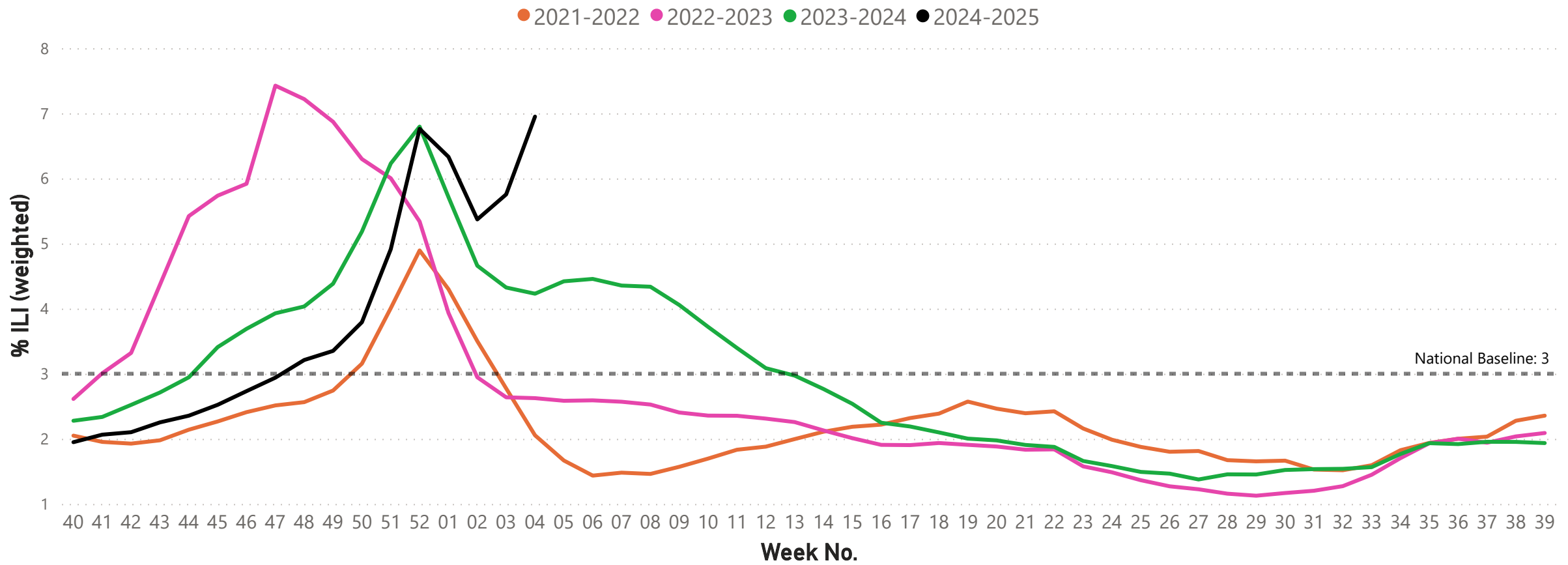
Race-Ethnicity



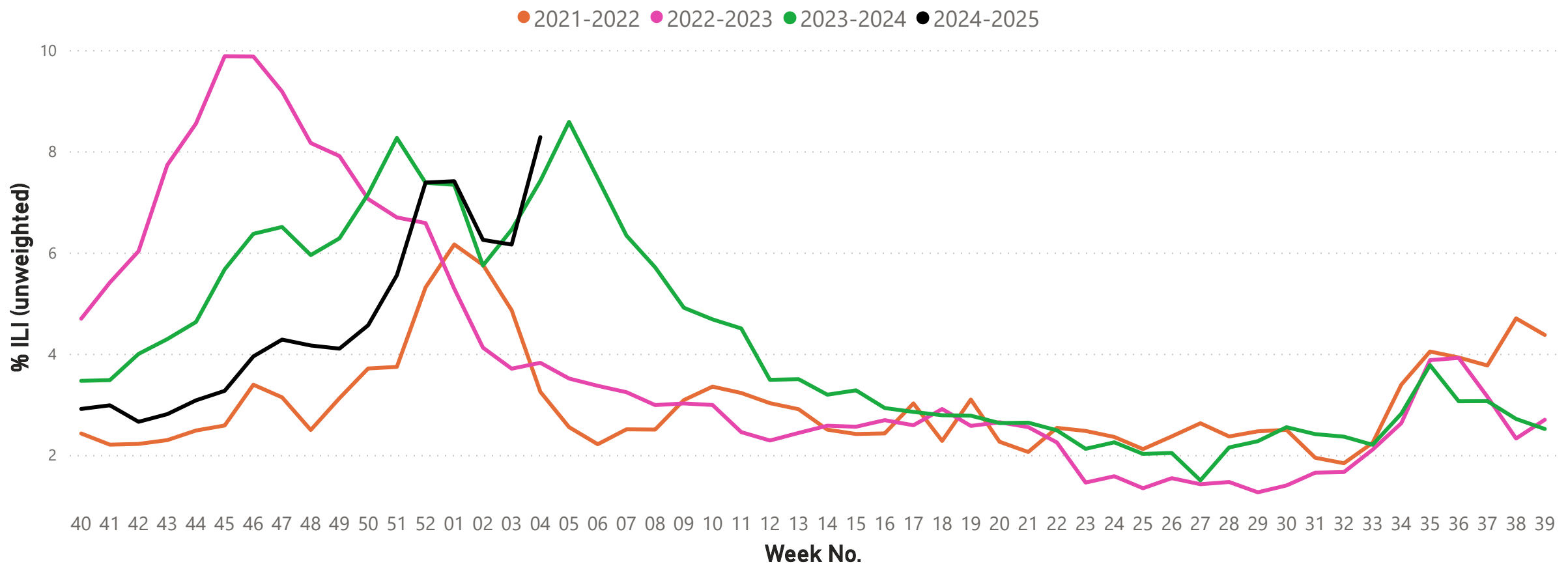


ILI Net: National and Texas Seasonal % Influenza-like Illness (ILI)

National % ILI (weighted)



Texas % ILI (unweighted)



Data Sources

- **Healthcare visit data** are from the Houston Health Department's syndromic surveillance system, HHD-ESSENCE,
- **Wastewater data** are provided by the Houston Health Department wastewater surveillance program.
- **ZIP code populations** are from the 2020 Census.

Queries for syndromic data

RSV - CDC Respiratory Syncytial Virus DD v1 (applied to discharge diagnosis fields):

^;B974^,or,^;J121^,or,^;J205^,or,^;J210^,or,^;46611;^,or,^;4801[;/]^,or,^;0796;^,or,^;55735004;^,or,^;408684006;^,or,^;195881003^,or,^;10625551000119103;^,or,^;57089007;^,or,^;195739001;^,or,^;79479005;^,or,^;195727009;^,or,^;72204002;^,or,^;31309002;^

Influenza - CDC Influenza DD v1 (applied to discharge diagnosis fields):

(,^[/]J09^,or,^[/]J10^,or,^[/]J11^,or,^[/]487.[018][;/]^,or,^[/]487[018][;/]^,or,^[/]488.[018][19][;/]^,or,^[/]488[018][19][;/]^,or,^[/]442696006[;/]^,or,^[/]442438000[;/]^,or,^[/]6142004[;/]^,or,^[/]195878008[;/]^,)

COVID-19 - CDC COVID-specific DD v1 (applied to discharge diagnosis fields);

^[/]U07.1^,or,^[/]U071^,or,^840539006^,or,^840544004^,or,^840533007^,or,^[/]J12.82^,or,^[/]J1282^

- Syndromic data presented include healthcare visits from onboarded healthcare facilities and only records within the Houston-area. All patient classes (inpatient, outpatient, emergency) are included. Counts for demographic groups are suppressed (if less than 5). Historical season data was updated Jan 2025.
- Data are aggregated to the weekly level. Week numbers listed correspond to MMWR week calendar dates (a week begins on Sunday and ends on the following Saturday). Generally speaking, the influenza season begins in October and lasts until Spring (April/May) of the following year. Time series presented begin Week 40 of the year, usually corresponding to the first week in October.
- Wastewater is sampled once a week (usually on Mondays). However, due to various reasons (holidays, extreme weather), there can be pauses in sampling and figures will not show values on these weeks.
- There is a week lag for any national or state data presented (e.g., report for Week 42 will have national/state data are for Week 40-41).
- All data is affected by varying data lags and, therefore, subject to change. Due to data quality improvement initiatives, recent/current season counts may not be comparable to historical seasons.

For more information and details on wastewater monitoring, please visit: <https://covidwwtp.spatialstudieslab.org/>

For more information and details on national and state data, please visit: <https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>