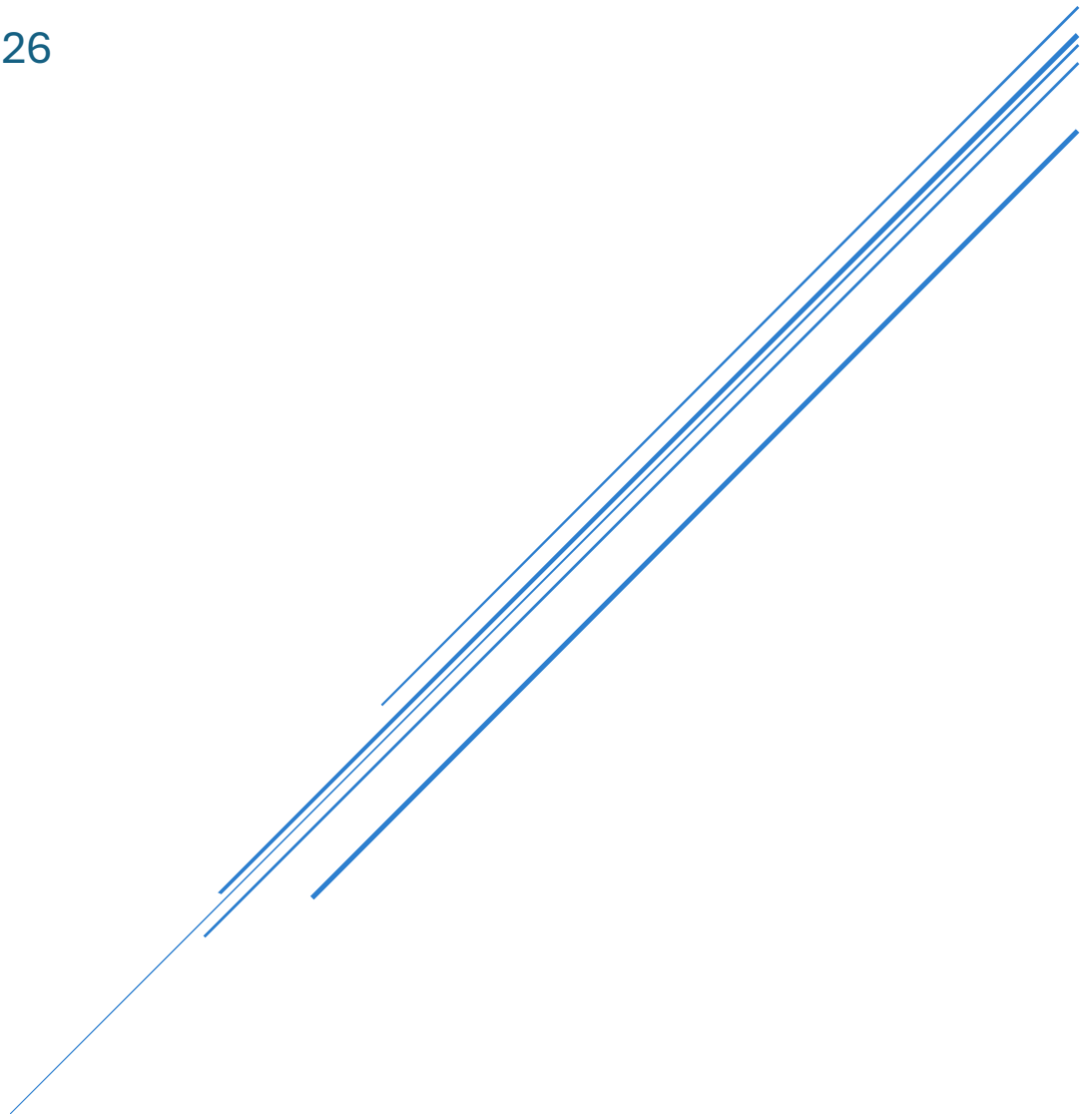# EPIDEMIOLOGY AND LABORATORY CAPACITY FOR INFECTIOUS DISEASES (ELC2) COMMUNITY ASSESSMENT

City of Hartford Department of Health and Human Services

January 2026

By Mark Abraham, MPH, DataHaven, with support from the City of Hartford Department of Health and Human Services

Contents

Executive Summary and Recommendations

This community assessment examines risk factors for respiratory diseases and trends in COVID-19, influenza, RSV, and influenza-like illness (ILI) in Hartford, and evaluates vaccine access. Using surveillance data from the City of Hartford Department of Health and Human Services, DataHaven reports, and other resources, the report identifies where disease burden and barriers to health-promoting resources are most pronounced and recommends strategies for action.

Key findings

- COVID-19 cases declined sharply from 2021–2022 to 2024–2025, indicating a transition from pandemic to endemic conditions; however, COVID-19 vaccination coverage in Hartford (7.4%) remains far below the Connecticut average (14.6%), with particularly low uptake among residents ages 0–64 and among Hispanic, Black, and Asian residents.
- Influenza and RSV have increased substantially over the same period. Influenza cases rose by 204% over four seasons, with the highest burden among children (ages 0–4 and 5–14) and older adults. RSV increased by 314%, disproportionately affecting young children (ages 0–4) and reflecting demographic patterns in Hartford's younger Latino population.
- Influenza-like illness (ILI) remains consistently high across all ages and neighborhoods, far exceeding laboratory-confirmed disease counts. This suggests that multiple respiratory pathogens are circulating simultaneously, and that many cases are not being specifically diagnosed.
- Significant disparities by age, neighborhood, and race/ethnicity persist. In some cases, the patterns align with broader structural risk factors such as housing conditions, crowding, and access to care, but may require more complex analysis of data on cases and risks (e.g., risks of severe hospitalization) that was not available for the writing of this report.
- Racial and ethnic disparities in disease burden and vaccination are evident. ILI rates are higher among Hispanic and Black residents than White residents, and vaccination rates for both COVID-19 and influenza are lowest among Hispanic and Black residents.
- Hartford lags behind the state in both COVID-19 and influenza vaccination, with gaps of 7.2 and 8.6 percentage points, respectively. These gaps cannot be explained by age structure alone and may reflect access barriers, work constraints, and trust and information challenges.
- DataHaven reports and surveys show that Hartford residents face elevated risk factors for severe outcomes from respiratory disease, including higher rates of chronic illness (e.g., asthma, diabetes), economic stress, housing instability, and overcrowding.
- Vaccine confidence and access barriers are likely to be central issues in Hartford. In a 2021 DataHaven survey of randomly-selected adults in Hartford, Hartford residents reported more concerns about side effects, missing work, transportation, and cost, and were more likely than residents statewide to hold misinformation about vaccines. At the same time, a strong majority of residents express trust in local health officials, indicating an opportunity to strengthen engagement.

Recommendations

- **Expand equitable vaccine access** through mobile and pop-up clinics, school- and childcare-based vaccination, senior housing sites, and extended evening and weekend hours in high-need neighborhoods.
- **Deploy trusted messenger strategies** by partnering with clinicians, school-based health centers, faith leaders, and trained peer ambassadors using culturally and linguistically tailored materials.
- **Reduce practical barriers** by offering no-cost vaccines, transportation support, on-site childcare at clinics, and employer partnerships to allow paid time off for vaccination and recovery.
- **Enhance multilingual and culturally responsive communication**, especially in Spanish, and through community media, local radio, and neighborhood organizations.
- **Strengthen data integration and targeting** using stratified analyses by age, race/ethnicity, and neighborhood to guide outreach and continuously monitor progress.
- **Build and sustain trust** through transparent data sharing, consistent community presence by health officials, and long-term partnerships with local organizations.

About this Community Assessment

Purpose and Scope

This assessment was developed in late 2025 to inform education, advertising, testing, vaccination access, and other public health efforts led by the City of Hartford. It draws on multiple sources of local, state, and national data to understand the current landscape of COVID-19 and other viral respiratory diseases and to identify opportunities for targeted interventions. The report seeks to understand health concerns and risk factors related to COVID-19 and other respiratory viruses based on analysis of primary and secondary public health data collected between 2020 and September 2025, in order to help target interventions to areas of greatest need.

This assessment integrates surveillance and administrative data provided by the City of Hartford Department of Health and Human Services, DataHaven survey and report findings, State-level analyses from the Connecticut Department of Public Health, and national guidance and tools for community health assessment and engagement.

About ELC2

According to the Centers for Disease Control and Prevention (CDC): "The Epidemiology and Laboratory Capacity (ELC) Program supports health departments across the country as they build the tools and systems needed to find and respond to infectious disease outbreaks. ELC funding ensures that health departments can hire and retain critical staff, expand testing, improve data systems, and strengthen coordination with partners. The program supports fast, flexible responses to both everyday infectious disease threats and public health emergencies."
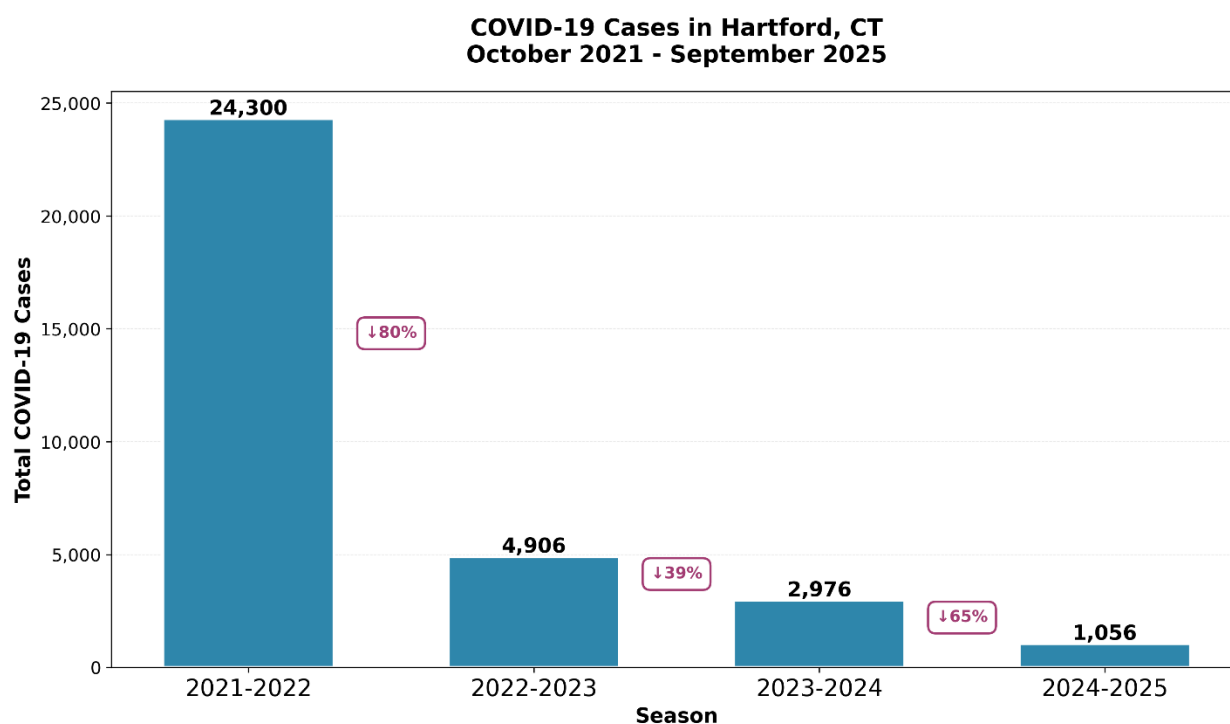
Local Data Resources for Hartford

City of Hartford Department of Health and Human Services Data

Data on respiratory viral diseases were analyzed by the City of Hartford Department of Health and Human Services in Fall 2025 and provided to DataHaven. This section summarizes trends and disparities for COVID-19, influenza, RSV, and influenza-like illness (ILI).

COVID-19 (Novel Coronavirus)

Findings: Total cases in Hartford decreased dramatically from 24,300 in 2021–2022 to 1,056 in 2024–2025, representing a 95.7% reduction over four seasons.

COVID-19 Cases in Hartford, CT
October 2021 - September 2025

2024–2025 Demographics: Older adults are disproportionately impacted by COVID-19. For example, in Hartford, residents age 25–34 experienced 9 cases per 1,000 residents, but residents age 75+ experienced 26 cases per 1,000 residents.

Neighborhood Disparities (Case Rates per 1,000 Residents, 2024–2025): Case rates were highest in South Meadows (15), Sheldon–Charter Oak (14), Downtown (11), and lowest in South Green (2), and Blue Hills (5). *Note: North Meadows is excluded from neighborhood analyses due to its small population size. Case counts may be higher among groups with greater access to testing.*

Vaccination Rates for COVID-19 (2024–2025):

- Hartford: 7.4% (8,971 vaccinated out of 120,710 people).

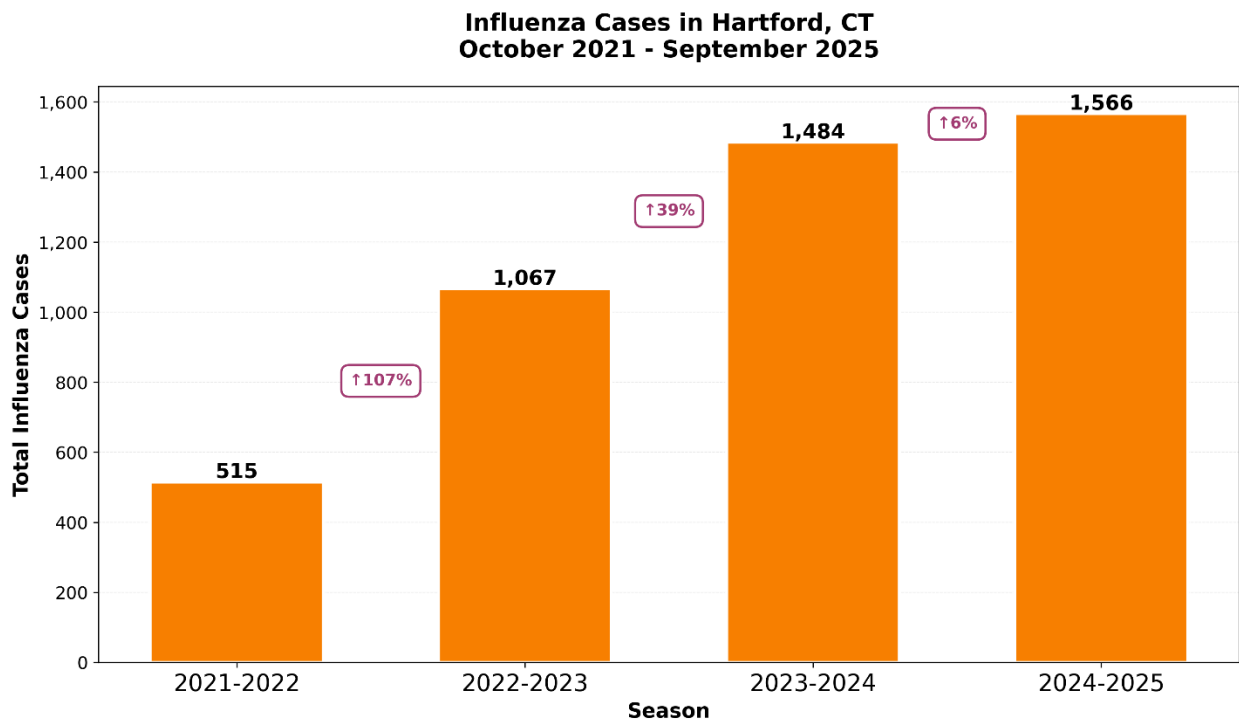- Connecticut: 14.6% (525,024 vaccinated out of 3.59 million people).

Within Hartford, COVID-19 vaccination rates varied by:

- **Age:** 5% (0–17), 5% (18–64), 25% (65+)

- **Race/Ethnicity:** 4% for Hispanic, 5% for Black, 17% for White, and 5% for Asian residents.

COVID-19 vaccination rates were higher in 2023–2024 (and prior years), but remained significantly below statewide levels.

Influenza

Findings: Cases in Hartford have increased steadily from 515 (2021–2022) to 1,566 (2024–2025), a 204% increase over four seasons.

Influenza Cases in Hartford, CT
October 2021 - September 2025

2024–2025 Demographics: Hartford residents age 5–14 had the highest case count (296 cases; 18 per 1,000 residents). Residents age 0–4 had the highest case rate (161 cases; 22 per 1,000 residents).

Neighborhood Disparities (Case Rates per 1,000 Residents, 2024–2025): Case rates are highest in Clay–Arsenal (17), Asylum Hill (16), Upper Albany (16), and lowest in South Meadows (4) and South Green (4). *Note: North Meadows is excluded from neighborhood analyses due to its small population size. Case counts may be higher among groups with greater access to testing.*

Influenza Vaccination Rates (2024–2025):

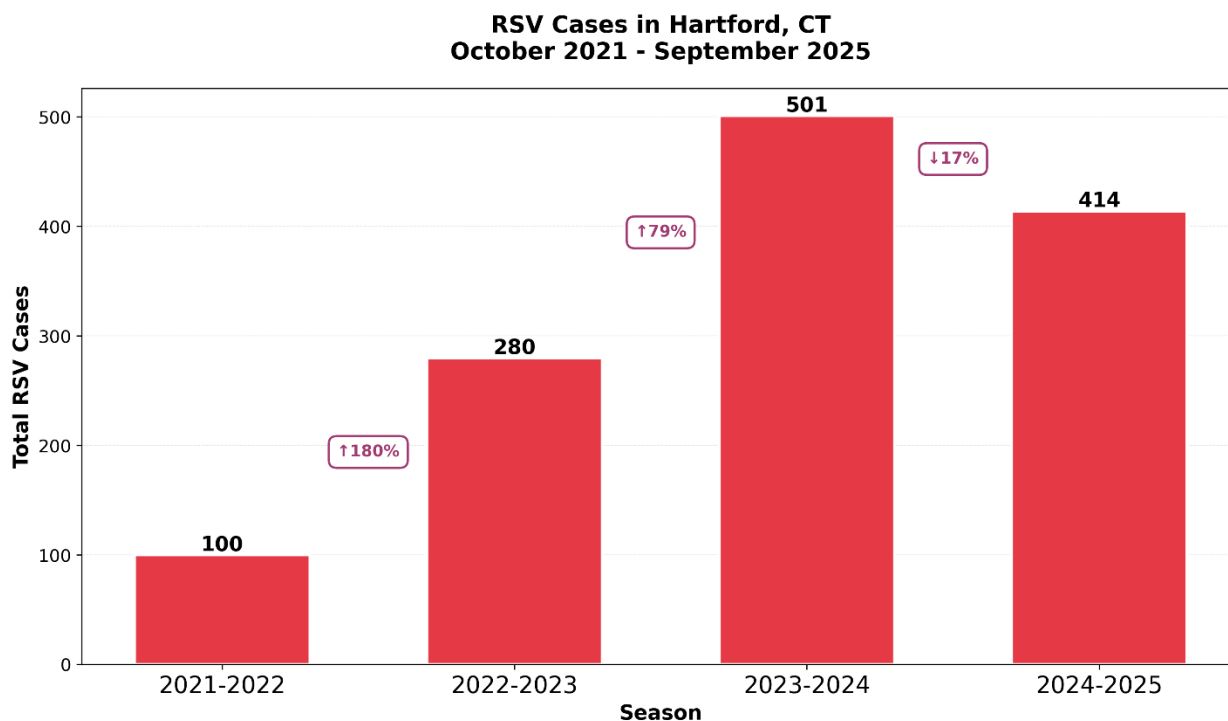- Hartford: 27.9%.

- Connecticut: 36.5%.

Within Hartford, influenza vaccination rates varied by:

- **Age:** 40% (0–17), 19% (18–64), 48% (65+).

- **Race/Ethnicity:** 24% Hispanic, 22% Black, 31% White, 20% Asian.

Rates of vaccination for influenza were similar in 2023–2024.

RSV (Respiratory Syncytial Virus)

Findings: Among Hartford residents, RSV cases increased from 100 (2021–2022) to 414 (2024–2025), a 314% increase over four seasons.

RSV Cases in Hartford, CT
October 2021 - September 2025

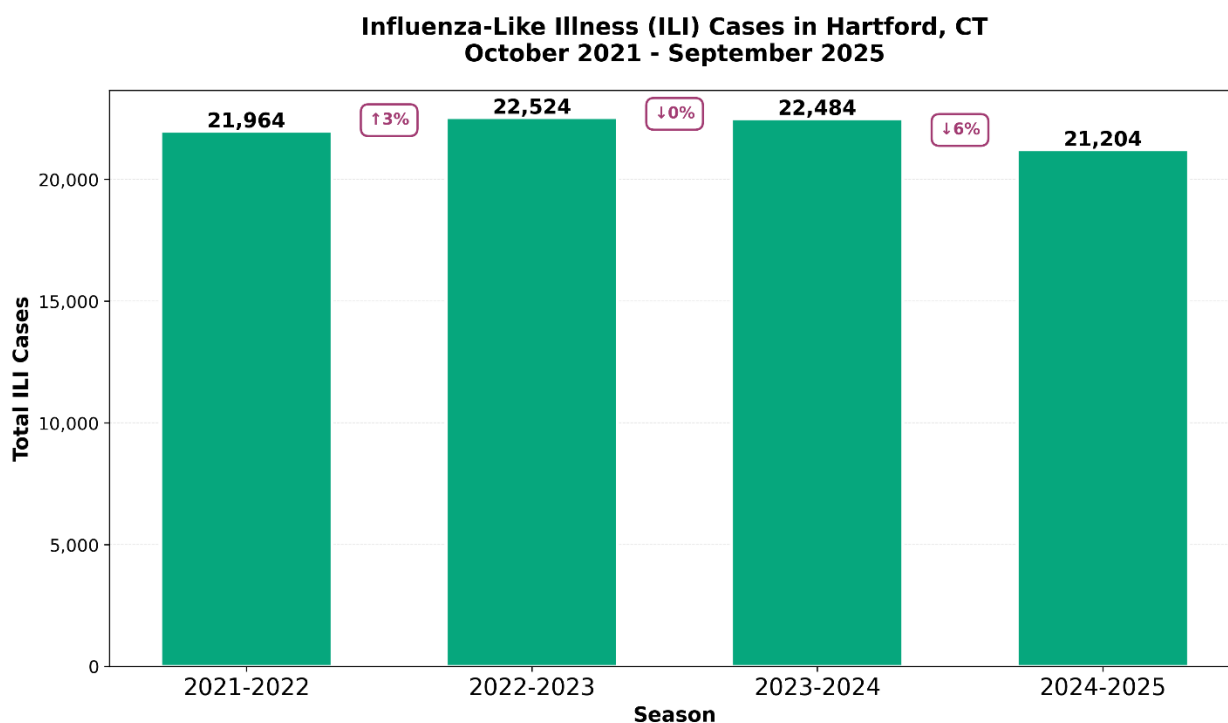| Season	Total RSV Cases
2021-2022	100
2022-2023	280 (↑180%)
2023-2024	501 (↑79%)
2024-2025	414 (↓17%)

2024–2025 Demographics: RSV disproportionately affects young children. Hartford residents age 0–4 had the highest case count (169 cases; 23 per 1,000 residents). Hispanic/Latino adults had the highest case count (209 cases; 4 per 1,000 residents), compared to Black (97; 2 per 1,000) and White (44; 3 per 1,000) residents. This may partially reflect the younger average age of the Latino population in Hartford, given that case rates are so much higher among young children.

Neighborhood Disparities: In the most recent year of data available, RSV case rates were fairly similar across ZIP Codes and neighborhoods throughout Hartford.

Influenza-Like Illness (ILI)

Findings: Cases among Hartford residents remained relatively stable across all seasons: with 21,964 (2021–2022), 22,524 (2022–2023), 22,484 (2023–2024), and 21,204 (2024–2025) cases in the years studied for this report. ILI represents broad syndromic surveillance and may include multiple pathogens.
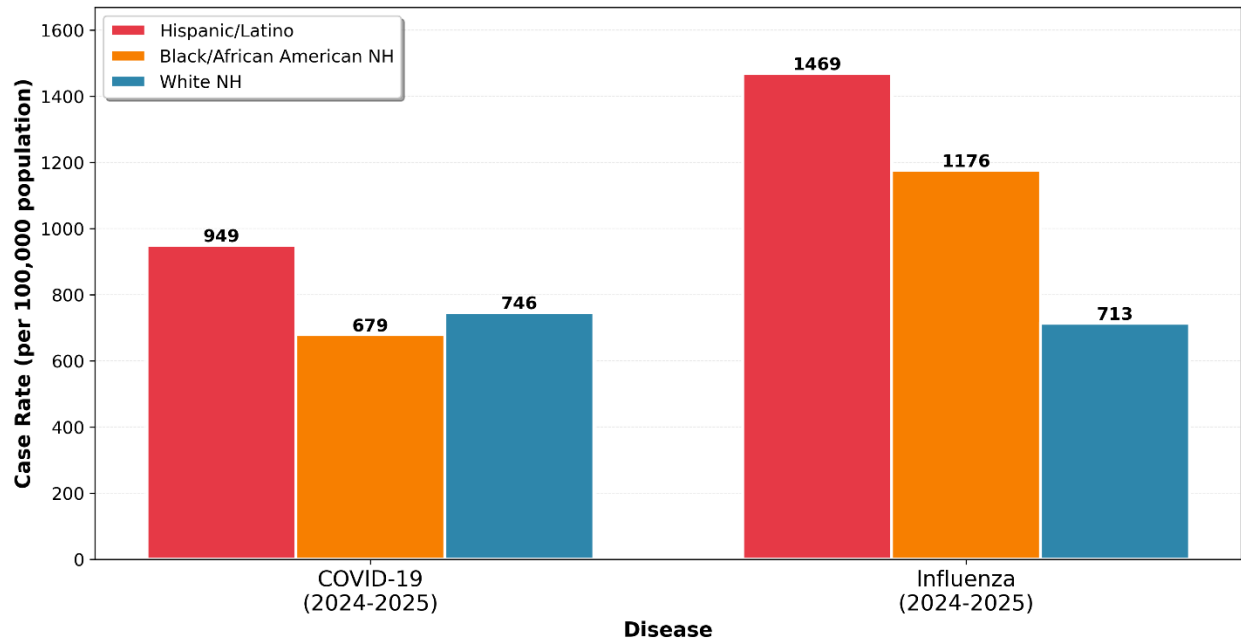
Influenza-Like Illness (ILI) Cases in Hartford, CT
October 2021 - September 2025

Season	Total ILI Cases
2021-2022	21,964
2022-2023	22,524 (↑3%)
2023-2024	22,484 (↓0%)
2024-2025	21,204 (↓6%)

2024–2025 Demographics: Within Hartford, residents age 0–4 had the highest case count (3,473 cases; 465 per 1,000 residents). Case rates were fairly high across all groups, however, ranging from 97 per 1,000 (ages 15–24) to 282 per 1,000 (ages 75+). Rates were high across all ZIP codes. Rates were higher among Hispanic (184 per 1,000) and Black (164 per 1,000) residents than among White (99 per 1,000) residents, potentially reflecting differences in exposure risk and access to primary or preventative care. Previous research in Connecticut has found that residents of high-poverty areas are at higher risk of hospitalization from influenza-like illnesses.
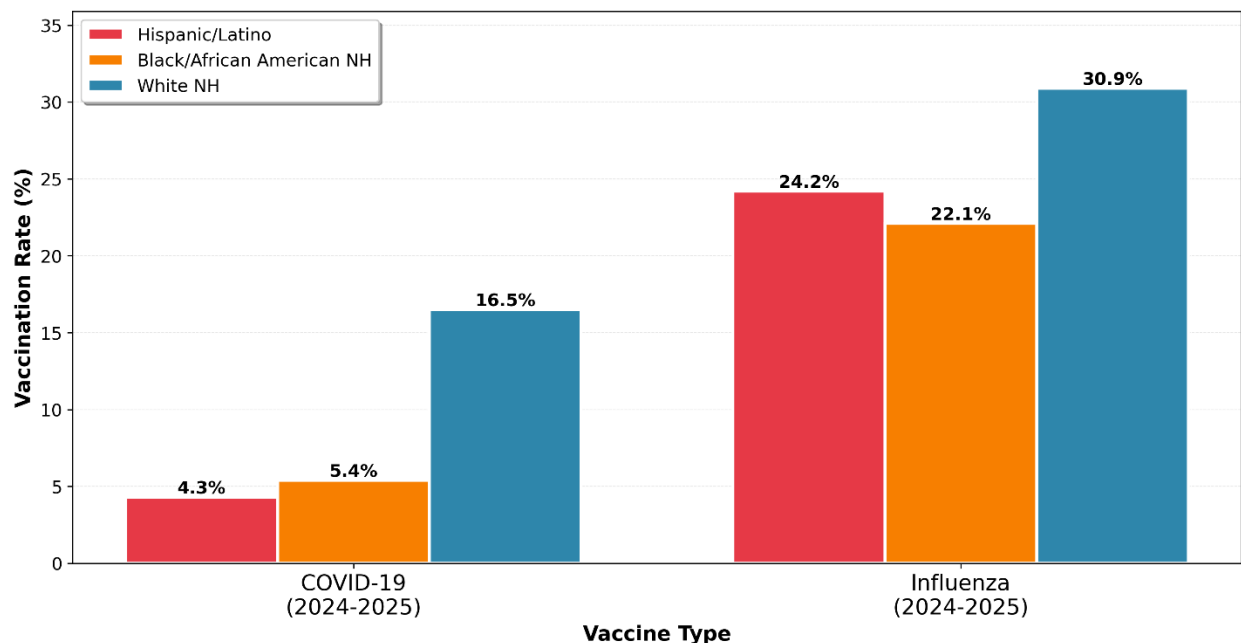
Summary of Local Surveillance Data

ILI cases far exceed laboratory-confirmed disease counts, indicating that multiple respiratory pathogens are circulating. COVID-19 cases declined dramatically over time, while influenza and RSV increased.

Differences in respiratory diseases and vaccine uptake are evident across different neighborhoods and racial/ethnic groups. These may be driven in part by the large differences in the age compositions of these groups, but social factors like access to care and underlying risks could be important as well (please see the section below with a summary of DataHaven's local data on these topics). These differences should be examined further using stratified analyses.

Racial/Ethnic Disparities in Hartford
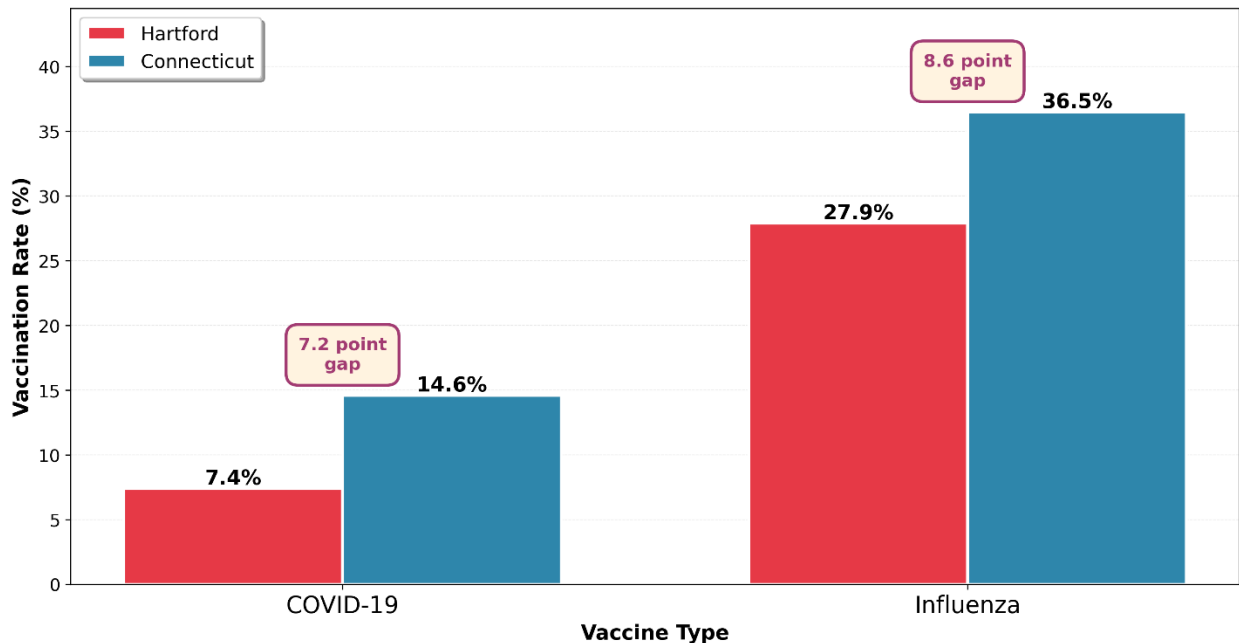**Case Rates by Race/Ethnicity**

Racial/Ethnic Disparities in Hartford
Vaccination Rates by Race/Ethnicity

There are significant gaps in vaccination rates between Hartford and the state overall:
- o **COVID-19:** Hartford 7.4% vs. Connecticut 14.6% (7.2 percentage point gap).
- o **Influenza:** Hartford 27.9% vs. Connecticut 36.5% (8.6 percentage point gap).

Vaccination Gaps: Hartford vs. Connecticut
2024-2025 Season

DataHaven reports

DataHaven reports provide critical context on COVID-19 risk factors and health equity in Hartford and across Connecticut. Together, they highlight structural conditions, such as housing, income, chronic disease, and access to care, that shape vulnerability to respiratory diseases.

1) 2025 Community Health Needs Assessment: Greater Hartford Community Focus Groups Summary
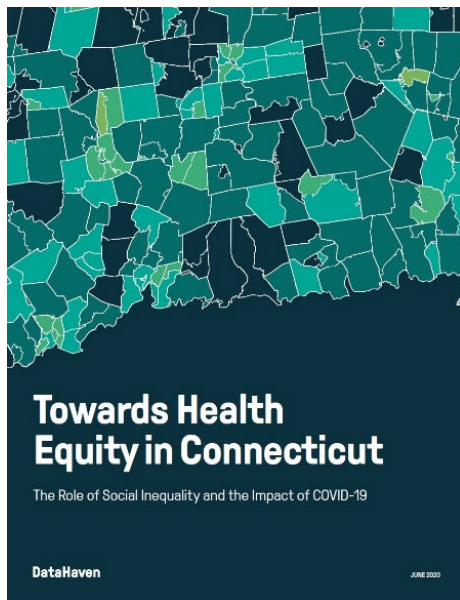
Relevant themes:

- **Access Barriers:** Participants reported difficulties accessing care due to transportation, clinic hours, cost concerns, and limited availability of culturally responsive services.

- **Information Gaps:** Confusion about where to get vaccines and what is free or low-cost, especially among non-English speakers.

- **Trust and Communication:** Residents emphasized the importance of trusted local messengers and community-based organizations.

- **Work and Time Constraints:** Inflexible work schedules make it hard to attend appointments or recover from side effects.

- **Housing Stress:** Difficulty affording the cost of housing, particularly as rental costs have risen dramatically, is placing very high stress on Hartford residents in 2025. Residents also experience other housing-related barriers.

Implications for Hartford: Expand mobile and community-based services; partner with trusted organizations; provide clear, multilingual information on vaccine locations and costs; consider housing-related interventions and efforts to reach unhoused populations as homelessness becomes more common.

2) Towards Health Equity in Connecticut (2020)

Relevant themes:

- **Structural Inequities:** There are persistent disparities by race/ethnicity and income in health outcomes and access to preventive care (including primary care, dental care, etc.)

- **Chronic Disease Burden:** The much higher prevalence of asthma, diabetes, and cardiovascular disease in urban communities such as Hartford increases risk of severe COVID-19 and influenza outcomes.

- **Housing and Overcrowding:** Crowded living conditions, which are much more common in Hartford and other cities in Connecticut, and among Latino and immigrant populations, elevate transmission risk for respiratory pathogens.

- **Economic Stressors:** Financial instability and lack of paid sick leave affect the ability to seek care and vaccination.

Implications for Hartford: Address social determinants alongside medical interventions; integrate vaccination with chronic disease management and housing-based outreach.

3) Health Equity in Connecticut (2023)

Relevant themes:

- **Geographic Disparities:** Concentration of poor health outcomes in urban neighborhoods with high poverty and limited access to care.

- **Language and Literacy:** Limited English proficiency remains a major barrier to understanding health guidance.

- **Trust and Experience:** Historical and ongoing negative experiences with healthcare systems reduce confidence among some communities of color.

- **Community Assets:** Strong networks of local organizations and leaders can support effective outreach.

Implications for Hartford: Invest in multilingual education, community health workers, and long-term partnerships with neighborhood organizations.

4) COVID-19-related data from the 2021 wave of the DataHaven Community Wellbeing Survey

The 2021 DataHaven Community Wellbeing Survey is a survey of thousands of randomly-selected adults in every town in Connecticut that is supported by dozens of public and non-profit partners throughout the state, including the City of Hartford. In 2021, the survey included additional questions related to COVID-19 exposure and prevention. Estimates produced by DataHaven are based on statistically weighting the survey data to represent the entire population, allowing adults in the City of Hartford and groups within Hartford to be compared to statewide averages. Although the more recent waves of the DataHaven survey did not include questions on vaccination or COVID-19, this is because other important topics such as access to health care, access to mental health services, substance use, and housing-related issues have been prioritized by local partners in recent years. The survey was conducted in mid-2021.

COVID-19 Vaccination: Overall, 74% of Hartford adults were vaccinated, compared to 82% of adults statewide. By income, 68% of Hartford adults earning under $30,000 were vaccinated, compared to 95% of Hartford adults earning $100,000 or more. By race/ethnicity, 69% of Hispanic, 75% of Black, and 81% of White adults the City in Hartford reported being vaccinated.

Mask Use: 77% of Hartford adults wore masks very often when leaving home, compared to 53% of adults statewide.

COVID-19 Impacts: 25% of Hartford adults had close friends or family who died from COVID-19, compared to 18% statewide. Hartford adults were also more likely to report that their close friends or family members had been hospitalized.

Misinformation: 48% of unvaccinated Hartford adults were concerned they could get COVID-19 from the vaccine, compared to 31% statewide.

Barriers to vaccine access: Compared to unvaccinated adults statewide, unvaccinated adults in Hartford residents more often cited concerns about missing work, side effects, cost of getting a vaccine, transportation, and lack of trusted sites. Despite the much higher rates of COVID-19 mortality observed in Hartford during the pandemic, Hartford residents were less likely to say that they had had close friends or family who had tested positive for COVID-19 (42% of city adults, compared to 48% of statewide adults), potentially indicating the effects of barriers to vaccine access.
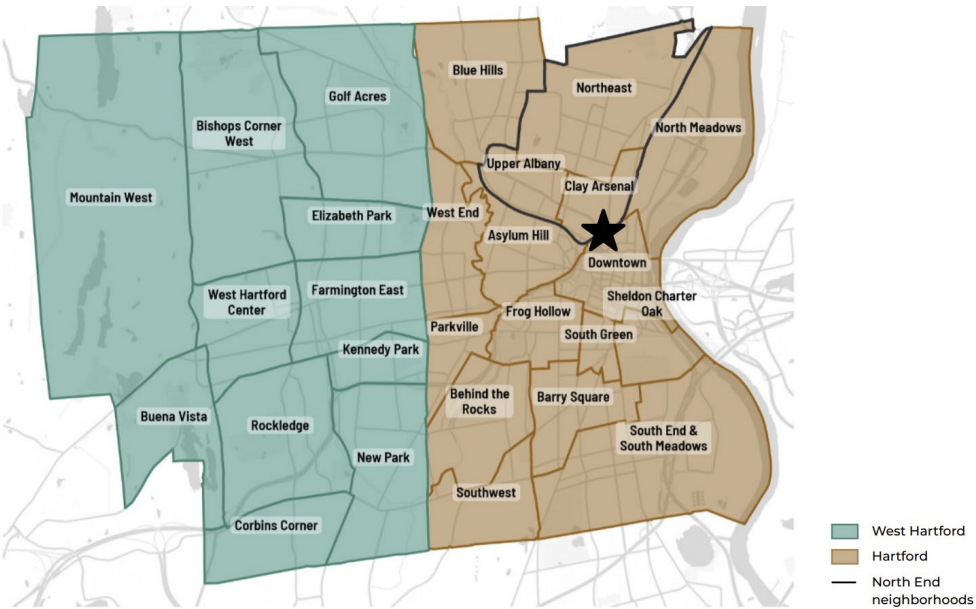
Trust: 77% of Hartford adults had a fair amount or great deal of trust in local health officials, compared to 86% statewide. However, the survey finds that trust in health officials is lower among younger adults and people of color in some areas, especially individuals who have faced discrimination in health care settings.

Implications for Hartford: These findings largely reflect the themes of other reports, but provide hard numbers based on a random sample of thousands of residents throughout Connecticut and across Hartford. Periodic local-level data collection on these issues could be helpful to identify disparities and track progress. For example, data from the DataHaven survey can be broken down for many different populations including people with incarceration experiences, disabilities, and by sexual orientation and gender.
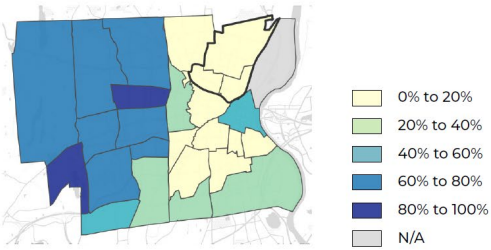
5) Maps of Hartford and West Hartford

The DataHaven website has several tools allowing the general public to map data for Connecticut towns as well as specific neighborhoods in Hartford and West Hartford. On the following page, examples from the recent "North Hartford Health Report: Data to Action" (2025) are included below to illustrate data about the area.
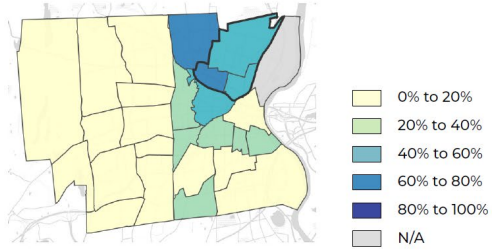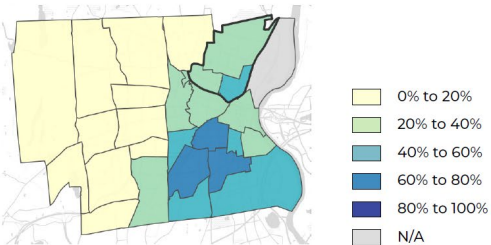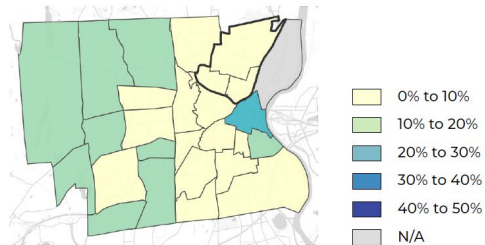
REFERENCE MAP
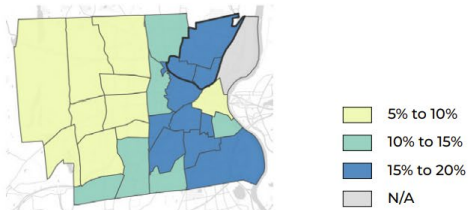

WHITE POPULATION

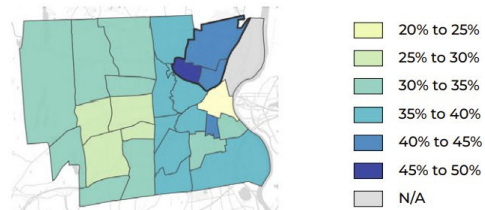BLACK POPULATION

LATINO POPULATION

OTHER RACE POPULATION

DIABETES

HIGH BLOOD PRESSURE

National and State Resources

Vaccine Equity and Community Barriers in Connecticut

Rapid Community Assessments (RCAs) conducted between 2020 and 2025 by Connecticut health departments and partners, primarily within the state's urban areas, identified major barriers to vaccination and opportunities for action. A 2025 conference presentation by Panchal et al. summarized these barriers and opportunities across communities throughout the state.

Core Barriers to Vaccine Equity

- **Transportation and Geography:** Limited transit options and distance to clinics reduce uptake.
- **Clinic Availability:** Restricted hours and appointment-only systems exclude people with inflexible work schedules.
- **Cost and Insurance Concerns:** Uncertainty about out-of-pocket costs even when vaccines are free.
- **Language and Literacy:** Insufficient multilingual materials and interpretation.
- **Mistrust and Misinformation:** Confusion about safety, schedules, and side effects.

Specific Strategies Suggested

1. **Mobile and Pop-Up Clinics**
   - Bring vaccines to schools, housing complexes, faith institutions, and transit hubs.
   - Pair vaccination with other services (e.g., health screenings).
2. **Extended and Flexible Hours**
   - Evening and weekend hours; walk-in options without appointments.
3. **Trusted Messenger Models**
   - Train clinicians, community health workers, and peer ambassadors.
   - Partner with faith leaders and school-based health centers.
4. **Multilingual and Culturally Tailored Outreach**
   - Materials in Spanish and other languages.
   - Use ethnic media and community radio.
5. **Practical Support**
   - Transportation vouchers.
   - On-site childcare at clinics.
   - Employer partnerships to support paid time off for vaccination and recovery.
6. **Digital Tools and Records Access**
   - Simple mobile tools for vaccine schedules and reminders.
   - Clear guidance on where to get free vaccines.

These strategies underscore the need for equity-centered vaccination approaches that address both access and confidence.

National Resources for Community Assessment and Engagement

National tools for COVID-19 and community health assessment (CDC) emphasize:

- Participatory approaches that engage residents as partners.

- Use of mixed methods (quantitative data and qualitative community input).

- Ongoing feedback loops to adapt interventions.

- Clear communication strategies tailored to local context.

- Building trust through transparent data sharing.

- Aligning public health actions with community-identified priorities.

Bibliography

Centers for Disease Control and Prevention. (n.d.). *Epidemiology and Laboratory Capacity (ELC) Program*. https://www.cdc.gov/epidemiology-laboratory-capacity/php/stories/index.html

City of Hartford Department of Health and Human Services. (2025). Analysis of surveillance data provided to author.

Community Action Task Force (CATF), UConn Health Equity Lab for the People, and DataHaven. (2025). *North Hartford Health Report: Data to Action*. https://ctdatahaven.org/report/north-hartford-health-report-data-action/

DataHaven. (2025). *2025 Community Health Needs Assessment: Greater Hartford community focus groups summary*. https://ctdatahaven.org/report/2025-community-health-needs-assessment-greater-hartford-community-focus-groups-summary/

DataHaven. (2020). *Towards health equity in Connecticut*. https://ctdatahaven.org/report/towards-health-equity-connecticut/

DataHaven. (2023). *Health equity in Connecticut 2023*. https://ctdatahaven.org/report/health-equity-connecticut-2023/

DataHaven. (2021–2025). *Community Wellbeing Survey and related reports*. https://ctdatahaven.org

Panchal, M., Holbert, N., & Durante, A. (2025). *Evaluation of rapid community assessments: Insights for vaccine equity* [Conference poster]. Southern Connecticut State University, Department of Public Health & Connecticut Department of Public Health, Infectious Disease Branch, Immunization Program.