



The City of Worcester

Department of Health and Human Services

Division of Public Health

Maternal and Child Health Dashboard

Improving Data Accessibility in Worcester

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GUIDED BY LOCAL VOICES

- Historical conversations between the City of Worcester and partner organizations working in the maternal and child health space include a longstanding request for a report card on maternal and child health in Worcester
- This need was reiterated by academic institutions, hospitals, and the City – who require maternal and child health data for different purposes
- The Worcester Division of Public Health (WDPH) would also benefit from this information for priority setting and program evaluation



APPROACH

- WDPH Epidemiology Office worked in tandem with the WDPH Maternal and Child Health Office on an approach to address the community's needs
- Began by reviewing existing guidance on key maternal and child health data
 - The MA Epidemiology Collaborative is an incredible resource for sharing ideas and information – this guide is directly from collaborative members
 - The guide outlines key data points to consider when conducting a needs assessment focused on maternal and child health



VIEW THE GUIDE

Empowering Local Health Departments: A Guide to Maternal and Child Health Services and Best Practices

Rachel Freedman and Deidra Clermont

INSPIRATION

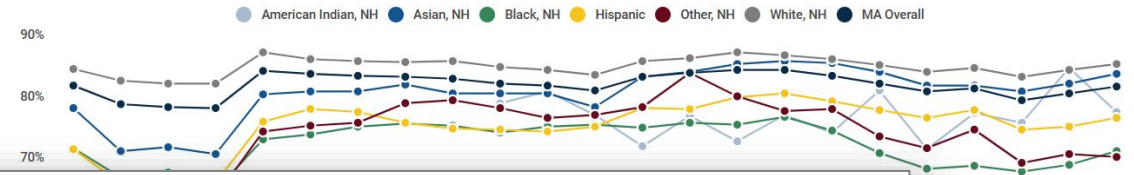
- Reviewed existing maternal and child health dashboards in other jurisdictions around the country
- Drew inspiration and guidance from the Mass DPH Maternal and Child Health Dashboard and the Mass DPH Data Library

Data on Maternal and Child Health in Massachusetts

Find data on maternal and child health in Massachusetts by race and Hispanic ethnicity.

People of color are more likely to experience risk factors for complications in pregnancy, maternal morbidity, infant mortality, and preterm births, which are associated with less access to prenatal care and exposure to toxins.

Adequate Prenatal Care



Metric Selection

Preterm

A developing baby goes through important growth throughout pregnancy—including in the final months and weeks. For example, the brain, lungs, and liver need the final weeks of pregnancy to fully develop. Unless there is a medical need, delivery should not be scheduled before 39 weeks of pregnancy. Premature babies often have serious health problems, especially when they're born very early. These problems often vary, but the earlier a baby is born, the higher the risk of health challenges.

Year: 2023

IDOH Preparedness District: (All)

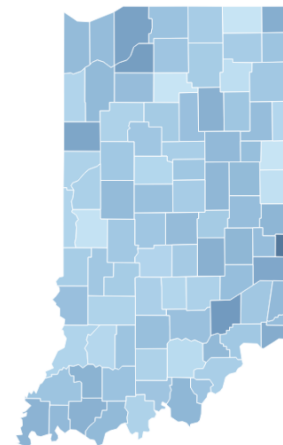
County Name: (All)

See Race and Ethnicity Data Documentation for information on how Race and Ethnicity are analyzed in Indiana.

Birth Outcomes Dashboard

2023 Preterm Rate

Display By: County



Preterm Rate

Year: 2023, District: All, County: All

11.0 %

This is **Equal** to the Statewide Rate of **11.0%**
This is **Higher** than the **2022** Nationwide Rate of **10.4%**

Display By: Race & Ethnicity

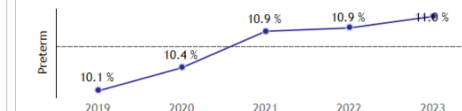
Preterm Rate by Race & Ethnicity

Year: 2023, District: All, County: All



Preterm Rate by Year

District: All, County: All



INDICATOR SELECTION

- Epi worked with the Maternal and Child Health Office at WDPH to narrow down indicators based on guidance and other best practices from health departments
- Determine which types of disaggregation would be most impactful for targeted programming: such as geographic level, time trends, racial breakdowns
- Determine the types of visuals that are possible with the data available and that would be the most helpful to a general audience

Indicator	Disaggregation	Category	Data Source(s)
Maternal Health			
OB/GYNs (population per provider ratio)	City, State, US Trends over time	Prenatal Care Access and Utilization	National Plan and Provider Enumeration System (NPPES) via MySidewalk
Midwives/Doulas (population per provider ratio)	City, State, US Trends over time	Prenatal Care Access and Utilization	National Plan and Provider Enumeration System (NPPES) via MySidewalk
Adequacy of Prenatal Care Utilization Index	City, State, US Trends over time Race Payment Type Age	Prenatal Care Access and Utilization	-National Vital Statistics Report (US) - Mass DPH Birth Reports (State, City)
Prenatal Care in the First Trimester	County, State, US Trends over time	Prenatal Care Access and Utilization	-CDC Wonder via MySidewalk
Postpartum Care Attendance	City, State, US Race	Prenatal Care Access and Utilization	- PRAMS (State, US) -Mass DPH PRAMS
Births by Payment Type	City, State, US Race Age	Prenatal Care Access and Utilization	-National Vital Statistics Report (US) -Mass DPH Birth Report (State, City) Birth Outcomes Dashboard
Maternal Mortality	City, State, US Race	Maternal Mortality & Morbidity	- CDC (National)
Severe Maternal Morbidity	City, State, US Race Age Weight Special populations	Maternal Mortality & Morbidity	Mass DPH (state)
Pre-Pregnancy Weight	City, State, US	Maternal Mortality & Morbidity	- Mass DPH (City)
Hypertension/Pre-eclampsia/Eclampsia	City, State, US Race Age	Maternal Mortality & Morbidity	-CDC (National)
Gestational Diabetes	City, State, US Race Age	Maternal Mortality & Morbidity	- Mass DPH (City)
Postpartum Depression		Perinatal mental health and substance misuse	PRAMS - Mass DPH (State) - CDC (US)
Smoking		Perinatal mental health and substance misuse	PRAMS -Mass DPH (City) -Mass DPH (State) - CDC (US)

DATA SOURCES

- Most data is publicly available, but scattered across various sources and sometimes difficult to access or navigate
 - As a larger municipality, we are fortunate to have the ability to access some public data at City-level, this often isn't the case for many municipalities in Massachusetts
- What data sources are available
 - State: PRAMS, Birth Reports, SMM Reports, DOE, DEP
 - National: CDC Wonder, National Vital Statistics, US Census Bureau
- Limitations
 - Data delays (several years delay)
 - Less data at local level
 - Self-reported vs medical record data



PLATFORM SELECTION

- Considered the pros and cons of various available software available to the division:
 - Excel, Power BI, MySidewalk, ArcGIS StoryMaps, Google Looker
- User experience: Ease of use, interactivity, navigation
- Back end maintenance: Internal capacity to update, ease of use
- Cost: Additional cost or existing software access
- IT Approval

The screenshot displays the Worcester, MA Health Department dashboard. The top navigation bar includes a 'Seek' logo and the department name. Below this, there are tabs for 'Search', 'Browse' (highlighted as 'EXPERIMENTAL'), 'Guides', and 'Saved Searches'. A search bar with the placeholder 'Search by keyword' is present, along with filters for 'Source', 'Categories', 'Time', and 'Availability'.

The main content area is divided into three sections, each with a table and a list of categories:

Low Birth Weight Births by Race / Ethnicity

Source	Statistical type	Unit	Coverage
Center for Disease Control (CDC)	Ratio	Live Births	Regions: 0% (Pop: 20%) Details

Time: 2020-2024 (current)

- Low Birth Weight - American Indian or Alaska Native (not Hispanic or Latino) Mother
- Low Birth Weight - Asian (not Hispanic or Latino) Mother
- Low Birth Weight - Black or African American (not Hispanic or Latino) Mother
- Low Birth Weight - Native Hawaiian or Other Pacific Islander (not Hispanic or Latino) Mother
- Low Birth Weight - Hispanic or Latino Mother
- Low Birth Weight - White (not Hispanic or Latino) Mother
- Low Birth Weight - More than one Race (not Hispanic or Latino) Mother

Births with Tobacco Used During Pregnancy by Race / Ethnicity

Source	Statistical type	Unit	Coverage
Center for Disease Control (CDC)	Ratio	Live Births	Regions: 0% (Pop: 20%) Details

Time: 2020-2024 (current)

- Tobacco Use During Pregnancy - American Indian or Alaska Native (not Hispanic or Latino) Mother
- Tobacco Use During Pregnancy - Asian (not Hispanic or Latino) Mother
- Tobacco Use During Pregnancy - Black or African American (not Hispanic or Latino) Mother
- Tobacco Use During Pregnancy - Native Hawaiian or Other Pacific Islander (not Hispanic or Latino) Mother
- Tobacco Use During Pregnancy - Hispanic or Latino Mother
- Tobacco Use During Pregnancy - White (not Hispanic or Latino) Mother
- Tobacco Use During Pregnancy - More than one Race (not Hispanic or Latino) Mother

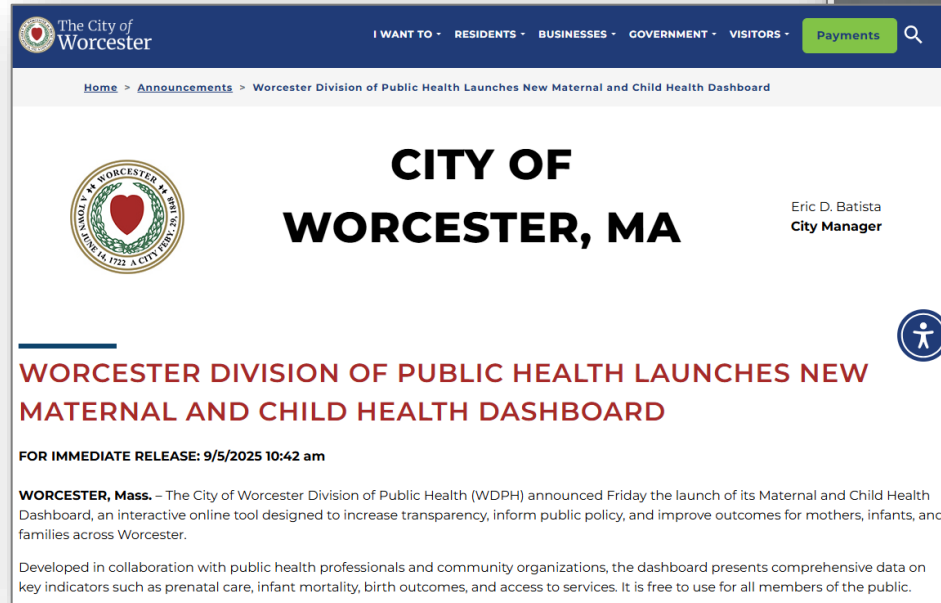
Preterm Births by Race / Ethnicity

Source	Statistical type	Unit	Coverage
Center for Disease Control (CDC)	Ratio	Live Births	Regions: 0% (Pop: 20%) Details



Check out the dashboard! Scan or visit bit.ly/WorcesterMCH

LAUNCH



The screenshot shows the City of Worcester website. At the top is a blue navigation bar with the city logo and links for "I WANT TO", "RESIDENTS", "BUSINESSES", "GOVERNMENT", "VISITORS", and a "Payments" button. Below the navigation bar is a breadcrumb trail: "Home > Announcements > Worcester Division of Public Health Launches New Maternal and Child Health Dashboard". The main content area features the city seal, the title "CITY OF WORCESTER, MA", and the name "Eric D. Batista, City Manager". A red headline reads "WORCESTER DIVISION OF PUBLIC HEALTH LAUNCHES NEW MATERNAL AND CHILD HEALTH DASHBOARD". Below this is a sub-headline "FOR IMMEDIATE RELEASE: 9/5/2025 10:42 am" and a paragraph of text: "WORCESTER, Mass. – The City of Worcester Division of Public Health (WDPH) announced Friday the launch of its Maternal and Child Health Dashboard, an interactive online tool designed to increase transparency, inform public policy, and improve outcomes for mothers, infants, and families across Worcester." A second paragraph follows: "Developed in collaboration with public health professionals and community organizations, the dashboard presents comprehensive data on key indicators such as prenatal care, infant mortality, birth outcomes, and access to services. It is free to use for all members of the public."



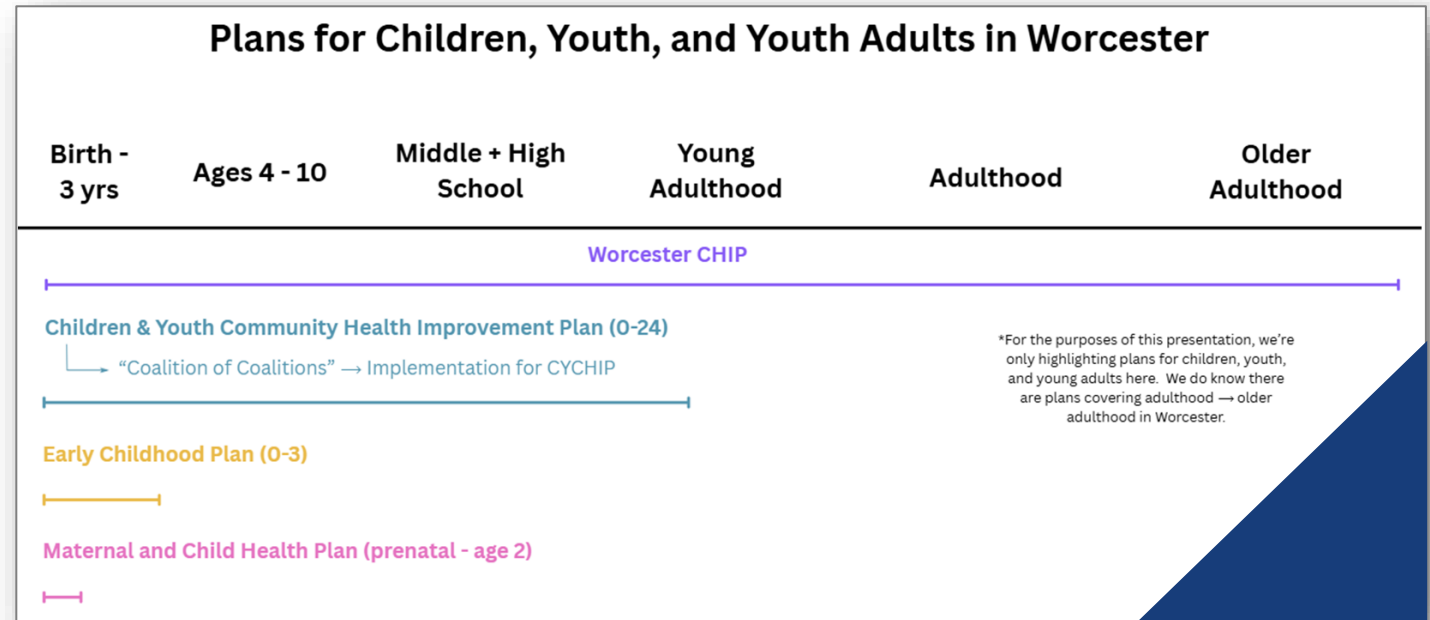
About This Dashboard

Centering Mothers and Children in Public Health

Maternal and child health is a cornerstone of public health, shaping the health and well-being of individuals across the lifespan. Ensuring strong maternal and child health outcomes lays the foundation for healthier communities, yet persistent disparities continue to undermine this goal - particularly among underserved populations. Addressing these inequities is not only a matter of health, but of justice and opportunity.

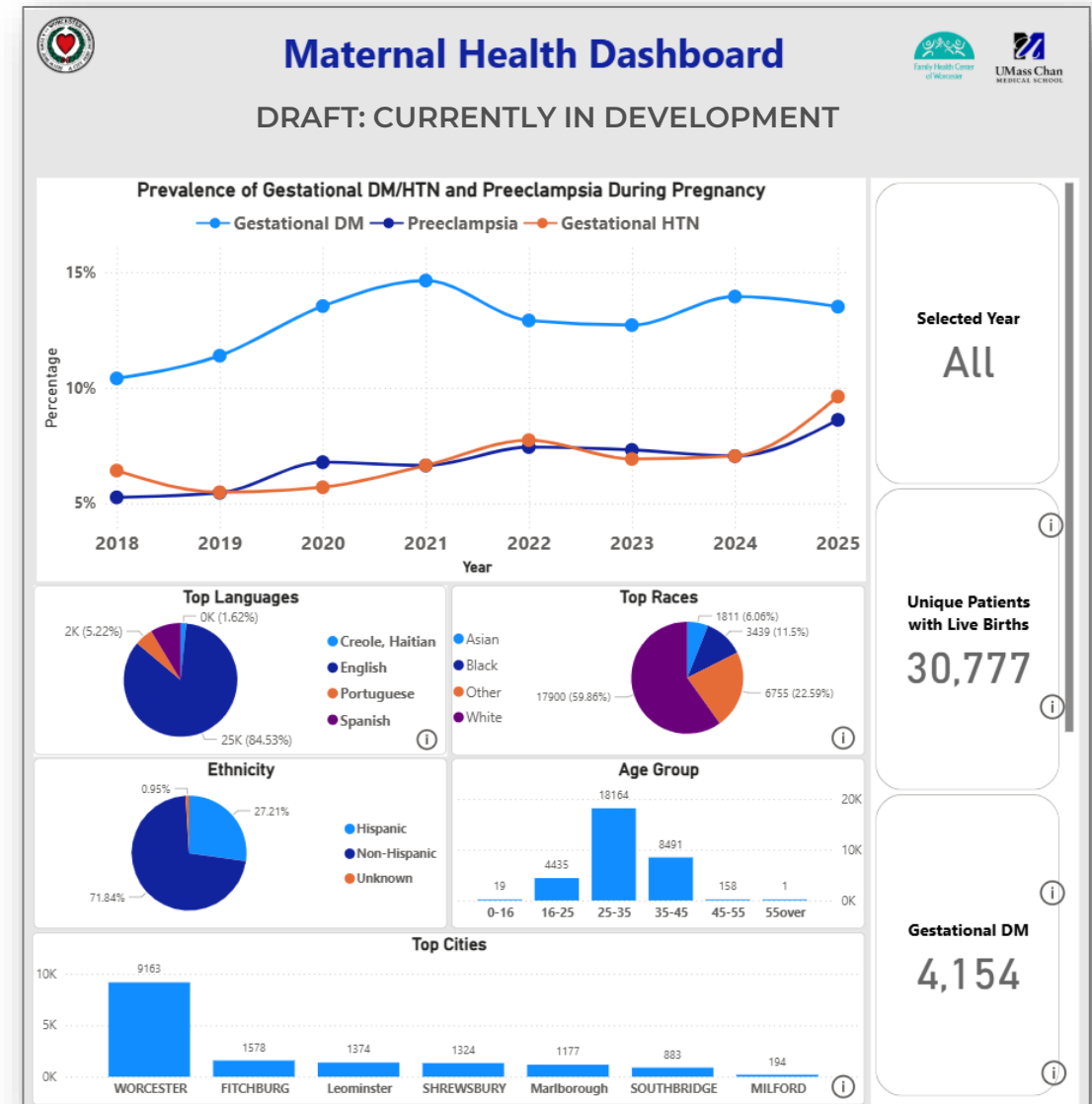
DATA USE

- Worcester Division of Public Health uses the dashboard to determine programming priorities and work planning
- Fostering wider conversations about limited local child health data, identifying existing data sources, and filling information gaps with activities like the Worcester Children and Youth Community Health Improvement Plan currently underway
- Partners working in the maternal and child health space see the platform as a potential platform to share programmatic data



DATA USE

- The Worcester Integrated Health Data Exchange, a parallel initiative between the City of Worcester and UMass Chan Medical School, is now working to develop a near real time dashboard on maternal and child health
- The City's maternal and child health dashboard was used as a template and WDPH staff are regularly consulted about content



MOVING FORWARD

- Develop an SOP for continued maintenance and updates to the dashboard
- Data request to Mass DPH for Worcester-specific data and data disaggregation not available in public reports
- Expansion of the dashboard to include maternal and child health resources, events, and organization links
- Move towards data for decision-making with a report-card for each indicator, ranking Worcester's maternal child health indicators against state and national prevalence
- Work with the community to continually evolve the dashboard based on needs
- Advocate for greater transparency and openness in data availability to advance health equity for mothers and children