Lower Hudson Valley Community Health Dashboard:
Maternal and Infant Health in Westchester, Rockland, and Orange counties

Last Updated: 3/20/2019
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Planning for Pregnancy
Intra-pregnancy interval

Having a live birth within 24 months of a previous pregnancy increases risk of adverse maternal and infant health outcomes.
The percent of live births within 24 months of a previous pregnancy declined in Westchester, but increased in Rockland and Orange counties.


Note: The denominator is all live births, excluding first births, as first births could not have a previous pregnancy to term.
Unintended pregnancy

Unintended pregnancy refers to current pregnancy indicated as ‘Wanted Later’ or ‘Wanted Never’. In this report, unintended pregnancy is only measured among live births, which excludes pregnancies that ended in miscarriages and induced abortions.
The percent of unintended pregnancy among live births has declined throughout the region since 2008.

The percent of unintended pregnancy continues to be higher for Hispanic and non-Hispanic black women in Orange County.

Non-Hispanic black and Hispanic women experienced a smaller decline in unintended pregnancy than non-Hispanic white women in Rockland County.

The percent of unintended pregnancy continues to be lower for non-Hispanic white women in Westchester County.

Unintended pregnancy among Medicaid births is highest in Westchester and Orange counties, but has declined in each county.

Teen (age 15-19y) birth rates
Teen birth rates have declined in Westchester, Rockland, and Orange counties since 2003; and remain highest in Orange County.
Prenatal Health
Timely initiation of prenatal care

Defined as starting prenatal care in the first 3 months of pregnancy
The proportion of women starting prenatal care in the first trimester has increased throughout the region.
The percent of women who start prenatal care late is lower in the Lower Hudson Valley and the rest of NYS excluding NYC than in the U.S. overall.

Lower Hudson Valley:
- No prenatal care: 3.1%
- 1st trimester: 0.4%
- 2nd trimester: 14.3%
- 3rd trimester: 82.1%

Rest of NYS excluding NYC:
- No prenatal care: 3.2%
- 1st trimester: 0.7%
- 2nd trimester: 13.5%
- 3rd trimester: 82.7%

United States:
- No prenatal care: 4.5%
- 1st trimester: 1.8%
- 2nd trimester: 16.5%
- 3rd trimester: 77.3%

Data source: CDC WONDER Births Data, 2017.
Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
Teen women, non-Hispanic black women, and those with less education are least likely to start prenatal care in the first trimester.

Lower Hudson Valley:

- Non-Hispanic White: 62.3, 75.7, 79.8, 82.3, 85.7, 85.7
- Non-Hispanic Black: 70.9, 79.3, 74.8, 78.8
- Hispanic: 79.3
- <HS: 74.8
- HS/Some College: 78.8
- ≥College: 89.0

United States:

- Non-Hispanic White: 61.2, 70.5, 77.8, 82.1, 81.0, 82.4
- Non-Hispanic Black: 66.6, 72.3
- Hispanic: 72.3
- <HS: 60.3
- HS/Some College: 75.4
- ≥College: 87.5

Data source: CDC WONDER Births Data, 2017.

Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
In the Lower Hudson Valley, disparities in the early initiation of prenatal care by race/ethnicity remain.

Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
The percent of teen mothers starting prenatal care in the first trimester has increased

Hypertension during pregnancy
Chronic hypertension during pregnancy is lower in the region than in New York State.

Pregnancy-associated hypertension is lower in the region than in New York State

Pregnancy-associated hypertension is most common among older moms, non-Hispanic black moms and those with more education.

Data for those <20 years suppressed due to small sample size. Lower Hudson Valley Region is comprised of Westchester, Rockland, and Orange counties.
Diabetes during pregnancy
Diabetes during pregnancy has increased in Westchester and Orange counties


Defined as gestational diabetes + established diabetes
Diabetes during pregnancy is most common among older moms, Hispanic and non-Hispanic black moms and those with less education.

Defined as gestational diabetes + established diabetes.

Lower Hudson Valley Region is comprised of Westchester, Rockland, and Orange counties.
Tobacco use during pregnancy
Although much lower than in NYS, tobacco smoking during pregnancy is higher in Orange than Westchester and Rockland counties.

Tobacco smoking during pregnancy is more common among younger moms, non-Hispanic black moms and those with less education.


Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
Cesarean Section
A larger percentage of women give birth through cesarean section in Westchester County than in the rest of the region and NY State.

Data source: CDC WONDER Births data, 2007-2017
Data includes both single and multiple births.
Lower Hudson Valley Region is comprised of Westchester, Rockland, and Orange counties.
Cesarean sections are more common among older moms, non-Hispanic black moms and those with more education.

Data source: CDC WONDER Births Data, 2017.
Data includes single and multiple births.
Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
Preterm delivery

Defined as giving birth <37 weeks based on obstetrician/clinical estimate of gestational age, which has been shown to be a more reliable measurement than estimates by last menstrual period.

Data are limited to single births because there is evidence that multiple pregnancies greatly increase the risk for preterm delivery.

Sources: Dietz, Bombard, & Hutchings, 2014.
The percent of preterm births has modestly decreased in the region and remains lower than in the rest of NYS and the United States.

Preterm defined as giving birth <37 weeks based on obstetrician/clinical estimate of gestational age.

In the Lower Hudson Valley, non-Hispanic black vs. non-Hispanic white disparities in the percent of preterm births have narrowed.

Data source: CDC WONDER Births Data, 2007-2017. Data limited to single births. Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.

Preterm defined as giving birth <37 weeks based on obstetrician/clinical estimate of gestational age.
In the Lower Hudson Valley, teens (and older women), as well as those with less education, tend to have higher preterm birth rates.

Data sources: CDC WONDER Births Data, 2017.
Data limited to single births. Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.

Preterm defined as giving birth <37 weeks based on obstetrician/clinical estimate of gestational age.
The percent of preterm births among Medicaid births has declined across all three counties since 2008.

Data includes both single and multiple births. Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
*Data points for New York State are three-year averages.
Low birth weight

Defined as <2,500 grams

Data are limited to single births because there is evidence that multiple births are more likely to result in low birth weight.

Source: Ventura et al., 1996.
The percent of total births with low birth weight has remained relatively stable in Westchester, Rockland, and Orange counties.

In the Lower Hudson Valley, the non-Hispanic black population has the highest burden of low birth weight.

### Percent of births that are low birth weight

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-Hispanic White</th>
<th>Hispanic</th>
<th>Non-Hispanic Black</th>
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<tbody>
<tr>
<td>2007</td>
<td>3.8</td>
<td>6.0</td>
<td>9.9</td>
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<tr>
<td>2017</td>
<td>4.3</td>
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</tr>
<tr>
<td>2017</td>
<td></td>
<td>6.0</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Data source: CDC WONDER Births Data, 2007-2016.
Data limited to single births. Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
In the Lower Hudson Valley, infants born to teen mothers are more likely to be low birth weight

Data source: CDC WONDER Births Data, 2017.
Data limited to single births. Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
Exclusive breastfeeding in the hospital

Exclusive breastfeeding in the hospital is a good predictor of meeting breastfeeding recommendations after hospital discharge. The goal is exclusive breastfeeding for the first 6 months.
The percent of infants exclusively breastfed in the hospital has declined in Westchester county, but increased in Rockland and Orange counties.

Across racial/ethnic groups, a greater percentage of infants are exclusively breastfed in Orange County than in NY state, although disparities persist.
The racial/ethnic disparities in the percent of infants exclusively breastfed are larger in Rockland county than in New York State.

Across racial/ethnic groups, a greater percentage of infants are exclusively breastfed in Westchester county than in NY state, although disparities persist.
Among Medicaid births, the percent of infants exclusively breastfed remained higher in the region than New York State.

*Data points for New York State are three-year averages.
Newborn drug-related diagnosis rate

Defined as the number of newborns with a drug-related ICD-9 code per 10,000 newborn discharges
In each county, the newborn drug-related diagnosis rate has at least doubled since 2008, increasing over fivefold in Orange county.

Infant mortality

Defined as the death of an infant before his or her first birthday
In the Lower Hudson Valley, the infant mortality rate is highest in Orange County, but lower than in the rest of New York State and the U.S.

### Infant Mortality Rate per 1,000 Live Births

<table>
<thead>
<tr>
<th>County</th>
<th>Rate 2016</th>
<th>Rate United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westchester</td>
<td>3.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Rockland</td>
<td>3.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Orange</td>
<td>4.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Rest of NYS</td>
<td>5.2</td>
<td>5.9</td>
</tr>
<tr>
<td>United States</td>
<td>5.9</td>
<td>6.6</td>
</tr>
</tbody>
</table>

### Causes of Infant Deaths

- Congenital problems: 26.8%
- Disorders related to preterm/LBW: 15.2%
- Respiratory distress: 6.6%
- Sudden infant death syndrome: 3.0%
- Bacterial sepsis: 3.1%
- Maternal complications of pregnancy: 4.7%
- Diseases of the circulatory system: 6.3%
- Necrotizing enterocolitis: 6.4%
- Diarrhea and gastroenteritis: 24.7%
- Other: 3.3%


Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
Since 1995, infant mortality rates have declined throughout the region, but remain highest in Orange county.

Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
Maternal age, race/ethnicity and education are strongly related to infant mortality rates

Data source: CDC WONDER Linked Birth/Infant Death Records, 2012-2016. Figure based on maternal race/ethnicity. Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
In the Lower Hudson Valley, the infant mortality rate has declined by 12 percent, although racial/ethnic disparities persist.

Lower Hudson Valley is comprised of Westchester, Rockland, and Orange counties.
Among teen mothers, Orange county has a higher infant mortality rate than Westchester and Rockland counties.


*Interpret with caution due to small numbers.
About the Lower Hudson Valley Community Health Dashboard Project

- The goal of the project is to provide Lower Hudson Valley-specific data on risk factors and health outcomes with an emphasis on presenting data on trends, socio-demographic differences (e.g., by age, sex, race/ethnicity, etc.) and sub-county/neighborhood level data

- Data will be periodically updated as new data becomes available.

- Produced by Montefiore’s Office of Community & Population Health using publicly-available data sources

- For more information please contact us at OCPHDept@montefiore.org
Sources

- Links to Data Sources:
  - CDC WONDER Births Data and Bridged-Race Population Estimates: [https://WONDER.cdc.gov/natality.html](https://WONDER.cdc.gov/natality.html)
  - CDC WONDER Linked Birth/Infant Death Records: [https://WONDER.cdc.gov/lbd.html](https://WONDER.cdc.gov/lbd.html)

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