Life Course Theory looks at health as an integrated continuum where biological, behavioral, psychological, social and environmental factors interact to shape health outcomes across the course of a person’s life. The adoption of the Life Course Theory into public health practice requires movement away from isolated efforts and encourages broader thinking about the factors impacting health. Instead of concentrating on one health disease or condition at a time, the Life Course Theory looks to social, economic and environmental factors as underlying causes of persistent inequalities in health.

The indicators in the report were calculated according to guidelines published by the Association of Maternal and Child Health Programs. For each indicator, a brief description of the topic and definition, connection to the Life Course Theory, and data source are provided in the report. When possible, a state-level estimate for each indicator was calculated with 95% confidence intervals (CI) and Florida’s status was compared to the nation. The indicators were then stratified by race/ethnicity when available and appropriate.

This section details the following life course indicators related to economic experiences:

- **LC-20. High School Graduation Rate**
- **LC-21. Mother’s Education Level at Birth**
- **LC-22. Unemployment**

LC-20: High School Graduation Rate

Graduation from high school is a prerequisite for post-secondary education opportunities that lead to better jobs and higher income. This in turn leads to increased access to healthier food, safer homes, and quality healthcare services. There also exists a direct relationship between education and health; people with higher education have better health outcomes. Higher educated individuals are less likely to suffer from and die from common acute and chronic conditions and are less likely to report anxiety or depression. Research shows that educational attainment is a predictive factor for health and wellness of individuals and their offspring.

Nationally, high school graduation rates exhibit inequity by income, race/ethnicity, and disability status. Non-Hispanic Black and Hispanic populations, students living in low-income families, and students with disabilities have lower high school completion rates than their peers.

Numerator: Number of students who graduate in four years with a regular high school diploma
Denominator: Number of students who form the adjusted cohort for the graduating class

This statistic is known as the regulatory adjusted cohort graduation rate or ACGR. When students enter the 9th grade for the first time, they become part of a four year cohort. This rate includes adjustments for students who move into or out of the state as well as those who immigrate to another country or die during the four year period.

<table>
<thead>
<tr>
<th>Table 1: Regulatory Adjusted Cohort Graduation Rate, 2014-2015</th>
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</thead>
<tbody>
<tr>
<td>Nation</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>83.2%</td>
</tr>
</tbody>
</table>

In Florida, three out of four high school students graduate in four years with a regular high school diploma (Table 1). Florida’s regulatory ACGR was lower than the national average for the same time period, 2014-2015. When compared to other states, Florida falls in Quintile 2 or the bottom 20-40% of states for ACGR.
The regulatory ACGR varies by race/ethnicity in Florida (Figure 1). Asian and Pacific Islander students have the highest graduation rate followed by non-Hispanic White students. Non-Hispanic Black students had the lowest graduation rate for 2014-2015 with 68.0%. It is important to note that while this rate is lower compared to other groups, the ACGR among Non-Hispanic Black students has increased by 5% since 2012-2013.

Race/ethnicity categories were defined by the U.S. Department of Education. Students identified as Native Hawaiian or Other Pacific Islander, and Multi-Racial had counts that were too low to report. These differences were not tested for significance.

**LC-21: Mother’s Education Level at Birth**

Educational attainment is a protective factor for overall health and influences social conditions such as education, occupation, and income. In particular, maternal educational attainment can have profound influence on the health of their offspring. A higher level of education allows the mother to make informed decisions about her health (including pregnancy) and the health of her children. Women of low educational attainment are at increased risk of having a low birth weight infants and experiencing other adverse birth outcomes. Additionally, as a child grows, he/she benefits from having educated parents. Research shows that there is a strong positive relationship between parental education/income and time spent with children and that maternal education is correlated with offspring intelligence.

This indicator used the birth certificate file to define three education levels as follows:

- Greater than High School = mothers with Associate, Bachelor’s, Master’s or Doctorate Degree
- High School Diploma = mothers with some college but no degree, high school graduate or GED
- Less than High School = 9th through 12th grade but no diploma, 8th grade or less
Data Source: National Vital Statistics System (NVSS), 2011
Numerator: Number of women delivering a live birth with less than high school, high school degree and greater than high school education
Denominator: Total live births

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Nation 7</th>
<th>Florida 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than High School</td>
<td>35.4% (35.4, 35.5)</td>
<td>33.5% (33.3, 33.7)</td>
</tr>
<tr>
<td>High School Degree</td>
<td>45.5% (45.4, 45.5)</td>
<td>50.0% (49.8, 50.2)</td>
</tr>
<tr>
<td>Less than High School</td>
<td>18.0% (17.9, 18.0)</td>
<td>15.9% (15.8, 16.1)</td>
</tr>
</tbody>
</table>

Florida estimates were derived using 2011 birth certificate data from the Bureau of Vital Statistics at the Florida Department of Health. Thus, they may not be directly comparable to estimates derived from the NVSS. The national estimates provided by NVSS are only representative of those states implementing the 2003 revision of the birth certificate in that year. Total percent does not equal 100 as some birth certificate records have missing information for maternal education level.

The percent of live births by maternal education level was similar when comparing Florida to the nation (Table 2). This difference was not tested for significance.

Maternal education level at birth differs by race/ethnicity in Florida in 2013 (Figure 2). Non-Hispanic White and non-Hispanic other mothers had the highest percent of having a greater than high school education. Hispanic and non-Hispanic Black mothers had a higher percent of having less than high school educational level at their child’s birth.
LC-22: Unemployment

Access to stable and well-paying employment can contribute to better health as it makes it easier to live in safer neighborhoods, provide quality education for one’s children, obtain quality child care services, and buy healthier food. Steady employment can provide the financial means, benefits, and stability to build and maintain a healthy life for individuals and their families. Research has shown that life expectancy increases with income; the life expectancy of those in the top half of the income distribution has increased 5.8 years since 1977 compared with an increase of only 1.3 years for those in the bottom half of the income distribution. Unemployment is linked with several adverse health outcomes including increased mortality, greater incident of depression and anxiety, and substance abuse. Additionally, the influence of unemployment can be multi-generational. For example, a child’s exposure to their parents’ compromised mental health or having inadequate health insurance as a result of unemployment can have a lasting impact on their own health.

Data source: American Community Survey (ACS), 2013

Numerator: Number of persons aged 16 years and older in the labor force who are unemployed (and actively seeking work)
Denominator: Number of persons aged 16 years and older

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<tr>
<th>Table 3: Percent (95% CI) of Unemployment for Persons Aged 16 Years and Older, 2013</th>
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<tbody>
<tr>
<td>Nation</td>
<td>Florida</td>
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<tr>
<td>8.4% (8.3, 8.5)</td>
<td>9.7% (9.5, 9.9)</td>
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</tbody>
</table>

The unemployment rate for Florida was significantly higher than the national estimate in 2013 (Table 3). Certain populations in Florida experienced higher unemployment rates than the state-wide average. These populations include those aged 16-24 years, those with less than high school graduate educational attainment, those living below the poverty level, and those with any disability.
The percent of unemployment differs by race in Florida (Figure 3). The percent of unemployment is highest among Black Floridians at 16.0%, followed by American Indian and Alaskan Native Floridians at 13.8%.

References