

Florida, in collaboration with the Association of Maternal and Child Health Programs (AMCHP), a national expert panel, and six other states, applied the Life Course Theory to identify a standardized set of 59 program-relevant indicators that can be used to help improve the status of maternal and child health (MCH) nationwide.



FLORIDA'S LIFE COURSE INDICATOR REPORT

In order to apply the Life Course Theory to public health work, the Maternal and Child Health (MCH) field needs to build or enhance relationships with various other entities or sectors, including non-traditional partners. Thus, the intended audience of the Life Course Indicator report are program, data and policy staff from various sectors and agencies across the state that have a stake in improving the lives of women, infants, children and families.

The 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.

4 Key Concepts of the Life Course Theory

As defined by the U.S. Department of Health and Human Services Health Resources and Services Administration's Maternal and Child Health Bureau.²



Health experiences across the life span are interconnected. Today's experiences and exposures influence tomorrow's health.







There are critical or sensitive periods, such as early childhood or adolescence, that can influence health outcomes across the lifespan.

Environment '



All aspects of the community—biologic, physical and social—influence
the ability to be healthy.

Equity



Causes of health inequality extend beyond genetics and personal choice.

Life Course (LC) Indicators

12 LC Categories

1. CHILDHOOD EXPERIENCES

LC-01: Adverse Childhood Experiences (ACE) Among Adults

LC-02: Adverse Childhood Experiences (ACE) Among Children

LC-03: Substantiated Child Maltreatment

2. COMMUNITY HEALTH POLICY

LC-04: Breastfeeding Support-Baby Friendly Hospitals

LC-05: Community Water Fluoridation

3. COMMUNITY WELLBEING

LC-06: Concentrated Disadvantage

LC-07A: Homelessness Among Individuals

LC-07B: Homelessness Among Families

LC-08: Homicide Rate

LC-09: Household Food Insecurity

LC-10: Poverty

LC-11: Small for Gestational Age

4. DISCRIMINATION & SEGREGATION

LC-12: Bullying

LC-13: Experiences of Race-Based Discrimination or Racism Among Women

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LC-14: Perceived Experiences of Discrimination Among Children

LC-15: Perceived Experiences of Racial Discrimination in Healthcare Among Adults

LC-16: Racial Residential Segregation by Community

5. EARLY LIFE SERVICES

LC-17: Early Intervention

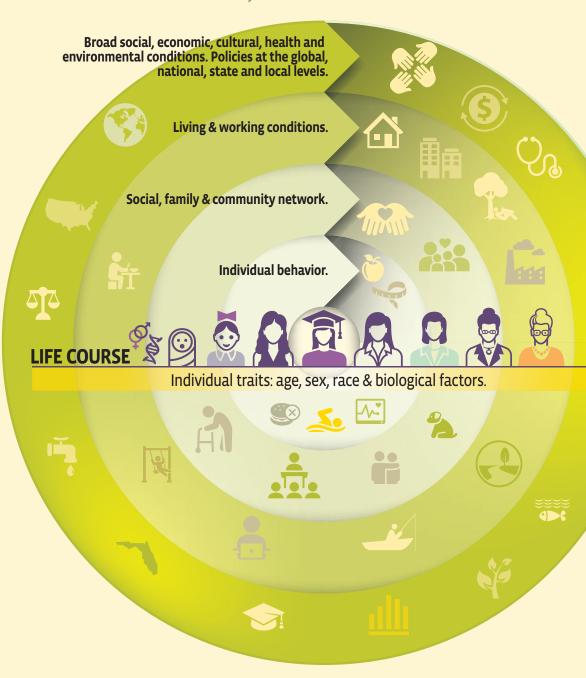
LC-18: Women, Infants and Children (WIC) Nutritional Services

LC-19: Early Childhood Health Screening-EPSDT

Ecological Model of HealthAcross the Life Course

Levels of the social and ecological environments influence one's health.

These dynamic conditions occur across their life course.³





To aid in incorporating the Life Course Theory into practice, comprehensive measures were developed to track progress in using the life course approach to improve MCH. The Association of Maternal and Child Health Programs (AMCHP) launched a project to identify and promote a standardized set of indicators for use in programs using the Life Course Theory to improve maternal and child health (MCH). The resulting Life Course Metrics Project was guided by a national expert panel and the selection of life course indicators included a collaborative effort from seven state teams: Florida, Iowa, Louisiana, Massachusetts, Michigan, Nebraska, and North Carolina. A series of meetings and voting procedures reduced the initial 413 proposed indicators to the final set of 59. The subsequent 59 indicators were chosen based on the following qualities: implications for equity, public health impact, potential to leverage or realign resources, ability to predict an individual's health and wellness and/or that of their offspring, connection to life course consistent with current science, data availability, data quality, and simplicity.

The indicators come from a variety of national and state data sources including population-based surveys, such as the Behavioral Risk Factor Surveillance System (BRFSS) and the Pregnancy Risk Assessment Monitoring System (PRAMS), vital statistics, the U.S. Census, and the Florida Department of Health (Department) program data. Estimates are from the most recent year available for the data source at the time the report was developed. Detailed information on the indicators and data sources is available in their respective Life Course Subsection on the Department's website.

Maternal and Child Health Implications

Florida is a large and diverse state with over 19 million residents. It ranks fourth in the nation for the total number of births each year. The application of the Life Course Theory has potential to impact the health of current and future residents of Florida, as well as the nation.

6. ECONOMIC EXPERIENCES

LC-20: High School Graduation

LC-21: Mother's Education Level at Birth

LC-22: Unemployment Rate

7. FAMILY WELLBEING

LC-23: Adolescent Smoking

LC-24: Adolescent Use of Alcohol

LC-25: Children with Special

Health Care Needs

LC-26: Diabetes

LC-27: Exclusive Breastfeeding at 3 Months

LC-28: Exposure to Second Hand Smoke in the Home

LC-29: Hypertension

LC-30: Illicit Drug Use

LC-31: Intimate Partner Violence, Injury, Physical or Sexual Abuse

LC-32A: Obesity Among Children

LC-32B: Obesity Among Adults

LC-33: Physical Activity Among High School Students

8. HEALTH CARE ACCESS & QUALITY

LC-34: Cervical Cancer Screening

LC-35: Children Receiving Age
Appropriate Immunizations

LC-36A: Human Papillomavirus Immunization Among Adolescents

LC-36B: Human Papillomavirus Immunization Among Young Adults

LC-37: Medical Home for Children

LC-38: Asthma Emergency Department Utilization

LC-39: Inability of Delay in Obtaining Necessary Medical or Dental Care

LC-40: Medical Insurance for Adults

LC-41: Oral Health Preventive Visit for Children





This report serves to establish a knowledge base about the Life Course Theory, to introduce the life course indicators to public health practitioners across Florida, and to provide baseline measures to gauge progress as the State moves forward in incorporating Life Course Theory into its public health efforts.

The life course indicators are diverse in subject matter; thereby providing a broad platform for partners to engage in collective action towards improving maternal, infant, child, and family health in Florida. As the Life Course Theory is largely community- or place-focused (i.e., social determinants of health), it is recommended that these indicators be calculated at the local level within states to understand how the singular or interactive effects of individuals, social factors, and place influence the health of communities.

The production of this report serves as the basis for initiating a statewide conversation about the Life Course Theory and its implications for improved population health in Florida. Most of the 59 indicators were calculated according to guidelines published by AMCHP.

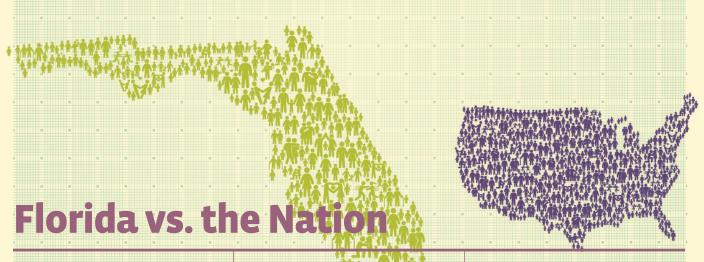
Data Needed for Life Course Indicators

There were a few instances when the data necessary to calculate state-level estimates for Florida were not available. These data gaps result from the non-adoption of optional modules on state-based surveys administered by the Department and the Centers for Disease Control and Prevention (CDC) such as the BRFSS and PRAMS. The life course indicators affected include:

ADVERSE CHILDHOOD EXPERIENCES (ACE) AMONG ADULTS This indicator was included on the 2010 Florida BRFSS survey, however questions were asked for only five of the eight ACE categories used in indicator calculation.

RACISM Questions to measure experiences of race-based discrimination or racism among women could be added to the Florida PRAMS survey.

HPV VACCINE Only national estimates for the proportion of young adults aged (18-24 years) receiving the HPV vaccine are available from the National Health Interview Survey (the recommended source for this indicator). There is an optional "Adult HPV Vaccination" module for BRFSS and Florida added these questions to the 2015 BRFSS.



Areas of Strength

Indicators where Florida had BETTER estimates than the nation:

Community Water Fluoridation—LC-05

Bullying Among Youth—LC-12

Adolescent Smoking—LC-23

Children Exposed to Second-Hand Smoke in the Home—LC-28

Depression Among Youth—LC-42

Suicide—LC-45

Data Capacity to Support Integrated Childhood Research—LC-47

Essential Actions Taken to Establish P-20 Longitudinal Data Systems—LC-48

Subsequent (Repeat) Teen Birth— LC-53

Teen Birth Rate—LC-54

Areas for M Improvement

Indicators where Florida had WORSE estimates than the nation:

Substantiated Child Maltreatment— LC-03

Breastfeeding Support: Births in Baby-Friendly Hospitals—LC-04

Homicide Rate—LC-08

Living In Poverty, Below the Federal Poverty Line—LC-10

Racial Discrimination in Health Care— LC-15

High School Graduation Rates—LC-20

Diabetes-LC-26

Hypertension—LC-29

Intimate Partner Violence—LC-31

Physical Activity Among High School Students—LC-33

Cervical Cancer Screening—LC-34

Medical Home for Children—LC-37

Delay in Medical or Dental Care for Children—LC-39

Oral Health Preventive Visits for Children—LC-41

> Mental Health Among Adults—LC-43

> HIV Prevalence—LC-51

Preterm Birth—LC-55

Stressors During Pregnancy—LC-56

Incarceration Rates for Adults and Juveniles—LC-58

Comparable to Nation

Indicators where Florida had SIMILAR estimates than the nation:

Adverse Childhood Experiences Among Adults—LC-01

Adverse Childhood Experiences Among Children—LC-02

Homelessness—LC-07

Household Food Insecurity—LC-09

Perceived Experiences of Race or Ethnic Based Discrimination Among Children—LC-14

Early Childhood Health Screening— LC-19

Mother's Education Level at Birth— LC-21

Adolescent Use of Alcohol—LC-24

Children with Special Health Care Needs—LC-25

Exclusive Breastfeeding at Three Months—LC-27

Illicit Drug Use—LC-30

Obesity—LC-32

Physical Activity Among High School Students—LC-33

Children Receiving Age Appropriate Immunizations—LC-35

Postpartum Depression—LC-44

Diabetes During Pregnancy (Gestational Diabetes)—LC-49

Early Sexual Intercourse—LC-50

Postpartum Contraception—LC-52

Fourth Grade Proficiency—LC-57

In particular, the areas of immunizations, access to oral health care, HIV incidence, obesity, tobacco use and exposure, breastfeeding, and teen birth reduction are of interest across the Department.

Alignment of Life Course Indicators and Department Priorities

There are several life course indicators that align with Department-wide priorities and are similar to measurable objectives used in statewide plans such as the *Florida State Health Improvement Plan (SHIP) 2012–2015* and the *Department Agency Strategic Plan 2016–2018.* In particular, the areas of immunizations, access to oral health care, HIV incidence, obesity, tobacco use and exposure, breastfeeding, and teen birth reduction are of interest across entities. The fact that statewide plans are addressing topics and using measures consistent with the Life Course Theory provides support for calculating and reporting these indicators in the future. This commonality demonstrates the value in using this model to improve the health of women, infants, children, and families across Florida.

Methodology

The 59 indicators in the report were calculated according to guidelines published by AMCHP. For each indicator, a brief description of the topic and definition, connection to the Life Course Theory, and data source are provided in their respective Life Course Subsection on the Department's website. When possible, a state-level estimate for each indicator was calculated and Florida's status was compared to the nation. The indicators were then stratified by race/ethnicity when available and appropriate. In total, there were 28 state and national data sources used to calculate the 59 indicators.

One major limitation to this report is data availability. To qualify as a life course indicator, the measure had to be currently available at the state level or have the ability to be captured at the state level, for example adding a new question to an existing survey such as PRAMS. National and Florida estimates were unable to be reported uniformly for all indicators. Additionally, there are instances where estimates were calculated or reported from different data sources and/or for different years. Lastly, significance testing between Florida and the nation was not performed. Background information on the selected indicators, as well as several national estimates, were largely pulled from data briefs available through AMCHP's Life Course Indicator Online Tool located on their website.⁵

9. MENTAL HEALTH

LC-42: Depression Among Youth LC-43: Mental Health Among Adults

LC-44: Postpartum Depression LC-45: Suicide

10. ORGANIZATIONAL MEASUREMENT CAPACITY

LC-46: Capacity to Assess Lead Exposure

LC-47: Data Capacity to Support Integrated Childhood Research

LC-48: States with P-20 Longitudinal Data Sets

11. REPRODUCTIVE LIFE EXPERIENCES

LC-49: Diabetes During Pregnancy

LC-50: Early Sexual Intercourse

LC-51: HIV Prevalence

LC-52: Postpartum Contraception

LC-53: Repeat Teen Births

LC-54: Teen Births

Among Juveniles

LC-55: Preterm Birth

LC-56: Stressors During Pregnancy

12. SOCIAL CAPITAL

LC-57: 4th Grade Proficiency LC-58A: Incarceration Rate

LC-58B: Incarceration Rate Among Adults

LC-59: Voter Registration



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References

- U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. Life Course Fact Sheet. Retrieved November 7, 2016 from: http://mchb.hrsa.gov/training/ lifecourse.asp
- 2. U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2010). Rethinking MCH: The Life Course Model as an Organizing Framework. Retrieved November 7, 2016 from: http://www.hrsa.gov/ ourstories/mchb75th/images/rethinkingmch.pdf
- Fielding, J. E., Steven Teutsch MD, M. P. H., & Breslow, L. (2010). A framework for public health in the United States. Public Health Reviews, 32(1), 174.
- 4. Florida Department of Health (2012). Florida State Health Improvement Plan 2012-2015. Retrieved from: http://www.floridahealth.gov/about-the-department-of-health/_documents/state-health-improvement-plan.pdf
- 5. Association of Maternal and Child Health Programs (AMCHP). (2014). Life Course Indicators Online Tool. Retrieved from: http://www. amchp.org/programsandtopics/dat a-assessment/Pages/ LifeCourseIndicators.aspx