# Florida Life Course Indicator Report
# Health Care Access and Quality

**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 **health care access and quality**:

- **LC-34.** Cervical Cancer Screening
- **LC-35.** Children Receiving Age Appropriate Immunizations
- **LC-36.** Human Papillomavirus (HPV) Immunizations
- **LC-37.** Medical Home for Children
- **LC-38.** Asthma Emergency Department Utilization
- **LC-39.** Inability or Delay in Obtaining Necessary Medical or Dental Care
- **LC-40.** Medical Insurance for Adults
- **LC-41.** Oral Health Preventive Visit for Children

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## LC-34: Cervical Cancer Screening

All women are at risk of cervical cancer, but it occurs most often in women over age 30.[1] The human papillomavirus (HPV) is the main cause of cervical cancer. The U.S. Preventive Service Task Force recommends that all women aged 21 to 65 years receive a pap smear every three years to screen for abnormal cell growth and cervical cancer.[2] Cervical cancer is highly preventable through the use of HPV-vaccines and routine screening.[1] Research shows that women who are less educated, older, uninsured, have language barriers, have sex with women, or are obese participate in pap smears less frequently.[3] The establishment of the National Breast and Cervical Cancer Early Detection Program in 1991 has increased access to timely breast and cervical cancer screening and diagnostic services for low income, uninsured, and underinsured women. The program has served over 11 million women since its inception.[4]

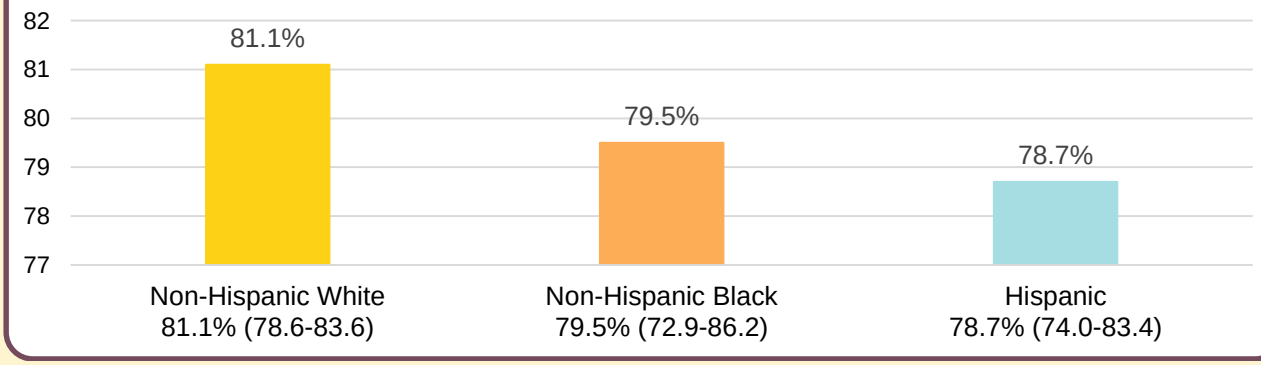
**Data source**: Behavioral Risk Factor Surveillance System (BRFSS), 2012
**Numerator**: Women aged 21 to 65 years who received a pap smear in the past three years
**Denominator**: Total women aged 21 to 65 years

**Table 1: Percent of Women Aged 21- 65 Years who Received a Pap Smear in the Past Three Years, 2012[5]**

| Nation | Florida |
|---|---|
| 78.1% | 75.3% (95% CI: 72.7-77.9) |

Overall, 75.3% of women aged 21-65 years received a pap smear in the past three years in Florida during 2012. The percent of women who received a pap smear in the past three years was lower in Florida when compared to the nation in 2012 (Table 1). This difference was not tested for significance.

**Figure 1: Percent (95% CI) of Women Aged 21-65 Years who Received a Pap Smear in the Past Three Years, by Race/Ethnicity 2014[6]**




According to the most recent 2014 Florida survey, 79.7% of women aged 21-65 years have received a pap smear in the past three years, an increase from 2012. The percent receiving a pap smear in the past three years was highest among non-Hispanic White women in Florida (Figure 1). This difference was not tested for significance.

## LC-35: Children Receiving Age Appropriate Immunizations

Immunizations are considered one of the CDC's Ten Great Public Health Achievements of the 20th century and are responsible for dramatic drops in morbidity and mortality from vaccine preventable diseases such as polio and measles.[7] Infants are particularly vulnerable to infectious disease and subsequently dangerous complications, which is why immunizing this age group is of great importance. Immunizations allow infants and children to receive immunity from infectious diseases without having to be sick with the disease itself.[8] In addition to the impact that vaccination has on individual health, it also helps to protect the health of communities by keeping the incidence of infectious disease low and protecting children who are too young to be vaccinated.[8]

It is recommended that between 19 and 35 months, infants receive vaccinations against seven infectious diseases. This is known as the 4:3:1:3:3:1:4 vaccination series. It is estimated that each birth cohort with the current childhood immunization schedule prevents approximately 42,000 deaths and 20 million cases of disease.[9] These immunizations result in a net savings of $14 billion in direct costs and $69 billion in societal costs.[9]

**Data source**: National Immunization Survey, 2013
**Numerator**: Number of children aged 19 - 35 months who have received the 4:3:1:3:3:1:4 vaccination series:

- ≥ 4 doses of diphtheria/tetanus/acellular pertussis
- ≥ 3 doses of poliovirus
- ≥ 1 dose of measles
- Full series of haemophilus influenza (3 or 4 doses depending on product type)
- ≥ 3 doses of hepatitis B
- ≥ 1 dose of varicella
- ≥ 4 doses of pneumococcal

**Denominator**: Total number of children aged 19-35 months

**Table 2: Percent (95% CI) of Children Aged 19-35 Months who Have Received All Age Appropriate Vaccinations, 2012[10]**

| Nation | Florida |
|---|---|
| 72.6% (71.1, 74.1) | 70.7% (62.0, 79.4) |

Approximately 70% of infants aged 19-35 months have received all age appropriate vaccinations in Florida. Florida was slightly lower than the national average for vaccine coverage in 2012 (Table 2). Nationally, percent estimates of vaccine coverage were highest among Asian and non-Hispanic White children and lowest among non-Hispanic Black children. However, these differences were not statistically significant.[10] Florida-level estimates were not analyzed by race/ethnicity.

## LC-36: Human Papillomavirus (HPV) Immunization

The human papillomavirus or HPV is the most common sexually transmitted infection and it is likely that nearly all sexually active men and women will get HPV at some point in their lives.[11] It is estimated that 79 million people in the U.S. are infected with HPV and that approximately 14 million people will become newly infected each year.[12] There are more than 150 HPV-related viruses, some of which cause genital warts and cervical cancer.[11] Most cases of invasive cervical cancer are caused by a HPV infection and these cases are largely preventable through routine screening (pap smears) and HPV vaccination.

The Advisory Committee of Immunization Practice (ACIP) recommends that the following two age groups receive all three doses of the HPV vaccination:[13]

1. All girls and boys aged 11 or 12 years.
2. Teen girls and young women aged 13-26 years and teen boys and young men aged 13 to 21 years, who did not receive the vaccine when they were younger.

It is recommended that vaccination occur prior to initiation of sexual activity in order to receive the full benefit of the vaccine. However, vaccination as a teenager or young adult is still important because vaccines can protect against types of HPV that may not have been already acquired.[13] Vaccination of these populations has the opportunity to reduce the mortality and morbidity associated with HPV, particularly cervical cancer.

### LC-36A: HPV Immunization among Adolescents (13-17 years)

**Data source:** National Immunization Survey-Teen, 2013
**Numerator:** Number of adolescents aged 13-17 years (males and females) who have received three or more HPV vaccine doses
**Denominator:** Total number of adolescents aged 13-17 years

**Table 3: Percent (95% CI) of Teens Aged 13-17 Years with Three or More Doses of HPV Vaccine, 2013[14]**

| | Nation | Florida |
|---|---|---|
| **Females** | 37.6% (35.7, 39.5) | 34.3% (24.5, 44.1) |
| **Males** | 13.9% (12.5, 15.3) | 13.2% (7.0, 19.4) |

The percent of teens who received at least three doses of the HPV vaccine was similar between Florida and the nation in 2013 for both males and females (Table 3). Vast differences were seen by gender in Florida; approximately one in three females had received three or more doses compared to only one in eight males. Nationally, immunizations rates are similar across races.[14] However, Hispanic teens (both males and females) were more likely than non-Hispanic White teens to have received three or more doses of HPV vaccine. No other significant differences by race/ethnicity were observed. These data were not available at the state level.

### LC-36B: HPV Immunization among Young Adults (18-26 years)

**Data source:** National Health Interview Survey, 2012
**Numerator:** Number of young adults aged 18-26 years (males and females) who have received three or more HPV vaccine doses
**Denominator:** Total population aged 18-26 years

| Table 4: Percent of Young Adults who Have Received Three or More Doses of HPV Vaccine | |
|---|---|
| **Nation** | **Florida** |
| Not Available | Not Available |

Data on receiving three or more HPV vaccine doses are not available at this time (Table 4). However, in 2012 it was estimated that 34.5% of women aged 19-26 years and 2.3% of males aged 19-26 years had received ≥1 dose of HPV vaccine nationally.[15] Among women aged 19-26, HPV vaccine coverage was significantly higher among non-Hispanic White and non-Hispanic other (race other than White, Black, or Asian) women.[15] HPV vaccine coverage was lowest among Asian women.[15]

## LC-37: Medical Home for Children

The American Academy of Pediatricians (AAP) defines the medical home as primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective.[16] Originally developed for children with special health care needs, it is now recommended that all children and youth establish a medical home.[16] Research shows that having a medical home significantly increases preventive care visits, decreases outpatient sick visits, and decreases emergency department sick visits.[17] The presence of a medical home facilitates a relationship between parent and practitioner and provides the mechanism to unite the different aspects of child health care.[18]

**Data source**: National Survey of Children's Health (NSCH), 2011-2012
**Numerator**: Number of children aged 0-17 years whose health care meets Medical Home criteria
**Denominator**: Total children aged 0-17 years

There are five component indicators used to determine the presence of a medical home:

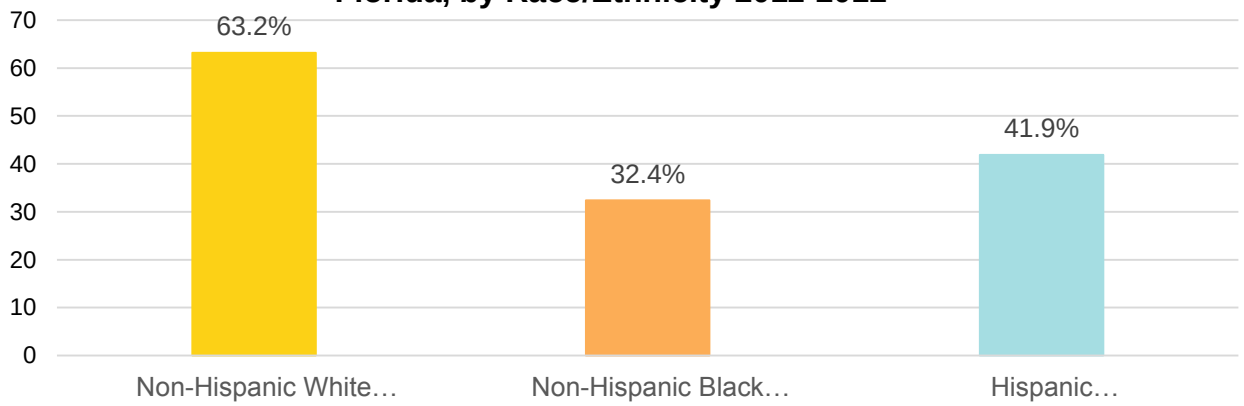
1. Personal doctor or nurse
2. Usual source for sick and well care
3. Family-centered care
4. No problems getting needed referrals
5. Effective care coordination when needed

To qualify as having a medical home, survey respondents must meet the criteria for adequate care on the first three components (personal doctor or nurse, usual source of care, and family-centered care). Any child who indicated the need for referrals or care coordination must also meet the criteria for components 4 and 5, in order to qualify as having a medical home.

| Table 5: Percent (95% CI) of Children with a Medical Home, 2011-2012[19] | |
|---|---|
| **Nation** | **Florida** |
| 54.4% (53.7, 55.1) | 50.4% (47.0, 53.8) |

Children in Florida have a lower percent of meeting the criteria for having a medical home than the nation (Table 5). Nationally, insurance status/type, poverty status and race/ethnicity are strong predictors of not receiving care that qualifies as having a medical home.[19]

**Figure 2: Percent (95% CI) of Children with a Medical Home in Florida, by Race/Ethnicity 2011-2012[19]**




In Florida, Hispanic and non-Hispanic Black children had a significantly lower percent of meeting the criteria for having a medical home than non-Hispanic White children (Figure 2). Children in Florida who were not insured at the time of the survey had a significantly lower percent of meeting the criteria for having a medical home when compared to children who were insured, 26.8% (15.7-37.8) vs. 52.9% (49.4-56.5) respectively.[19]

## LC-38: Asthma Emergency Department Utilization

Asthma is a disease that affects the lungs and causes wheezing, breathlessness, chest tightness and coughing.[20] It is one of the most common chronic conditions among children and affects approximately 25.7 million people nationally.[21] Asthma is a treatable condition and is usually controlled through a physician-guided asthma plan, medications, and avoiding asthma triggers such as smoke and pet dander.[20] Receiving care at the emergency department (E.D.) for asthma is usually a result of uncontrolled asthma. Adults and children with uncontrolled asthma are at greater risk of comorbidities such as obesity, stress, and depression and of complications such as upper respiratory infections.[22] One study looking at trend data identified differences by age and race/ethnicity. Children and non-Hispanic Black people have the highest rates for asthma E.D. visits during 2007-2009.[21]

**Data source**: Florida Agency for Health Care Administration, Medicaid claims for FY 2013 (7/1/13-6/30/14)

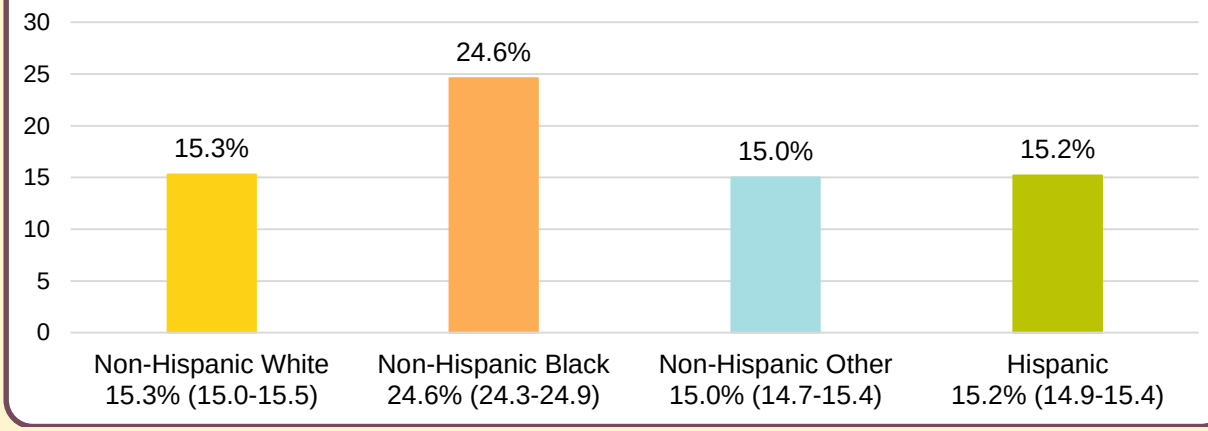
**Numerator**: Number of Medicaid clients diagnosed with asthma having one or more E.D. visit for asthma
**Denominator**: Total number of Medicaid clients with asthma

The following data are based on billed, not paid, Medicaid claims.

| Table 6: Percent of Medicaid Clients with Asthma with at Least One E.D. Visit for Asthma, FY 2013 | |
|---|---|
| **Nation** | **Florida**[23] |
| Not Available | 17.7% (95% CI: 17.6, 17.9) |

Among Medicaid clients with asthma in Florida, almost one in five (17.7%) had at least one E.D. visit for asthma during FY 2013 (Table 6). E.D. visits were higher among children than adults, with most E.D. visits for asthma occurring in children less than ten years of age.[23]

**Figure 3: Percent (95% CI) of Medicaid Asthma Clients with at Least One E.D. Visit for Asthma in Florida, by Race/Ethnicity, FY 2013**[23]




The percent of asthma patients with at least one E.D. visit for asthma differed by race/ethnicity among Medicaid clients in Florida (Figure 3). The percent of Medicaid asthma patients with at least one E.D. visit for asthma was highest among non-Hispanic Black clients. The non-Hispanic other category includes Asian, American Indian/Alaskan Native, Native Hawaiian, other and unknown as defined by Medicaid.

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

Inability or delay in obtaining necessary medical or dental care can have significant impact on health outcomes across the lifespan. Delays in receiving care may result in poor health outcomes. As childhood and adolescence is a critical and sensitive period of development, delays in care during this time can have a lasting impact and influence on

quality of life. Living in poverty and lack of insurance introduces a financial barrier to obtaining necessary medical or dental care and these children are more likely to have an unmet health care need.[24] Families are unable to fully integrate into the health care system and establish a medical home for their children without proper health insurance.

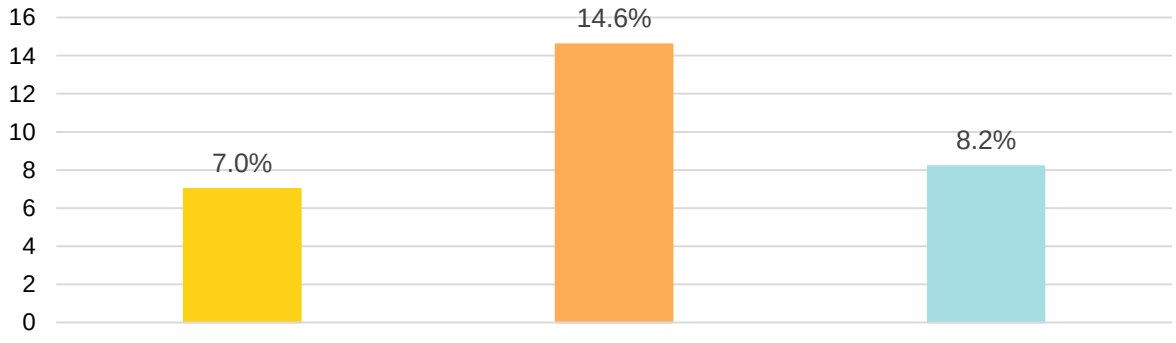
**Data source**: National Survey of Children's Health (NSCH), 2011-2012
**Numerator**: Number of children aged 0-17 years who were not able to obtain or had a delay in obtaining necessary medical care or dental care
**Denominator**: Total number of children aged 0-17 years

Parents were asked the following question: *During the past 12 months, was there any time when your child needed health care (medical, dental, mental health) but it was delayed or not received?*

| Table 7: Percent (95% CI) of Children with One or More Unmet Needs for Care During the Past 12 Months, 2011-2012[19] | |
|---|---|
| **Nation** | **Florida** |
| 6.7% (6.3, 7.1) | 9.0% (6.9, 11.0) |

Children in Florida had a higher percent of unmet needs for care during 2011-2012 than the national average (Table 7). Percent of one or more unmet needs for care was significantly higher among children who were not insured at the time of the survey.[19] Children whose household income was between 100-199% of the federal poverty level had a significantly higher percent of one or more unmet needs for care when compared to children whose household income was between 200-399% of the federal poverty level in Florida.[19]

**Figure 4: Percent (95% CI) of Children with One or More Unmet Needs for Care in Florida, by Race/Ethnicity 2011-2012[19]**




In Florida, non-Hispanic Black children had the highest percent of unmet needs for care during 2011-2012 (Figure 4).

## LC-40: Medical Insurance for Adults

Lack of medical insurance has both health and financial consequences. Uninsured people generally receive less preventive care, less care for acute and chronic conditions, and less effective care management.[25] As uninsured people are less likely to receive preventive care or screenings, they have an increased likelihood of preventable illness, missed diagnosis, and delay in treatment.[25] Additionally, the control of chronic conditions is more challenging when uninsured or under-insured. Health insurance is necessary as it helps alleviate the cost of medical care by offering free preventive services and protecting those insured from unexpected and high medical costs.[26] In 2010, more than one in five Americans were in a family that reported having problems paying their medical bills, leading to severe financial consequences such as bankruptcy.[27] Additionally, having debt has been positively linked to delaying necessary medical or dental care and medication non-adherence.[28]

Many adults do not receive medical insurance through their employer, and prior to the passing of the Patient Protection and Affordable Care Act (ACA) in 2010, there were not many affordable insurance options for purchase. The ACA is expanding access to insurance coverage through Medicaid eligibility expansions and facilitating the use of health insurance exchanges. However, it is still estimated that 30 million adults nationally did not have health insurance at the end of 2014.[29] Those uninsured are more likely to be of Hispanic origin, low-income and to self-report their health as fair or poor when compared to adults with insurance.[29] Many of those who sought insurance coverage under the ACA stated that the coverage offered was unaffordable or they were confused about their eligibility for ACA coverage.[29]

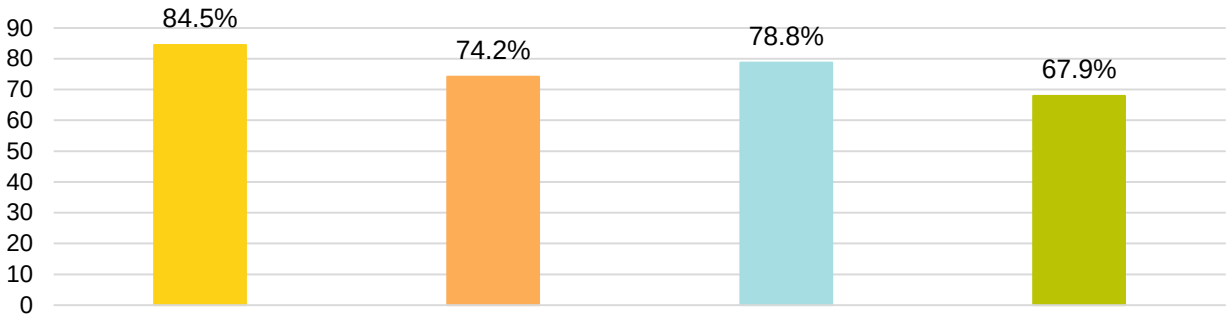
**Data source**: Current Population Survey Annual Social and Economic Supplement (CPS ASEC), 2013
**Numerator**: Number of adults aged 18 years and older with medical insurance
**Denominator**: Total number of adults aged 18 years and older

**Table 8: Percent (95% CI) of Adults aged 18 Years and Older with Medical Insurance, 2013[30]**

| Nation | Florida |
|---|---|
| 84.7% (84.6, 84.8) | 79.4% (78.8, 80.1) |

The percent of adults in Florida with medical insurance was 79.4% in 2013 (Table 8). This percent was significantly lower than the national average. This percent estimate represents those covered by some type of health insurance (private or public).

**Figure 5: Percent (95% CI) of Adults aged 18 years and Older with Medical Insurance in Florida, by Race/Ethnicity 2013[30]**




The percent of adults aged 18 and older with medical insurance differed by race/ethnicity in Florida (Figure 5). The percent of having medical insurance was highest among non-Hispanic White adults and lowest among Hispanic adults. Non-Hispanic other includes the following racial groups as defined by the CPS: American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific Islander, and two or more races.

## LC-41: Oral Health Preventive Visit for Children

Oral health is essential to maintaining general health. The mouth plays a critical role in everyday activities such as breathing, swallowing, speaking, smiling, and eating. Poor oral health can affect growth and school attendance, lead to medical complications and diminish self-image and self-esteem resulting in poor social outcomes.[31] Common barriers to oral health care include lack of access to care due to income or insurance status, transportation, work flexibility, and disability status.[32] A shortage of dentists who accept Medicaid creates an additional barrier in access to care.[32] Low income children, the elderly and ethnic minorities are particularly vulnerable populations.

In the United States, tooth decay is the most common chronic disease affecting children.[33] Routine oral health examinations are important for the provision of preventive and educational services, as well as early detection of oral health problems such as tooth decay or gum disease. Good nutrition, dental sealants and exposure to fluoride are proven effective measures against tooth decay.[33]

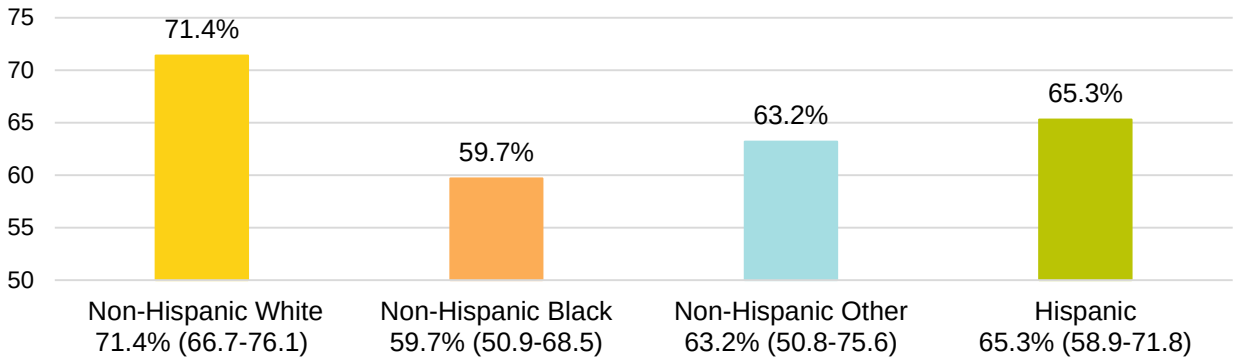
**Data source**: National Survey of Children's Health (NSCH), 2011-2012
**Numerator**: Number of children aged 1-17 years who received at least one preventive dental visit in the past 12 months
**Denominator**: Total number of children aged 1-17 years

Parents were asked the following question: *During the past 12 months/since birth, how many times did your child see a dentist for preventive dental care such as check-ups and dental cleanings?*

| Table 9: Percent (95% CI) of Children with at Least One Preventive Dental Visit in the Past 12 Months, 2011-2012[19] | |
|---|---|
| **Nation** | **Florida** |
| 77.2% (76.5, 77.8) | 67.0% (63.7, 70.4) |

Children in Florida had a significantly lower percent of having received one or more preventive dental visits in the past year when compared to the national average in 2011-2012 (Table 9).

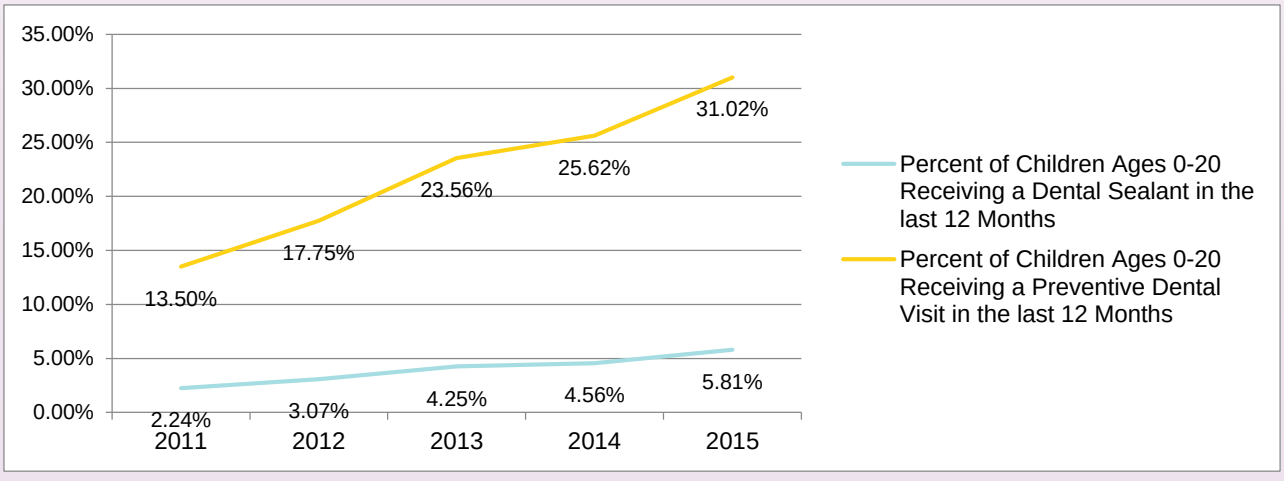
**Figure 6: Percent (95% CI) of Children with One or More Preventive Dental Visits in the Past Year in Florida, by Race/Ethnicity 2011-2012[19]**




Non-Hispanic White children reported the highest percent of receiving one or more preventive dental visits in Florida (Figure 6).

***Florida Program Spotlight***

The Public Health Dental Program focuses on providing preventive dental services for high-risk children. Services are provided in Florida by County Health Department Dental Clinics, Federally Qualified Health Centers, and local oral health coalitions. Over the past five years, there has been a steady increase in the number of dental sealants and preventive dental visits for Medicaid children aged 0-20 years.[34] For more information, visit www.flhealth.gov/dental



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