



## Improving Oral Health During Pregnancy in New York State

Research has shown that poor oral health is related to poor health for both a mother and her child. Dental caries can occur when foods containing sugars and starches are frequently consumed or when bacteria related to dental caries is transferred from mother to infant through saliva. Children whose mothers have poor oral health and high levels of oral bacteria are at greater risk of developing dental caries than children whose mothers have good oral health and lower levels of oral bacteria<sup>1</sup>.

### Dental Caries is the Leading Chronic Disease Among Children

Dental caries, or tooth decay, is expected to affect approximately 3.4 million New York children by high school graduation. From 2009-2011, the most recent data available, the percentage of all third-grade children with untreated tooth decay was 22.1%. Children living in low-income homes are 2.2 times more likely to have untreated tooth decay than children who live in non-low-income homes (NYS excluding NYC). Left untreated, dental caries is often painful and can disrupt daily activities, learning, and school performance.

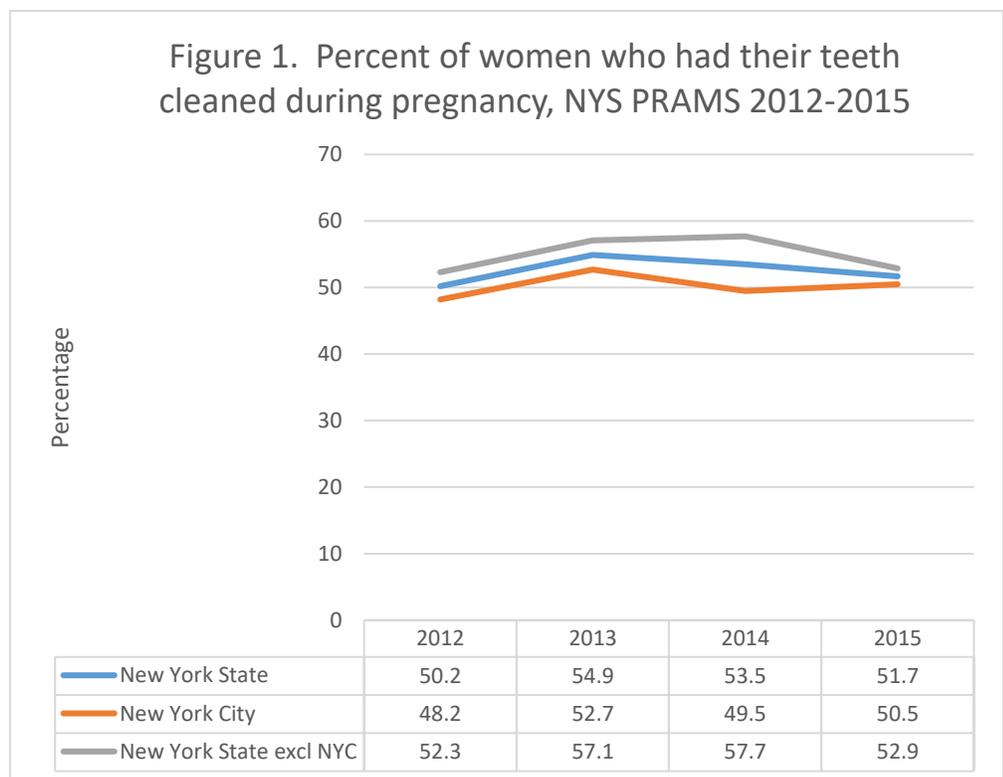
#### Why is this important?

Dental decay is an infectious transmissible disease that mothers can pass on to their babies' through decay causing germs in their mouth<sup>2,3</sup>. Improving oral health during pregnancy can help prevent early cavities in children. During pregnancy, women should get their teeth cleaned, examined and have any needed dental work done before their baby is born. However, data show only 1 in 2 pregnant women reports having their teeth cleaned during pregnancy (Figure 1) Research has shown that poor maternal oral health is related to poor health for both a mother and her child including:

- Increased risk of developing caries in early childhood and throughout life
- Pain, altered speech, tooth loss, disruption of learning and school performance
- Atherosclerosis
- Diabetes

- Increased bacteria in the mother's mouth
- Poor birth outcomes such as pre-term birth, low birth weight, preeclampsia, miscarriage, and fetal growth restrictions
- Increased risk of transmitting decay-causing bacteria from a mother to her infant

Figure 1. Percent of women who had their teeth cleaned during pregnancy, NYS PRAMS 2012-2015



<sup>1</sup>[http://www.aapd.org/media/policies\\_guidelines/g\\_perinataloralhealthcare.pdf](http://www.aapd.org/media/policies_guidelines/g_perinataloralhealthcare.pdf)

<sup>2</sup>Weintraub JA, Prakash P, Shain SG, Laccabue M, Gansky SA. Mothers' Caries Increases Odds of Children's Caries. Journal of Dental Research. 2010;89(9):954-958. doi:10.1177/0022034510372891.

<sup>3</sup>Virtanen JI, Vehkalahti KI, Vehkalahti MM. Oral health behaviors and bacterial transmission from mother to child: an explorative study. BMC Oral Health. 2015;15:75. doi:10.1186/s12903-015-0051-5.

## Who is at higher risk?

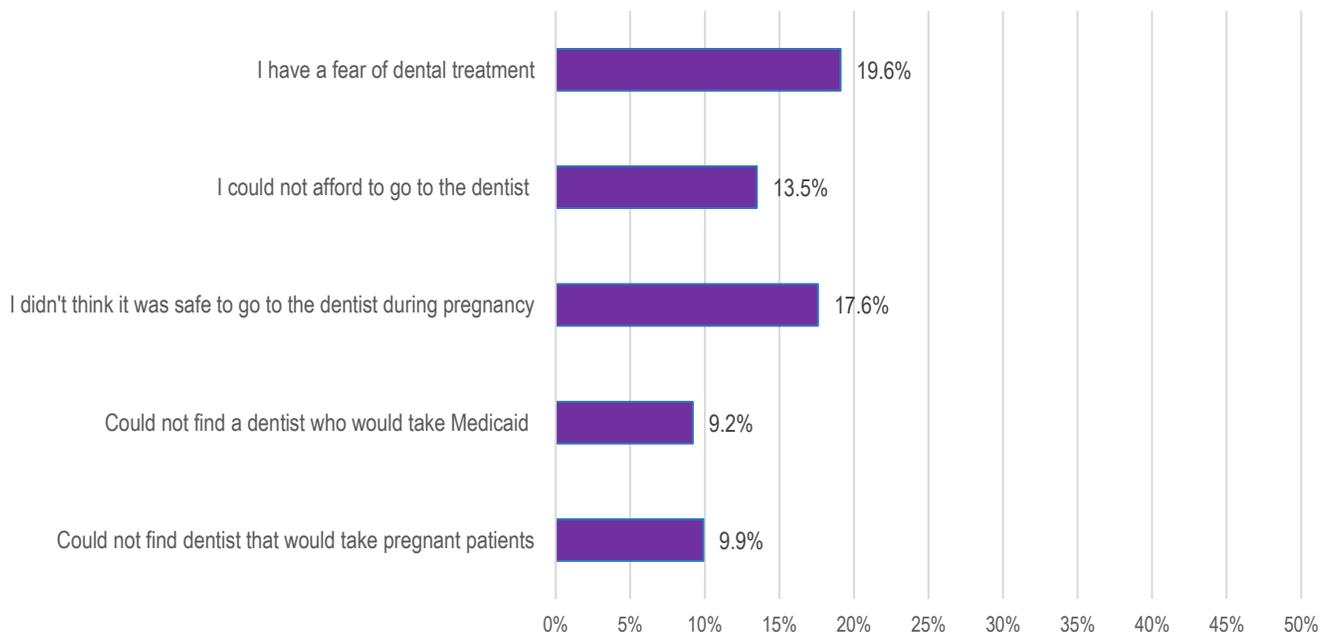
Disparities in oral health care during pregnancy are apparent with respect to race/ethnicity, education, and marital status. Women who are less likely to have their teeth cleaned during pregnancy are non-Hispanic Other (44.1%), are 20-24 years old (43.6%), are not married (47.9%) and are on Medicaid (47.6%) (Table 1).

Women who reported having a problem with their teeth during pregnancy also reported barriers to receiving care that include: financial difficulties (13.5%), believed it was not safe to go to the dentist during pregnancy (17.6%), could not find a dentist who would treat a pregnant woman (9.9%) and having a fear of dentists (19.6%) (Figure 2).

**Table 1. Prevalence of mothers who reported having their teeth cleaned by a dentist or dental hygienist during pregnancy by demographics, NYS PRAMS, 2012-2015**

Maternal Characteristic	Respondents	Est. # Affected	Prevalence	95% CI	P value
Total	10,088	865,331	52.6%	51.3-53.8	
<b>Race/Ethnicity</b>					0.0001
Non-Hispanic White	4,296	238,274	55.4%	53.5-57.3	
Non-Hispanic Black	1,845	59,024	48.6%	45.1-52.1	
Non-Hispanic Other	1,315	46,668	44.1%	40.7-47.5	
Hispanic	2,632	110,884	53.3%	50.8-55.8	
<b>Age</b>					0.0001
Less than 20 years old	1,218	18,542	47.2%	41.1-53.4	
20-24 years old	1,547	68,130	43.6%	40.4-46.7	
25-34 years old	5,082	256,774	53.6%	51.8-55.3	
35 years old or more	2,241	111,403	58.5%	55.9-61.2	
<b>Education</b>					0.0001
Less than High School	2,042	73,950	50.2%	47.0-53.4	
High School Graduate	2,179	89,399	47.1%	44.2-49.9	
More than High School	5,828	290,251	55.2%	53.6-56.8	
<b>Marital Status</b>					0.0001
Married	5,602	286,810	55.8%	54.2-57.4	
Not Married	4,486	168,039	47.9%	45.7-50.0	
<b>Medicaid Status</b>					0.0001
Not on Medicaid	5,168	265,232	56.8%	55.1-58.6	
On Medicaid	4,917	189,618	47.6%	45.7-49.5	

**Figure 2: Barriers to oral health care during pregnancy among women who reported having a problem with their teeth and gums during pregnancy, NYS PRAMS (excluding NYC), 2012-2015**



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# Taking Action to Improve Oral Health During Pregnancy in New York State

## What is the Department of Health Doing?

- Conducts surveillance on oral health through health surveys to inform state policies and initiatives.
- Supports fifty-three *School-Based Health Center Dental Programs* (SBHC-D) that aim to increase access to dental care for NYS children through the delivery of dental health services, including fluoride varnish, sealants and education in schools. This program serves over 300,000 children in the state.
- Partners with the *NYS Oral Health Center of Excellence* in providing information to communities, local health departments, health care institutions, and school-based health centers to improve oral health and enhance access to oral health services in NYS.
- Monitors fluoride levels in public water systems through the *Community Water Fluoridation (CWF) Program* to ensure they meet the CDC's recommendations for water fluoridation.
- Provides school-age children access to an adequate amount of fluoride for the prevention of tooth decay through the *Supplemental Fluoride (Rinse) Program*
- Works to increase access to preventive dental care for high risk children and adults by addressing oral health workforce needs in areas in NYS.

## What Can You Do?

- Promote healthy meals and snacks for children of all ages at home, in childcare programs, and in schools.
- Get your teeth cleaned before and during pregnancy to improve health outcomes for both mother and child.
- Teach children to practice good oral hygiene beginning in the early childhood years.
- Brush teeth with fluoridated toothpaste.

## Local Health Departments and Community Organizations

- Inform stakeholders about the barriers to good oral health facing low-income children and children with special needs. Barriers include access to care due to competing priorities for parents and caregivers, a shortage of dental health professionals that are trained in the treatment of children with complex needs and a lack of insurance or being underinsured.

- Produce, evaluate, and distribute evidence-based strategies to improve oral health behaviors and use of dental services for pregnant women and children.
- Execute annual community health assessments to determine availability of dental services, their capacity to accept new patients, and list of insurances they accept.
- Incorporate oral health messages across all clinicians and programs that serve children, including childcare, birthing hospitals, home visiting, and Women, Infants and Children (WIC).
- Participate in community health assessments to inform health officials of dental practice needs and oral healthcare disparities.
- Support education programs that promote healthy meals.

## Health Insurers

- Offer comprehensive, affordable dental coverage for all NYS children.
- Assist with enrollment of low-income children in Medicaid and Child Health Plus.
- Create Medicaid reimbursement incentives for providers and hospitals, especially those who treat low-income women and children.

## Health Care Providers

- Connect children and families to dental services and ensure access to quality care.
- Promote dental sealants and fluoride treatments for high-risk children.
- Enhance the treatment of children with special healthcare needs through updated standards.
- Encourage women at first prenatal visit to have an oral health exam during pregnancy.
- Get trained in the application of fluoride varnish and integrate into routine practices.

## Policy Makers and Elected Officials

- Support the expansion of school-based dental sealant programs, especially in high-need, underserved areas.
- Incorporate required dental examinations into Head Start examinations, with referrals to dental providers.
- Guarantee affordable, comprehensive health insurance including dental coverage for all children in NYS. Facilitate joint location of medical and dental health services.
- Maintain and broaden fluoridation of public water sources in high-need areas.

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# NYS Maternal and Child Health Block Grant 2015-2020 State Action Plan

[https://www.health.ny.gov/community/infants\\_children/maternal\\_and\\_child\\_health\\_services/docs/2018\\_application.pdf](https://www.health.ny.gov/community/infants_children/maternal_and_child_health_services/docs/2018_application.pdf)

The Maternal and Child Health Services Title V Block Grant provides funding to states to improve the health and wellness of women, children and families. New York's Title V State Action Plan focuses on reducing health disparities and improving the health of all New Yorkers across the life span in maternal and women's health, perinatal and infant health, child health including children with special health care needs, and adolescent health.

## Prevention Agenda 2013-2018: New York State's Health Improvement Plan

<https://www.healthypeople.gov/2020/topics-objectives/objective/mich-18>

The Prevention Agenda 2013-18 is the blueprint for state and local action to improve the health of New Yorkers in five priority areas and to reduce health disparities for racial, ethnic, disability, socioeconomic and other groups who experience them. Reducing dental caries in children is one of the Prevention Agenda goals.

### Additional Resources:

#### *For Communities:*

NYS Department of Health, Oral Health for Infants and Children, June 2011.

[www.health.ny.gov/prevention/dental/infant\\_oral\\_health.htm](http://www.health.ny.gov/prevention/dental/infant_oral_health.htm)

NYS Community Health Indicator Reports, Oral Health Indicators, September 2013.

[www.health.ny.gov/statistics/chac/indicators/ora.htm](http://www.health.ny.gov/statistics/chac/indicators/ora.htm)

NYSDOH, Oral Health Status of Third Grade Children: NYS Oral Health Surveillance System Report, December 2005.

[www.health.ny.gov/prevention/dental/docs/child\\_oral\\_health\\_surveillance.pdf](http://www.health.ny.gov/prevention/dental/docs/child_oral_health_surveillance.pdf)

Centers for Disease Control and Prevention (CDC), Division of Oral Health, Children's Oral Health, September 2013.

[www.cdc.gov/oralhealth/children\\_adults/child.htm](http://www.cdc.gov/oralhealth/children_adults/child.htm)

Healthy People 2020, Topics and Objectives, Oral Health, July 2014.

[www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32](http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32)

#### *For Individuals:*

NYS Department of Health, A Healthy Mouth for Your Baby, July 2013.

[www.nidcr.nih.gov/OralHealth/Topics/ToothDecay/AHealthyMouthforYourBaby.htm](http://www.nidcr.nih.gov/OralHealth/Topics/ToothDecay/AHealthyMouthforYourBaby.htm)

Centers for Disease Control and Prevention (CDC), Oral Health Resources, My Water's Fluoride, October 2008.  
[apps.nccd.cdc.gov/MWF/CountyDataV.asp?State=NY](http://apps.nccd.cdc.gov/MWF/CountyDataV.asp?State=NY)

National Maternal & Child Oral Health Resource Center, Head Start.

[www.mchoralhealth.org/](http://www.mchoralhealth.org/)

American Academy of Pediatric Dentistry, 2014.

[www.mychildrensteeth.org/](http://www.mychildrensteeth.org/)

### **Contact Information:**

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