

Consequences of Tooth Decay

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Disclosure

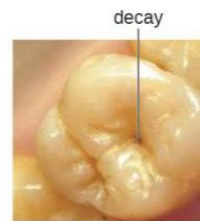
- Presenter: Celeste Terry, RDH, BS – Hub Team Specialist
- Ineligible Company: Association of State and Territorial Dental Directors
- Nature of Relationship: Advisor/Consultant serving as Louisiana Head Start Dental Hygienist Liaison since 2011, one of 52 DHLs in the U.S.

Objectives

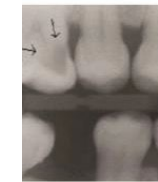
- To review what cavities are
- To review the impact of cavities
- Review the prevalence of untreated tooth decay



(a)



(b)



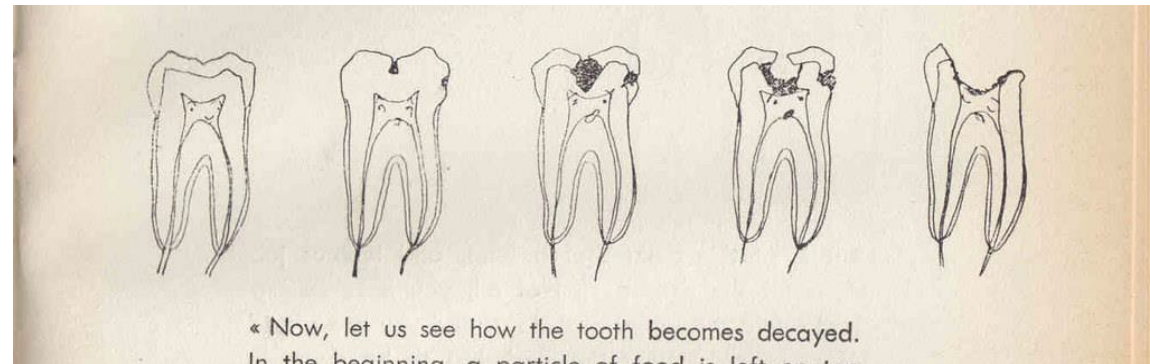
(c)



(d)



(e)



What is a cavity or tooth decay?



- “Tooth decay begins when bacteria in your mouth make acids that attack the tooth’s surface (enamel). This can lead to a small hole in a tooth, called a cavity. If tooth decay is not treated, it can cause pain, infection, and even tooth loss.”
- When decay-causing bacteria come into contact with sugars and starches from foods and drinks, they form an acid. This acid can attack the tooth’s enamel, causing it to lose minerals.
- When a tooth is repeatedly exposed to acid, such as when you frequently consume food or drink high in sugar and starches, the enamel continues to lose minerals. A white spot may appear where minerals have been lost. This is a sign of early decay.
- Tooth decay can be stopped or reversed at this point. Enamel can repair itself by using minerals from saliva and fluoride from toothpaste or through the application of fluoride by a dentist or dental hygienist. If more minerals are lost than can be restored, the enamel weakens and eventually breaks down, forming a cavity.

Impact of Untreated Tooth Decay

- “Cavities, also called tooth decay, are one of the greatest unmet health treatment needs.” - Centers for Disease Control (CDC)



Cavities are almost completely preventable.

It Shouldn't Hurt to Be a Child *Preventing Early Childhood Caries (ECC)*



Early childhood caries (ECC) is highly prevalent, can progress rapidly, may cause toothaches, and may have an impact on a child's health and well-being. ECC is a serious public health problem.

Teeth decay is the most common chronic disease of childhood, with about 1 in 5 children aged 5 to 11 years having at least one untreated decayed tooth.² Early childhood caries (ECC) can cause significant pain for children and can lead to oral infection, visible dental decay, destruction and loss of teeth, and damage to permanent teeth. This can impact a child's self-esteem, sleep patterns, school readiness, weight gain and more. Child care centers can play an important role in the reduction of cavities by educating children and their parents on the importance of healthy oral hygiene.

Oral Health Status in Louisiana Head Start Programs

 **Office of Head Start - Program Information Report (PIR)**
Dental Services Report - 2019 - Region Level

For a summary of the filters selected to generate this report, please see the last page of this document.

State Summary

	<i>Dental Home</i>	<i>Preschool Preventive Care</i>	<i>Preschool Completed Dental Exam</i>	<i>Preschool Needed Treatment</i>	<i>Preschool Received Treatment</i>	<i>0-2 Up-to-Date on Dental EPSDT Schedule</i>	<i>Pregnant Women Completed Dental Exam</i>
Arkansas	89.64%	79.12%	80.41%	13.35%	77.21%	76.19%	34.06%
Louisiana	95.96%	79.56%	82.19%	11.94%	70.83%	64.16%	26.28%
New Mexico	91.15%	79.3%	81.37%	12.43%	71.78%	56.93%	54.76%
Oklahoma	89.63%	69.25%	79.45%	13.26%	65.51%	62.36%	41.83%
Texas	95.4%	79.13%	81.74%	13.63%	73.48%	71.44%	29.79%
Region 06	94.1%	78.09%	81.45%	13.22%	72.34%	68.79%	33.06%
National	89.79%	75.59%	79.87%	16.12%	71.06%	68.16%	31.85%

Oral Health Status in Louisiana Head Start Programs



**Office of Head Start - Program Information Report (PIR)
Dental Services Report - 2021 - State Level**

For a summary of the filters selected to generate this report, please see the last page of this document.

Louisiana - Region 06

State Summary

	<i>Accessible Dental Care</i>	<i>Preschool Preventive Care</i>	<i>Preschool Completed Dental Exam</i>	<i>Preschool Needed Treatment</i>	<i>Preschool Received Treatment</i>	<i>0-2 Up-to-Date on Dental EPSDT Schedule</i>
Louisiana	93.21%	66.36%	67.65%	11.14%	63.67%	53.97%
Region 06	93.21%	66.36%	67.65%	11.14%	63.67%	53.97%
National	93.21%	66.36%	67.65%	11.14%	63.67%	53.97%

What are the consequences of tooth decay?

- “Untreated cavities can cause pain and infection that may lead to problems with eating, speaking, playing, and learning.”
- “Untreated cavities can lead to abscess under the gums which can spread to other parts of the body and have serious and in rare cases fatal results.”
- Source: CDC





Perspectives of Change

The story of civil rights, diversity, inclusion and access to education at HMS and HSDM



12-year-old Deamonte Driver Dies from Lack of Access to Dental Care

In February 2007, 12-year-old, seventh grade r Deamonte Driver died after complications from an abscessed tooth. His mother, Alyce, who worked a low-paying job, could not find a dentist who would accept Medicaid and perform the routine \$80 extraction to treat Deamonte's toothache. As a result, bacteria from the untreated tooth infection spread to his brain. After two surgeries and six weeks of hospital care, Deamonte died. His operations, hospital care and therapy totaled approximately \$250,000.

Tooth decay is the most common chronic childhood disease - five times more common than asthma.

Year

2007

School Timeline

HSDM/ Oral Health History



Why Are Teeth Important?

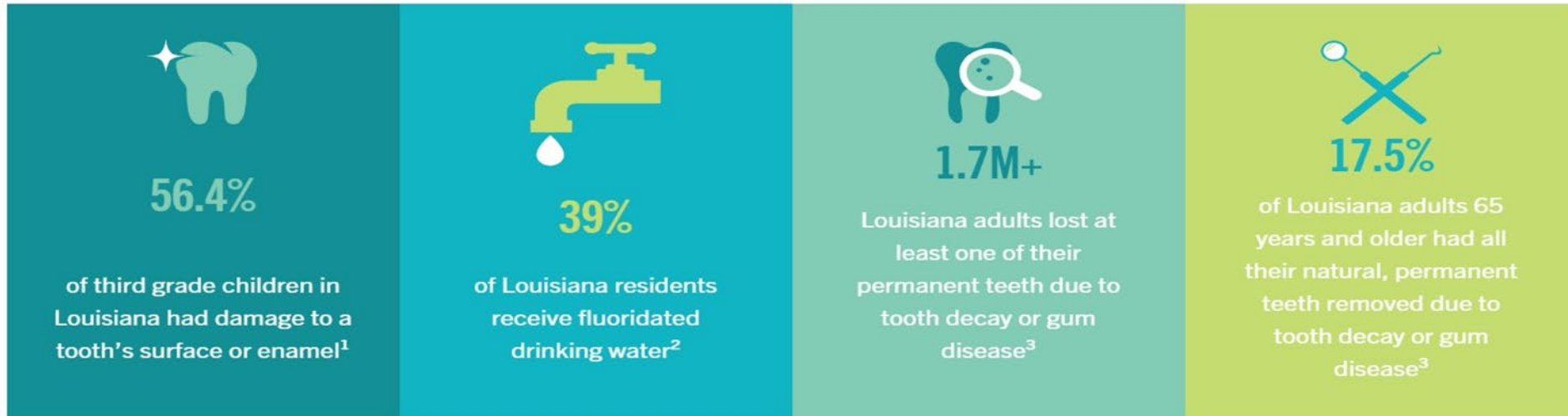
- Eating and chewing healthy food
- Growth and development
- Speaking and talking
- Esthetics and self esteem
- Impact of Tooth Loss
 - Smile
 - Shifting and Drifting Teeth
 - Difficulty Eating Healthy Foods
 - Affects Speech
 - Poor oral health affects learning

Oral Health Status in Louisiana

CHRONIC DISEASE LEADS TO ORAL DISEASE

Good oral health is essential to the health of all Louisiana residents. Oral disease is almost completely preventable, but it still affects children and adults throughout Louisiana every day.

Our oral health affects our ability to speak, smile, eat and show emotions. It also affects self-esteem, academic performance and attendance at work and school. Poor oral health is associated with chronic conditions like diabetes and heart disease and risk behaviors like tobacco use and sugary diets. In Louisiana, 86% of our parishes are Dental Health Professional Shortage Areas, meaning the majority of our state does not have access to the dental care they need.



Prevalence of Cavities in the U.S.

Among children 6-8 years of age, over 52% have had a cavity in their primary teeth

Among adolescents aged 12-19, more than half (57%) have had a cavity in their permanent teeth

Children from low-income families are twice as likely to have untreated cavities as higher income children

Among adults 20 and older, about 90% have had at least one cavity

1 in 4 adults 20 – 64 currently have at least one cavity.

Cited by Centers of Disease Control and Prevention, Oral Health, Cavities. <https://www.cdc.gov/oralhealth/fast-facts/cavities/index.html>

Oral Health Infographics

Oral health is essential to general health and well-being **across the lifespan.**



During pregnancy, women may be more prone to gum disease and cavities.



A mother's oral health status is a strong predictor of her child's oral health status.

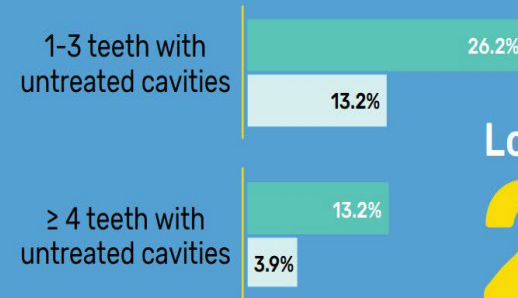


If mothers have high levels of untreated cavities or tooth loss, their children are 3X more likely to have cavities.

www.cdc.gov/oralhealth

CS32153A

Low-Income Adults Aged 20-64 Years Have More Untreated Cavities



Low-income adults have

2 to 3X
more untreated cavities



■ Low-income (< 200% FPG)
■ High-income (≥ 200% FPG)

www.cdc.gov/oralhealth/disparities

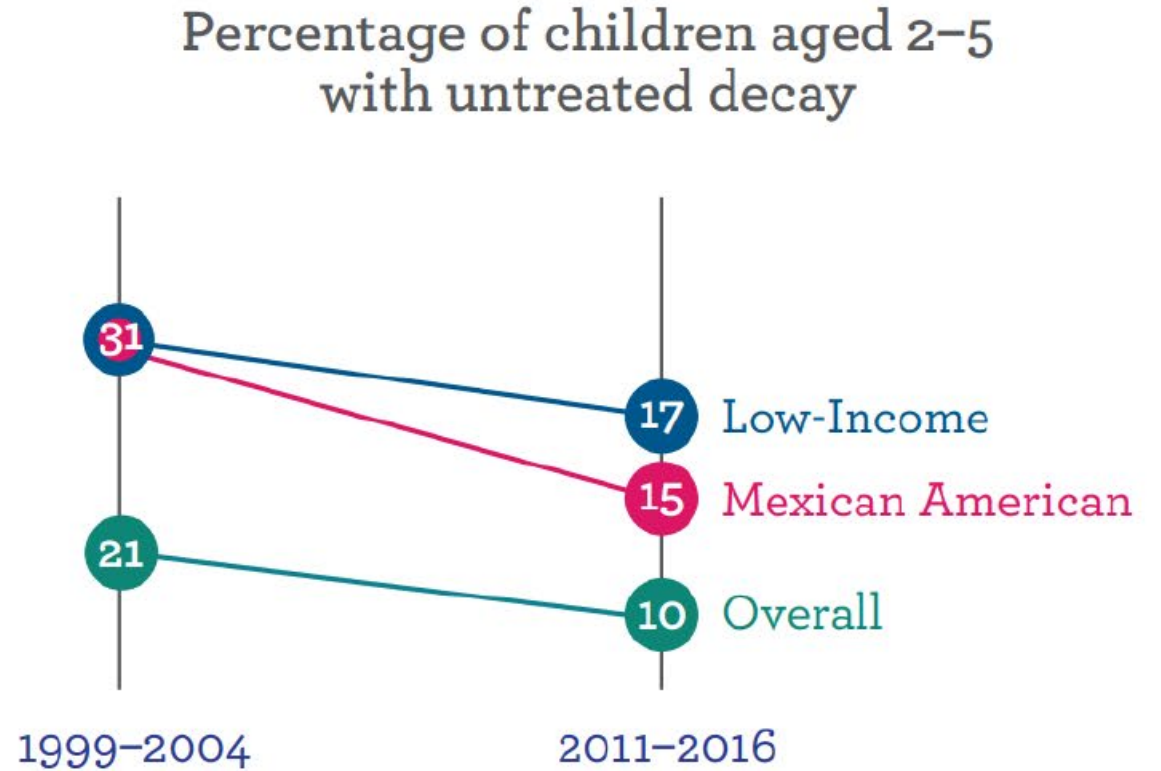
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Untreated tooth decay declined in young children



Since 1999–2004, the prevalence of **untreated tooth decay** in primary teeth of children aged

2–5 years **has dropped by half.**



Mexican American and **low-income** children saw the **greatest declines.**

<http://bit.ly/OralHealthReport>

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Some adults were twice as likely to have untreated tooth decay



Nearly half of adults aged 20–64 years who were:

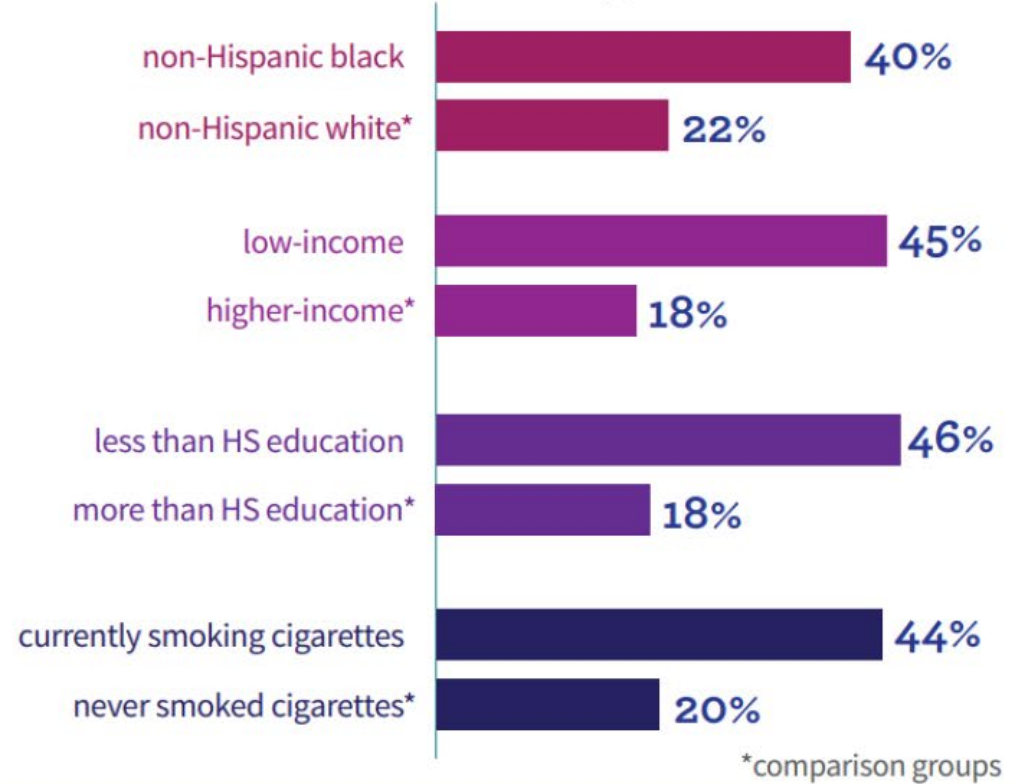
- **non-Hispanic black**
- **low-income**
- **had less than a high school education**
- **currently smoking cigarettes**

had untreated tooth decay

This is **2x the amount** of untreated decay as the comparison groups.

<http://bit.ly/OralHealthReport>

Percentage of adults aged 20–64 with untreated tooth decay, 2011–2016



Some older adults were more than twice as likely to have untreated tooth decay



About 1 in 3 adults aged 65 or older who were:



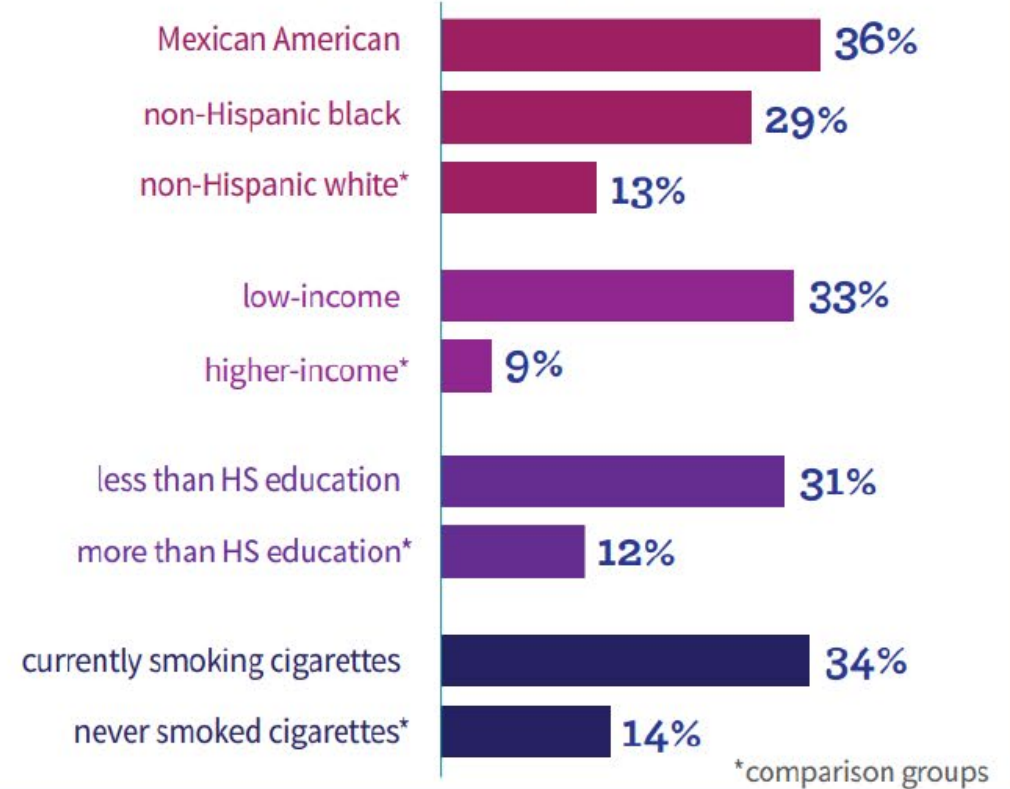
- **Mexican American**
- **non-Hispanic black**
- **low-income**
- **had less than a high school education**
- **currently smoking cigarettes**

had untreated tooth decay

This is **2x to 3x the amount** of untreated decay as comparison groups.

<http://bit.ly/OralHealthReport>

Percentage of adults aged 65 or older with untreated tooth decay, 2011–2016

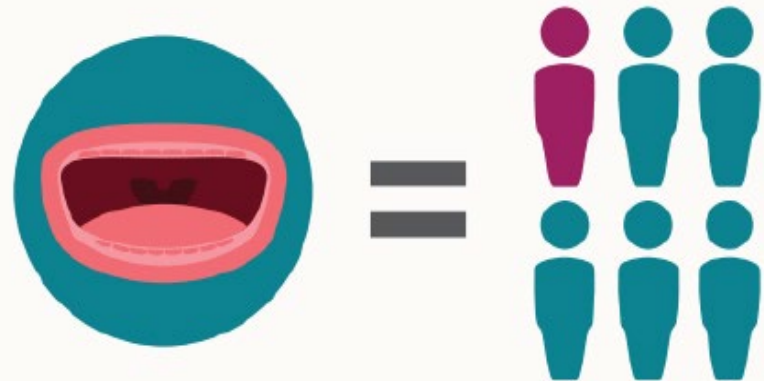


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Total tooth loss in older adults, 2011–2016



1 in 6 adults aged 65 or older had lost all of their teeth.



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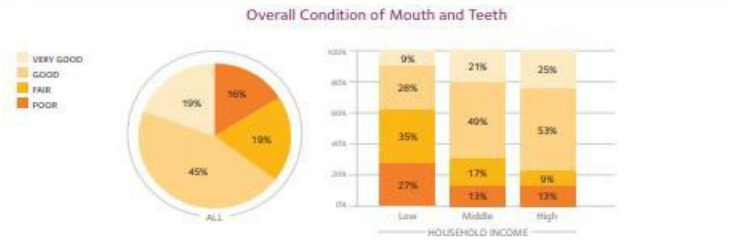
Impacts on Quality of Life & Productivity

- Over 34 million school hours were lost in the US in 2008 because of unplanned urgent dental care
- Over \$45 billion lost in productivity in the US each year because of untreated oral disease
- Nearly 18% of all working age adults and 29% of those with lower incomes, report that the appearance of their mouth and teeth affects their ability to interview for a job.” CDC, Oral Health, Disparities in Oral Health.
- “Oral health affects our ability to eat, speak, smile, and show emotions. Oral health also affects a person’s self-esteem, school performance, and attendance at work or school. Oral diseases—which range from cavities and gum disease to oral cancer— cause pain and disability for millions of Americans and cost taxpayers billions of dollars each year.”

Oral Health and Well Being in Louisiana - (ADA Health Policy Institute)

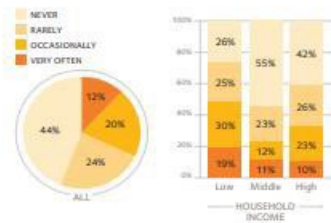
Oral Health and Well-Being in Louisiana

How do adults in Louisiana view their oral health?
This fact sheet summarizes select data on self-reported oral health status, attitudes and dental care utilization among Louisiana adults as of 2015, by income level, based on an innovative household survey. For methods and sources, visit ADA.org/statefacts. For more information on the ADA Health Policy Institute, visit ADA.org/HPI.

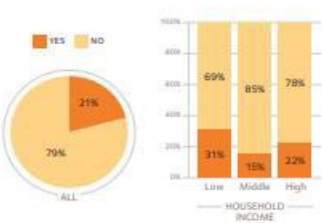


27% of low income adults say their mouth and teeth are in poor condition.

Life in General is Less Satisfying Due to Condition of Mouth and Teeth

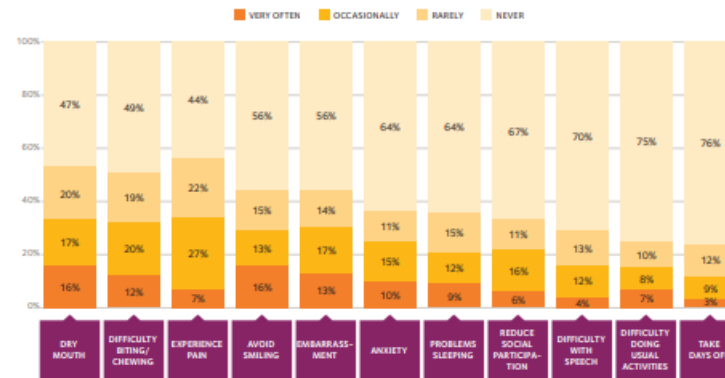


Appearance of Mouth and Teeth Affects Ability to Interview for a Job



Oral Health and Well-Being in Louisiana

How Often Have You Experienced the Following Problems in the Last 12 Months Due to the Condition of Your Mouth and Teeth?



3 in 10
adults avoid smiling due to the condition of their mouth and teeth.

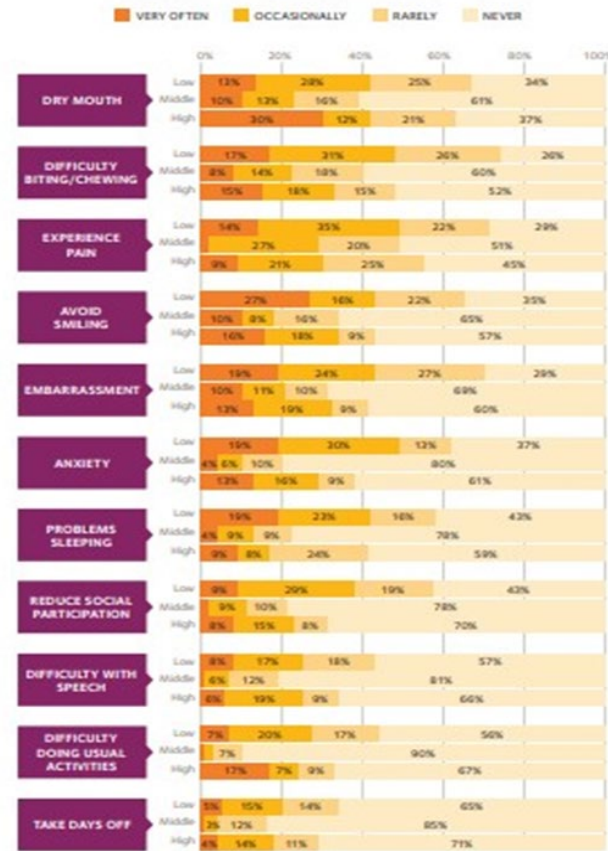
3 in 10
adults feel embarrassment due to the condition of their mouth and teeth.

1 in 4
adults experience anxiety due to the condition of their mouth and teeth.

Louisiana: The State We're In and Teeth

Oral Health and Well-Being in Louisiana

Problems Due to Condition of Mouth and Teeth, by Household Income



Low income adults are most likely to report having problems due to the condition of their mouth and teeth.



The top oral health problems for low income adults are **anxiety** and **experiencing pain**.



43% of low income adults avoid smiling due to the condition of their mouth and teeth.

30% of high income adults experience pain due to the condition of their mouth and teeth.

21% of middle income adults feel embarrassment due to the condition of their mouth and teeth.

38% of low income adults reduce participation in social activities due to the condition of their mouth and teeth.

Oral Health and Well-Being in Louisiana

Attitudes Towards Oral Health and Dental Care in Louisiana (ADA HPI)

Attitudes Toward Oral Health and Dental Care



93%
value oral health.




88%
feel they need to visit the dentist twice per year.



91%
agree regular dental visits keep them healthy.



82%
believe straight, bright teeth help you get ahead in life.

"I accept I will lose some teeth with age." 



68%
low income adults

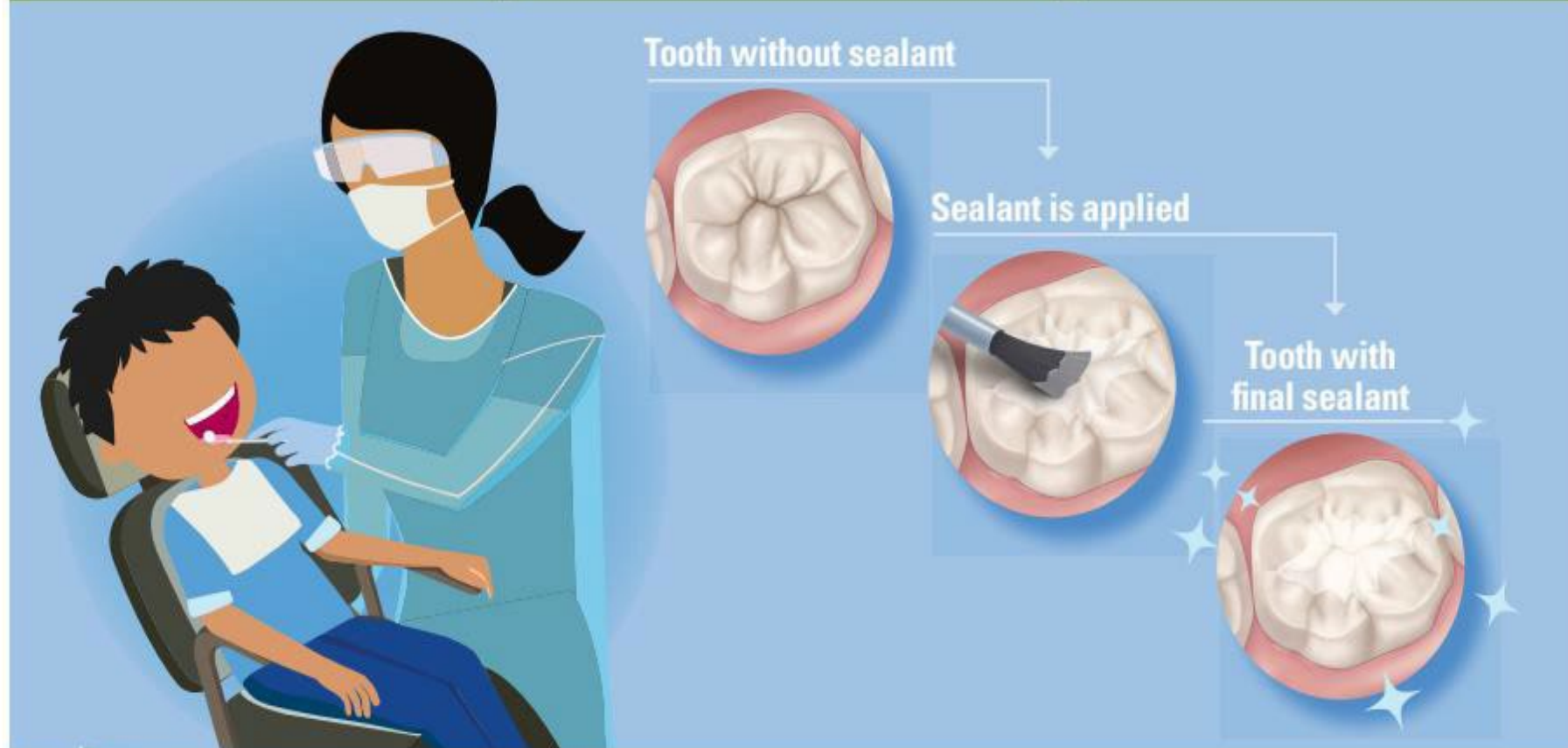


44%
high income adults

Best Practices

- Prevention
- Dental Sealants and Fluoride Varnish
- Fluoride Toothpastes and Mouth Rinses
- Community Water Fluoridation
- Good Oral Hygiene (regular brushing and flossing)
- Regular Dental Visits and Early Intervention
- Access to Oral Health Care - Preventive and Routine Care

Dental sealants can prevent cavities when applied to molar teeth.



School-based programs are one way to reach millions of children with sealants to prevent cavities.

Citations

- National Institute of Health, National Institute of Dental and Craniofacial Research, Health Info, Tooth Decay Causes Centers of Disease Control, Cavities
- Maternal and Child Health Organization, ECC Fact Sheet WellAhead, Living wellahead, Love Your Smile
- Office of Head Start Performance Information Dental Services 2019 Region Level Report, State Summary
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- WellAhead Prevention, Oral Health
- CDC Oral Health Disparities
- CDC Oral Health Report Untreated tooth decay
- Centers of Disease Control, Oral Health, Cavities, Infographics
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- CDC Oral Health
- CDC Tooth Loss InfographicCDC Oral Health Basics
- CDC Disparities in Oral Health
- CDC Power of Prevention
- American Dental Association Health Policy Institute, Oral Health and Well Being, State Facts, Louisiana

Thank You!

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