

Be An Oral Health Champion: Strategies for Promoting Oral Health Among Families Within Your Community

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DC Department of Health

Community Health Administration



Oral Health Affects Performance

- ~50 million school hours missed each year¹
- ~164 million work hours lost for adults¹
- Pain can cause diminished concentration
- Esthetic issues can contribute to decreased social and occupational engagement



¹DHHS. Oral Health in America: A Report of the Surgeon General – Executive Summary (2000).

Health Consequences of Oral Conditions

- Altered nutrition
- Spread of infections
- Impaired speech
- Chronic Pain
- Psychological effects
- Worsening of existing health conditions
- Hospitalization

WHAT PROBLEMS COULD POOR DENTAL HEALTH CAUSE?



The Good News: Oral Conditions Are Preventable and Manageable



And You Can Help!



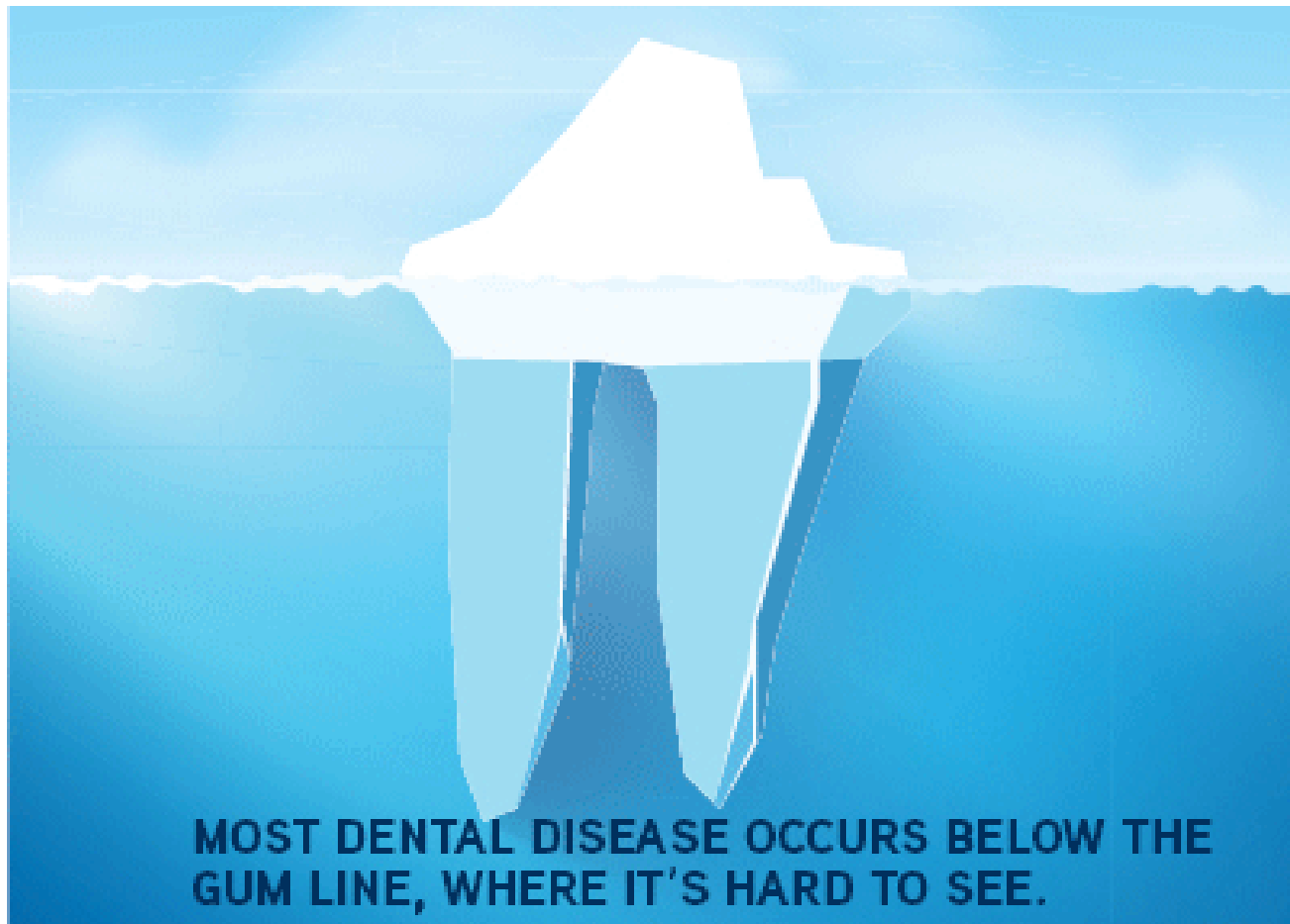
Schools Are Ideal Venues for Reaching Communities and Families



So, How Can I Be An Oral Health Champion?

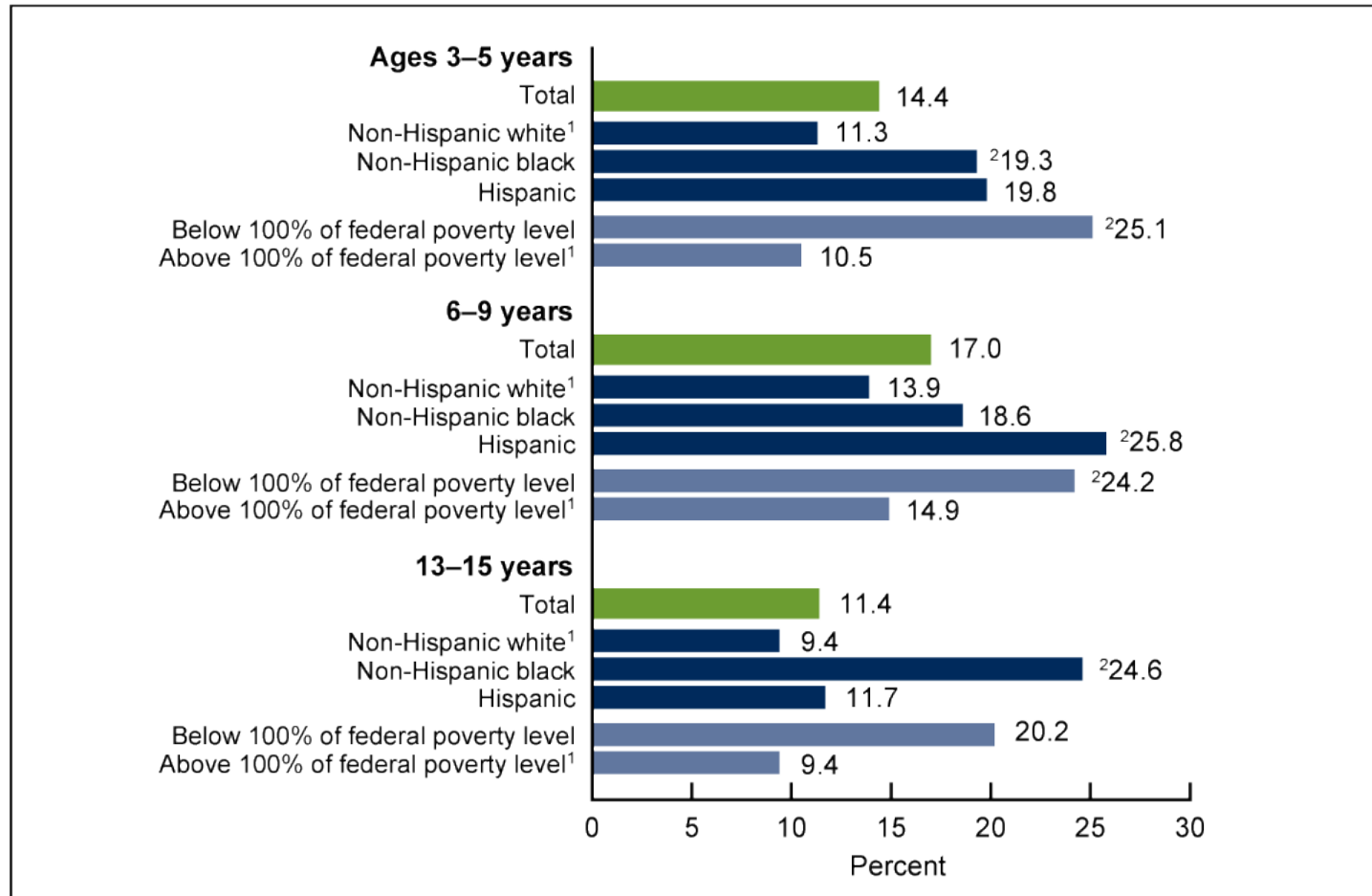
**Be a
Champion:
Three Easy
Steps for
Getting Started**

Step 1: Be Aware Of Oral Conditions and Their Contributory Factors



Oral Diseases Affect the Population Disproportionately

Figure 1. Prevalence of untreated dental caries among children and adolescents, by age, race and ethnicity, and poverty level: United States, 2009–2010.



¹Reference group.

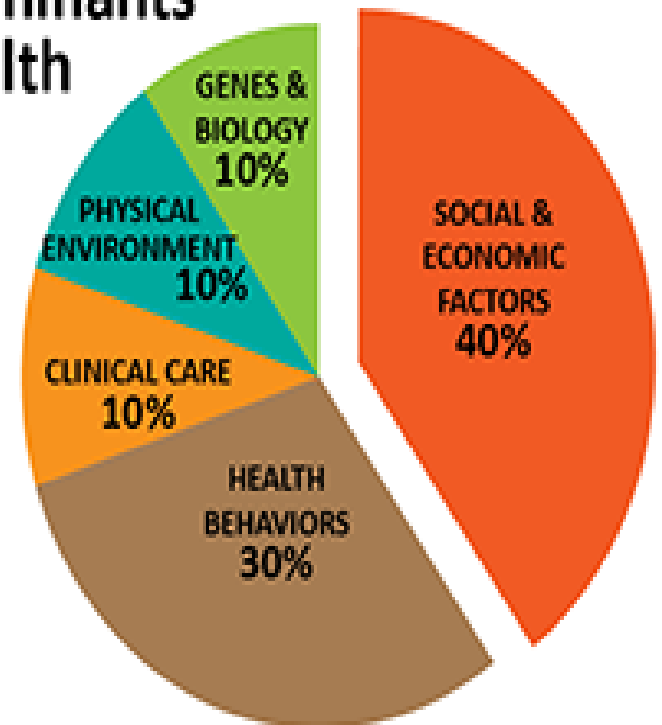
² $p < 0.05$.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 2009–2010.

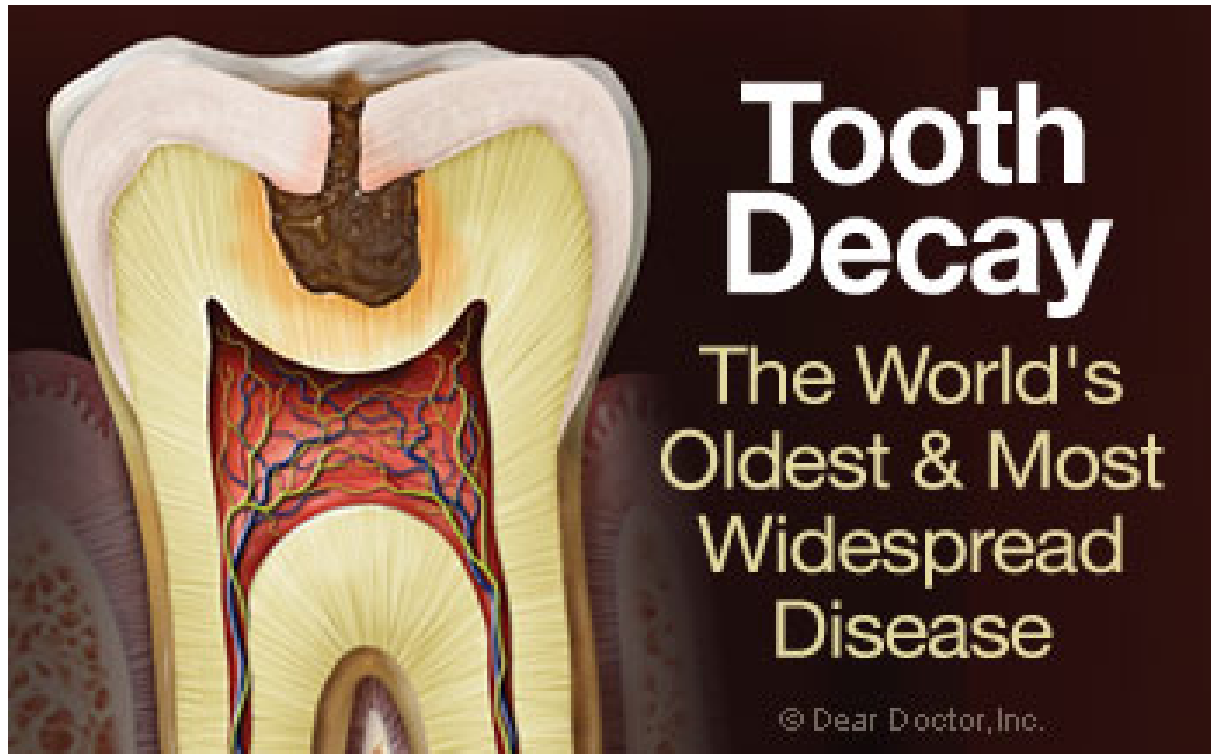
Non-Clinical Factors Play A Key Role

- Income
- Housing
- Education
- Access to Transportation
- Timely Access to Care and Resources
- Access to Healthy Foods
- Cultural and Peer Norms
- Social Support
- Resiliency Factors (Self-Esteem, Self Efficacy, etc.)

**Determinants
of health**




Tooth Decay





A Common Chronic Disease

- Presence of at least 1 decayed tooth
 - 1 in 5 children, 5-11 years ¹
 - 1 in 7 adolescents, 12-19 years
- Tooth decay experience typically increases with age
 - >40% by Kindergarten ²
 - ~91% by adulthood ³

Tooth decay is the **MOST COMMON** chronic childhood disease

 **5X** more common than asthma

 **#1** reason kids miss school

 **55%** of 3rd graders have cavities

Created by Delta Dental of Colorado Foundation
www.deltadentalcofoundation.org

¹ US Centers for Disease Control and Prevention. Children's Oral Health. November 14, 2014.

² US Centers for Disease Control and Prevention, Oral Health Program, Strategic Plan for 2011-2014.

³ US Centers for Disease Control and Prevention. Dental Caries and Tooth Loss in Adults in the US, 2011-12. May 2015.

Tooth Decay is Considered an Infectious Process

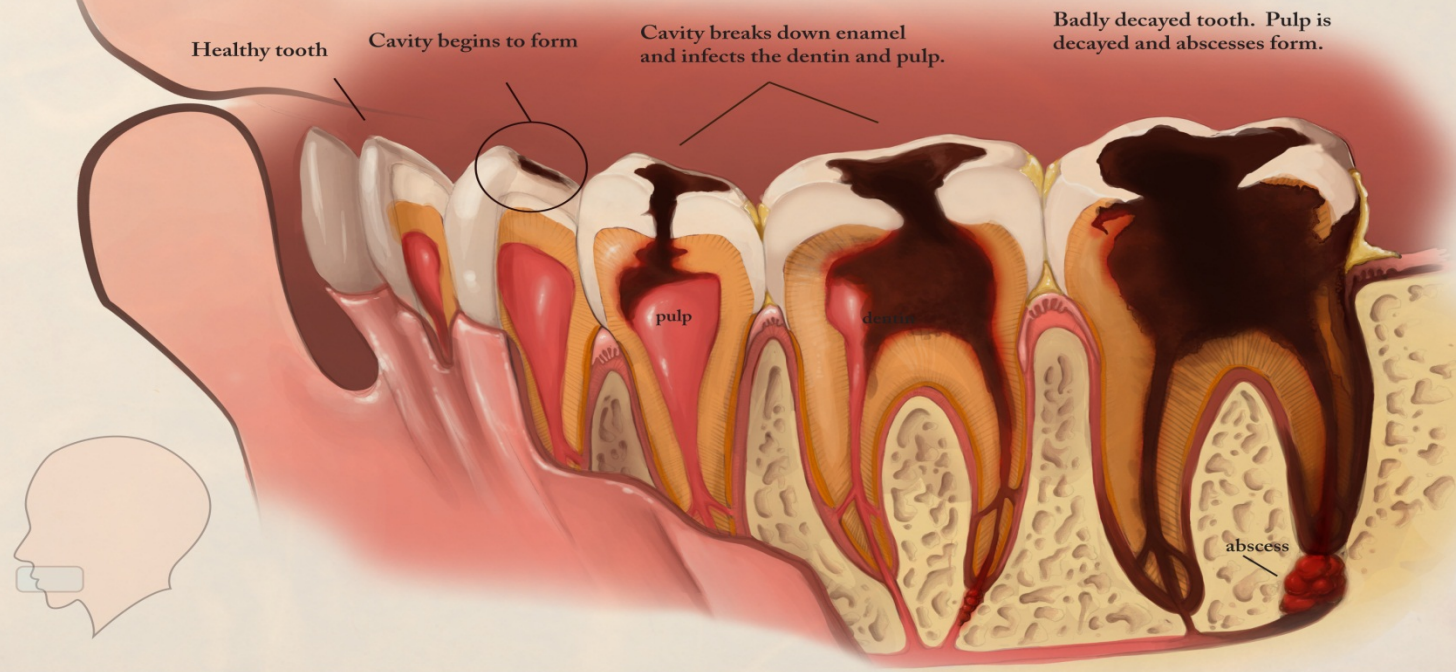
- Bacteria convert sugars to acids
- Can be spread vertically from parent to child
- Horizontal spread also possible
- Colonization typically occurs at early age



And It Ultimately Progresses

TOOTH DECAY

Tooth decay is a degenerative oral health condition that results from the breakdown of tooth enamel. The destruction of tooth structure associated with decay can lead to the development of holes in the teeth, more commonly referred to as cavities.



Multiple Factors Contribute to Decay

THE CARIES BALANCE

Disease Causing Factors

BAD disease-causing factors include the following:

Bad Bacteria – Acid-producing Bad bacteria

Absence of Saliva – The Absence of healthy salivary function (for example, dry mouth)

Dietary Habits (Poor) – Frequent sugars and acids lead to de-mineralization and a low pH allowing bad bacteria to thrive starting the decay process

Protective Factors

SAFE protective factors include the following:

Saliva and Sealants – Saliva neutralizes acid encouraging good bacteria to thrive and aids re-mineralization. Sealants seal the chewing surfaces of the teeth most likely to decay

Antimicrobials – Helping rid the bad bacteria and establish health-promoting bacteria

Fluoride – Strengthening the tooth surfaces against demineralization promoting re-mineralization

Effective Diet – Consuming a healthy diet



**Tooth
Decay**



**Healthy
Tooth**

Early Childhood Tooth Decay



Early Childhood Cavity Prevention



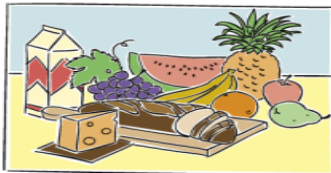
PREVENTING BABY BOTTLE TOOTH DECAY OR EARLY CHILDHOOD CARIES



Never put a baby to bed with a bottle, unless it has only water in it.



Introduce a feeding cup between ages 6 and 8 months. Use a regular cup (no sippy cups).



Limit sweet, sticky, starchy snacks. Snacks like cheese, plain yogurt, whole grain cereals or breads, fruits and vegetables are better.



Wean from the bottle by the first birthday.



Start cleaning teeth as soon as the first teeth erupt. Clean the mouth, gums and teeth at least daily.



Encourage children to drink water rather than fruit juices or sweet drinks when thirsty.

Prevention – Children and Adults



Healthy Smiles

Tooth decay

is the most common childhood disease in the United States.



Prevention
starts at birth



- › Don't put your baby to bed with a bottle of milk or juice.
- › Start brushing when baby's first tooth comes in.
- › Use a smear (size of a grain of rice) of fluoride toothpaste.



- › Watch as your child brushes twice daily.
- › After age 3, use a pea-size amount of fluoride toothpaste.
- › Ask your baby's doctor about fluoride varnish.



- › Make sure your child brushes twice daily with fluoride toothpaste.
- › Over-the-counter fluoride rinses are not recommended for kids under age 6.
- › Your child should floss at least once a day.
- › Visit the pediatrician and dentist each year.

Infant Oral Healthcare Utilization

- **Dental exams recommended for children <3 years of age**
 - Should occur at first tooth eruption or age 12 months, whichever comes first
 - Exams should occur every 6 months or on interval established by dentist
 - Children should receive a fluoride varnish every 3-6 months (as recommended by dentist)



What About Home Fluoride?

- “Smear” of toothpaste for children <3 years
- Pea-size amount for children 3-6 years of age
- Don’t let child use fluoride rinse until he/she can spit it out.
- Be aware of fluoride in water (0.7 ppm in DC)

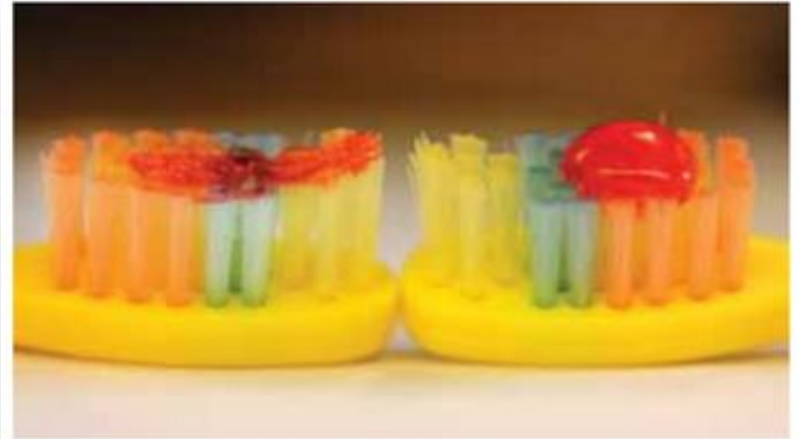


Figure. The toothbrush on the left shows a smear of toothpaste (0.1 milligram of fluoride) and the one on the right a pea-sized amount (0.25 mg of fluoride).

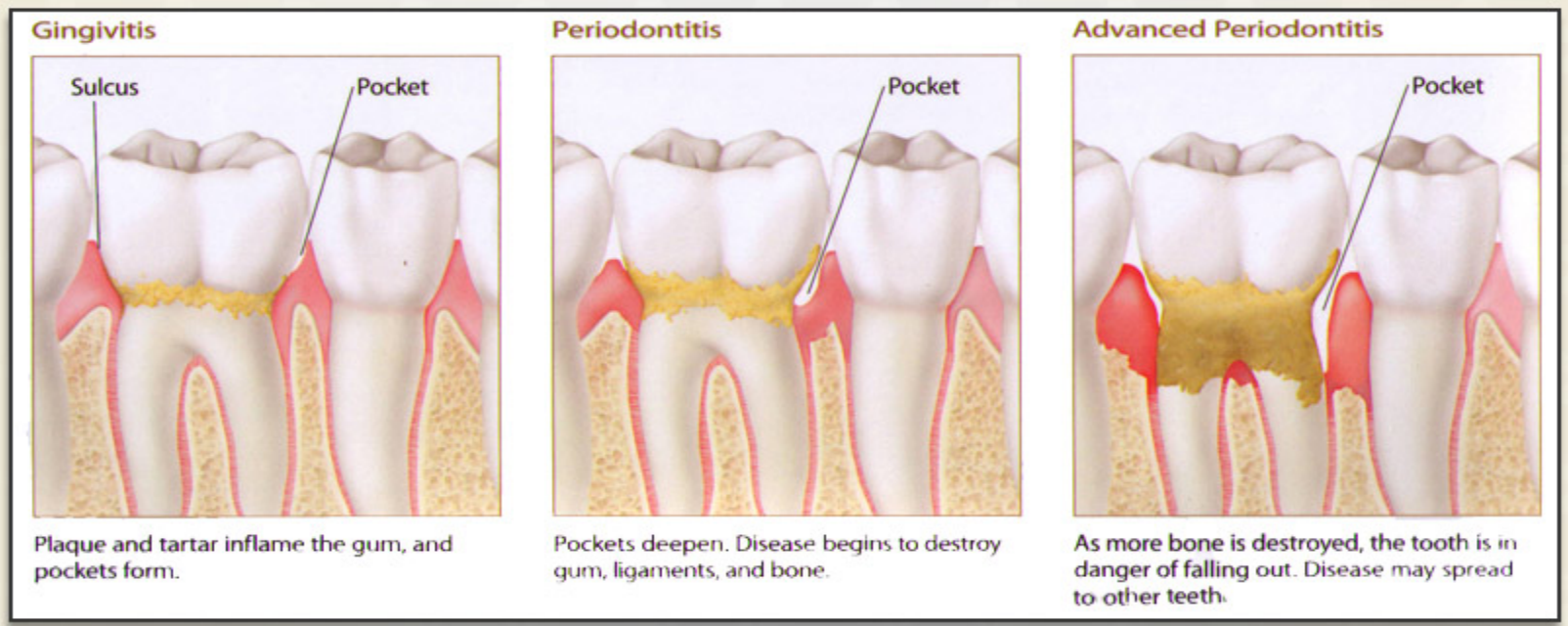


Managing Teething

- Bottles and cups are not an appropriate strategy for pacification
- **Alternative Actions**
 - Try to determine what is making the child fussy and address this.
 - Consider pacifiers – Do not dip in sugar or honey.
 - For teething, use refrigerated pacifier or refrigerated washcloth soaked in chamomile tea.
 - Advise avoiding OTC remedies



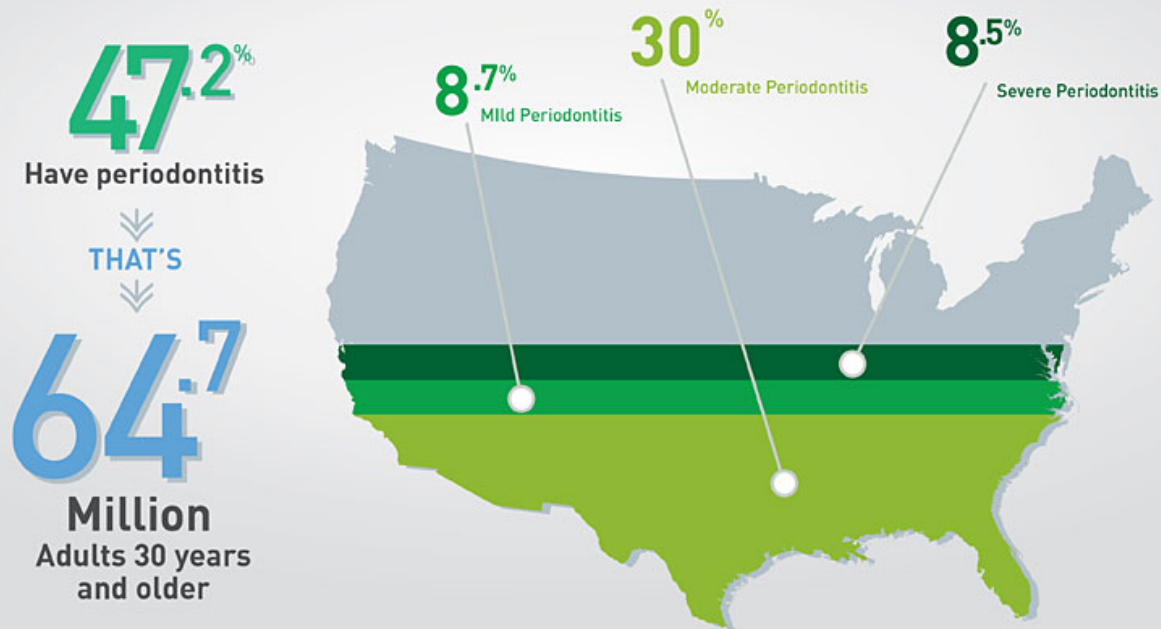
Gingival (Gum) Diseases



Key Health Issue Among Adults

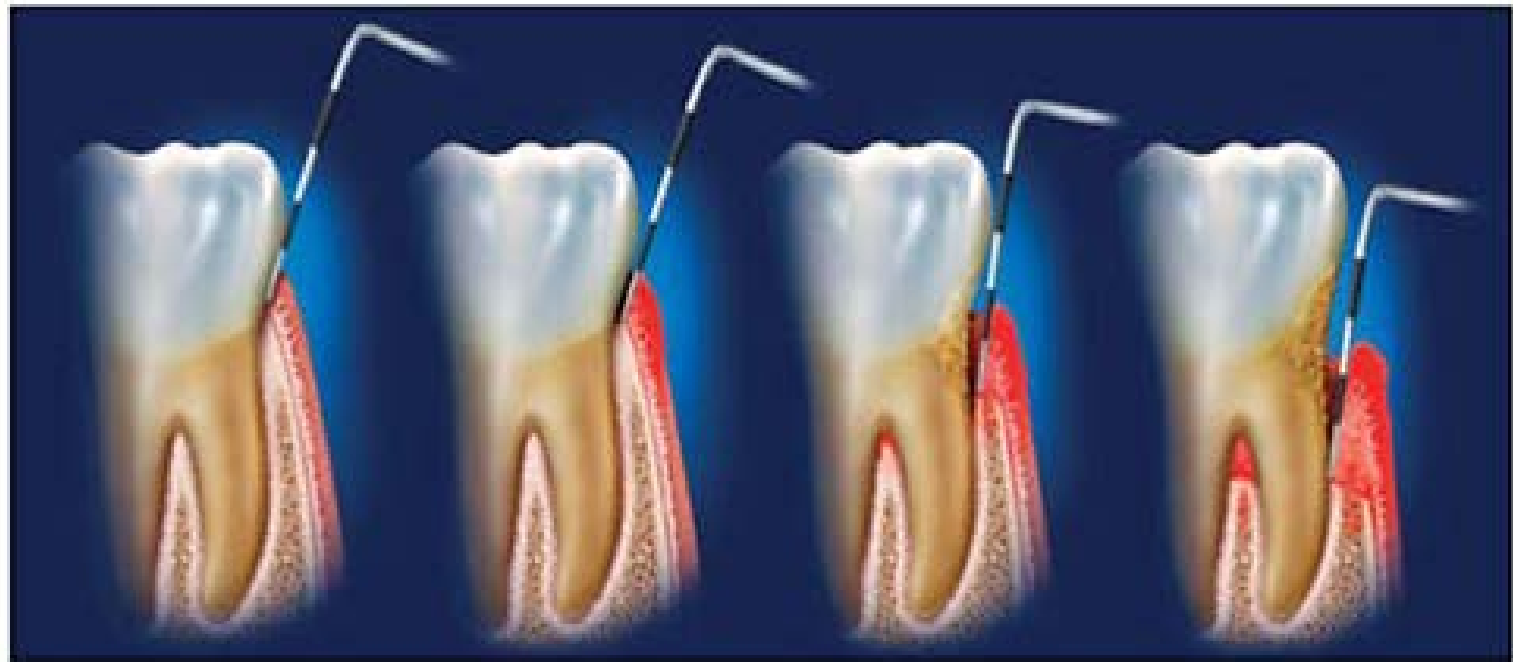
* THE AMERICAN ACADEMY OF PERIODONTOLOGY WARNS OF A SIGNIFICANT PUBLIC HEALTH PROBLEM

HALF OF AMERICAN ADULTS SUFFER FROM GUM DISEASE



*SOURCE: P.I. Eke, B.A. Dye, L. Wei, G.O. Thornton-Evans, and R.J. Genco. Prevalence of Periodontitis in Adults in the United States: 2009 and 2010. J DENT RES 0022034512457373, first published on August 30, 2012 as doi:10.1177/0022034512457373

Can Progress and Cause Destruction

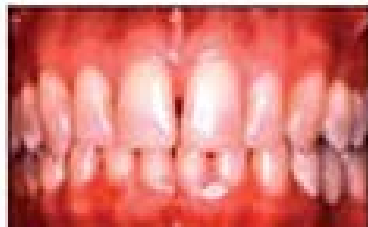


A.
Healthy Periodontium

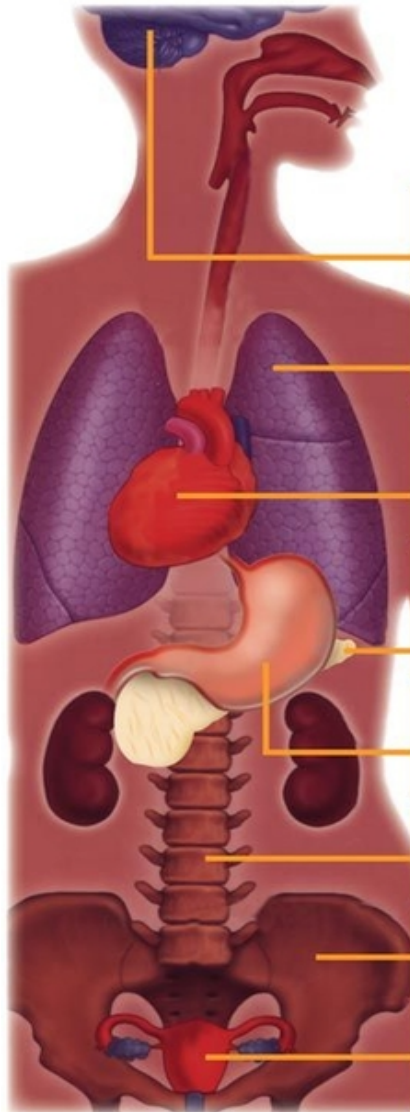
B.
Gingivitis

C.
Slight to Moderate
Chronic Periodontitis

D.
Advanced
Chronic Periodontitis



May Also Affect General Health



Gum Disease Can Kill More Than Your Smile

Bacteria that builds up between the tooth and gum can enter into the bloodstream whenever your gums bleed. This bacteria can travel throughout the body and cause serious health problems.

STROKE

A new study of fatty deposits lodged in the carotid arteries of stroke sufferers shows that up to 40% of the bacteria that cause the fatty deposits comes from the mouth if the gums are inflamed.

RESPIRATORY DISEASE (3rd most common cause of death)

Dental plaque harbors a high number of respiratory pathogens that can be aspirated and, in turn, increase the risk in susceptible patients for pneumonia, emphysema and chronic obstructive lung disease.

HEART DISEASE

Bacteria from the mouth can get into the bloodstream when the gums are inflamed. This bacteria can get mixed up with blood-clotting cells called platelets. These clumps of cells and bacteria can lodge inside the walls of the blood vessels, causing heart-stopping clots to form. These clots are what lead to heart disease. Keeping your gums healthy can reduce your risk of a heart attack.

DIABETES (pancreas)

The presence of any gum inflammation can make it much more difficult for a diabetic to control their blood sugar. Elimination of any gum inflammation can directly improve diabetic control. A study of 48,000 men (Health Professionals Study 1986–2002) found that men who had periodontal disease had a 63% higher risk of developing pancreatic cancer than men with healthy gums.

ULCERS (stomach)

The bacteria that collect in your mouth when gum disease is present are the same bacteria that cause gastric ulcers. If the bacterial count in the mouth is high these bacteria can be constantly travelling to the stomach, re-infecting and causing a return of ulcers.

OSTEOPOROSIS

Periodontal disease may play a role in promoting osteoporosis. With tooth loss there is a decrease in proper digestion, nutrition and calcium uptake.

ARTHRITIS

There is a strong relationship between the extent and severity of periodontal disease and Rheumatoid Arthritis.

PRE-TERM BIRTHS

Women with gum disease are seven to eight times more likely to give birth prematurely to low birth weight babies. Researchers believe that the low grade gum inflammation causes the body to release inflammatory chemicals which are linked to pre-term birth.

Risk Factors

A MOUTH FULL OF RISK



POOR HYGIENE: BACTERIA AND PLAQUE BUILD UP WITHOUT PROPER BRUSHING AND FLOSSING.

SMOKING: SMOKERS ARE 4 X'S MORE LIKELY TO DEVELOP ADVANCED GUM DISEASE.



AGE: MORE THAN HALF OF ADULTS 35-69 SHOW SIGNS SURROUNDING 3 OR 4 TEETH.

GENDER: FEMALE HORMONAL CHANGES CAN AFFECT GUM TISSUE.



GENETICS: IF YOUR PARENTS HAD GUM DISEASE, YOU'RE 12 X'S MORE LIKELY TO HOST THE BACTERIA THAT CAUSES GUM DISEASE.



WARNING SIGNS

- CHRONIC BAD BREATH • RED, SWOLLEN AND/OR BLEEDING GUMS
- PAINFUL CHEWING • LOOSE OR SENSITIVE TEETH
- SENSITIVE OR RECEDING GUMS



Visit your dentist or periodontist
for a complete evaluation



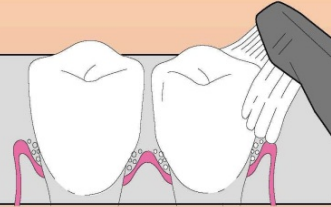
Join the fight against gum disease at
facebook.com/fightgumdisease and twitter.com/fightgumdisease
For more info, visit: www.fightgumdisease.org

Gum Disease Prevention

5 Steps to Prevention

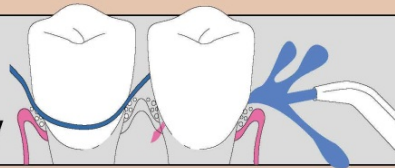
1

Brush
Your Teeth **2x** daily



2

Floss
Your Teeth **1x** daily



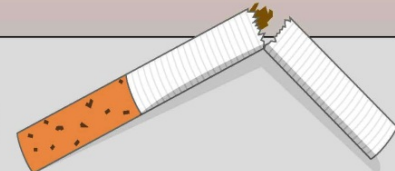
3

Visit
Your Dentist **2x** yearly



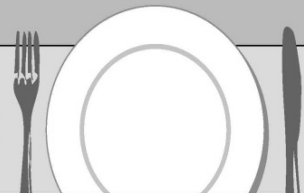
4

Avoid Smoking
& Smokless Tobacco



5

Eat a Balanced Diet
Containing Vitamin C, A, & E

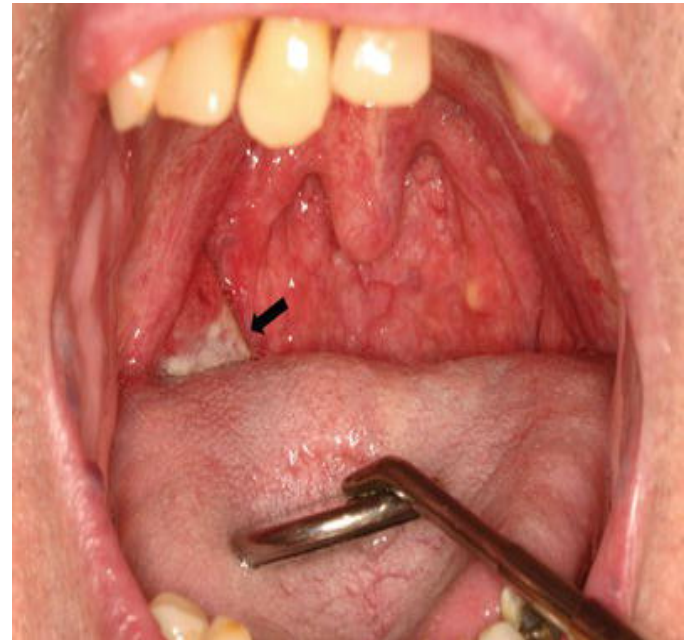


Treatment – Scaling and Root Planing (“Deep Cleanings”)

- Aid in removing tartar
 - Reduce bacterial burden
 - Aid gums in healing
- Regular checkups and maintenance are needed
- Additional treatments, such as surgery, can be needed



Oral and Pharyngeal Cancers




Oral and pharyngeal cancers are increasing among young adults



You thought oral cancer was just an older man's disease. Not always.

Oral cancer is rising in women, young people and non-smokers. Testing is now painless. Early detection saves lives.

ADA
American Dental Association
www.ada.org
© 2011 American Dental Association



It's tiny now. Don't let it grow up to be oral cancer.

Oral cancer facts you may not know

- Kills more people nationwide than cervical cancer or melanoma (skin cancer)
- Often starts as a tiny, unnoticed, white or red spot or sore anywhere in the mouth
- Over 25% of victims do not smoke, and have no other risk factors

See your dentist. Testing is now painless.

ADA
American Dental Association
www.ada.org
© 2011 American Dental Association

Unfortunately, It's Often Detected Late



<https://www.youtube.com/watch?v=xtG8LcGv3Zw>

An Early Oral Cancer Lesion



Early Stage
Squamous Cell Carcinoma

Photo by Michael Kahn, DDS, Oral Pathologist, Tufts University, School of Dental Medicine

Prevention and Treatment

- Prevention: Receiving regular dental exams
- Early lesions may be removed and monitored
- Advanced lesions typically require intensive treatment
 - Require aggressive surgical treatment
 - Typically require radiation and chemo

If you do get HPV-related oral or throat cancer, there are treatment options

If you do get HPV-related oral or throat cancer, there are treatment options including **surgery**. Select facilities throughout the country are using new, minimally invasive robotics, which reduce scarring and side effects.

Other treatments include **radiation therapy** and/or **chemotherapy**.

As with any treatment plan, early detection is key.

If you have any of the symptoms of throat or oral cancer, use tobacco and alcohol regularly, and have five or more sexual partners, talk to your doctor.

The infographic features an illustration of three surgeons in an operating room, a patient lying on a table with a robotic surgical arm, and several medicine bottles and a syringe.

Signs and Symptoms of Oropharyngeal Cancer

A lump or thickening in the oral soft tissues, lips, or head/neck region

Sore or difficulty in chewing or swallowing

Ear pain

Difficulty in moving the jaw or tongue

Hoarseness

Numbness of the tongue or other areas of the mouth

Swelling of the jaws that causes dentures to fit poorly or become uncomfortable

Repeated bleeding from the mouth or throat

Taste change

Change in bite or fit of teeth

Red, white, or discolored lesions in the mouth or on the lips

Loose tooth or teeth

Chronic cough

Dry mouth

Speech changes

Symptoms potentially related to a tumor elsewhere (e.g. breast lumps, impaired urination, blood in urine or stool, etc.)

Mouth and Face Injuries



Oral Injuries

- Young children are susceptible to oral and facial injuries
 - Motor skills are developing
 - Tendency for “exploring” environment
- Children with protrusive maxillae (upper jaws) have higher risk of tooth injury
- Prevention: Follow general safety precautions



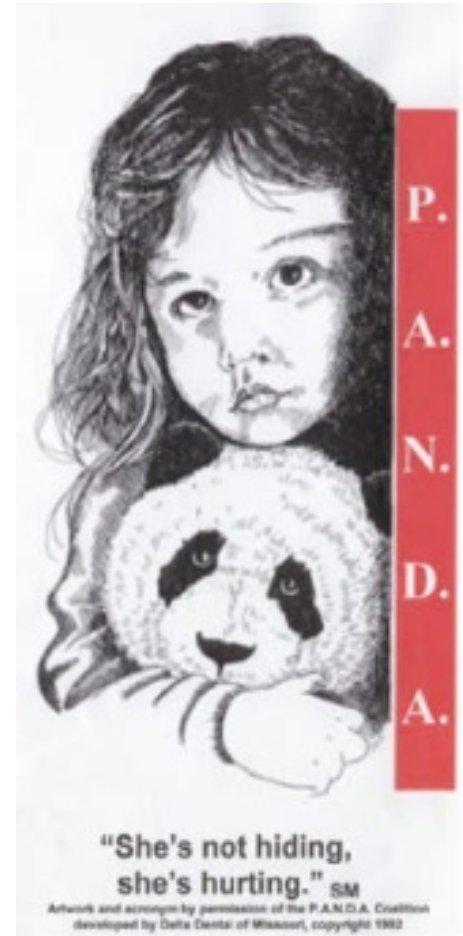
Prevention – Older Children and Adults

- Again, general safety precautions
 - Avoiding horseplay
 - Seat belts
 - Adult supervision of sports
- Protective equipment
 - Helmets
 - Custom Sports Mouthguards



Oral Injuries and Abuse

- Oral conditions are a potential sign of physical abuse
 - Lips are most common site for injury (54%)
 - Discolored/dark teeth suggest previous trauma
- Untreated dental conditions may signify neglect
 - Untreated, rampant decay and/or other conditions
 - Untreated trauma
 - Willful failure to follow through on treatment
- Child care workers are mandated reporters



Step 2: Identify Families that May Not Be Utilizing Oral Health Services



Role as a “Front Line” Stakeholder

- You are a key “force multiplier” in advocating oral health to families
 - Regularly encounter individuals that are at a high risk for oral diseases
 - Observe complications of untreated conditions
 - Information resource



Be an Oral Health Champion

As you interact with children, you can change their lives in important ways. One of the ways that you can help them the most is by teaching them about good oral health.

Here are some ideas on how you can help:

- Teach children about nutrition. Children need to eat healthy food every day. Foods high in sugar should not be eaten often.
- Encourage children to drink water during the day, especially between meals or snacks.
- Be aware that tooth decay is caused by bacteria that can be passed from one person to another. Bacteria can be spread when children share food, lick pencils or other objects, or put toys in their mouths.
- Reward children with stickers, words of praise, or fun activities instead of food.
- Be a good role model. Let children see you drinking water or milk and eating healthy snacks.
- Help children brush their teeth with fluoridated toothpaste twice a day. Praise them for brushing.

You can make a big difference in children's lives—now and in the future!

Lucy H. Park, 2010, Ph.D., Oral Care Specialist, Washington, DC
National Maternal and Child Oral Health Resource Center
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Washington, DC 20017-0175
2022, 2017, 2014, 2012, 2010, 2009
E-mail: CMOHC@oralhealth.gov
Web site: <http://www.oralhealth.gov>

High Risk Groups

- Women, children, and caregivers with active dental disease (such as untreated decay or gum disease)
- Individuals in low-income families
- Children who receive more than three “between meal” foods or beverages with sugar
- Children who are sent to bed with a sippy cup or bottle containing sugary beverages
- Children and adults with special health care needs
- Recent immigrants
- Children and adults with “white spots” on their teeth
- Individuals with visible cavities, fillings, crowns, etc.

Perinatal Oral Healthcare

- Oral healthcare under-utilized among pregnant women and young children
- Missing key opportunity for early intervention
 - Child's tooth decay risk established before age 2
- **Misinformation exists regarding safety of dental care during pregnancy and early childhood**



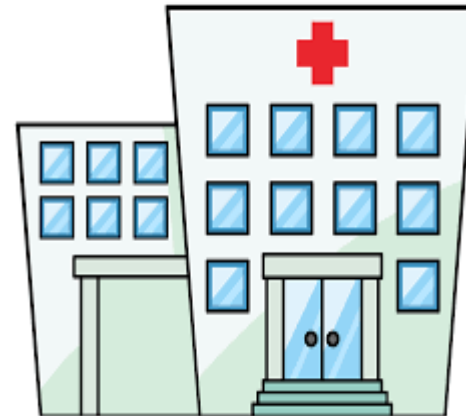
Continuous Reinforcement



Step 3: Know Your Resources and Have a Strategy for Connecting and Engaging People



DC Has an Array of Dental Resources



Build Partnership With Providers

- “Adopt” healthcare providers
 - Family Physician
 - Pediatrician
 - Dentist
 - Include staff as well!
- Meet providers and invite them to school or organization
 - Doctors or staff may offer education sessions
- Community Health Centers are good options



Increasing Engagement

- Ask about oral health
 - Driven by specific circumstances (school performance, visible decay, etc.)
 - Can ask around administrative events (e.g. school registration)
 - Also ask when counseling or teaching parent about child and self care (e.g. nutrition, hygiene, etc.)
 - Ask when you notice acquaintance that might be experiencing condition



Making Referrals Work

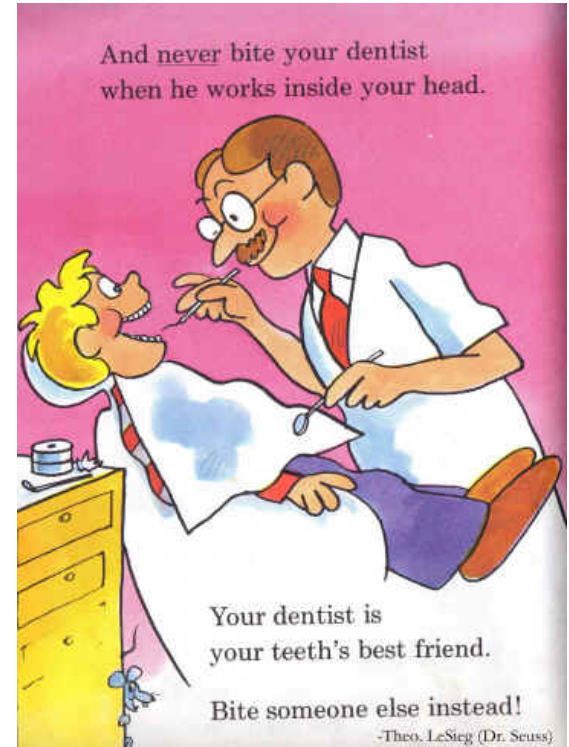
“Case Management” is critical

- Passive referrals not always acted upon
- Ensure that clients connect with dentist on referral day
 - Offer assistance in making appointment
 - If self-initiated, follow-up
- Aid clients in completing Medicaid registration, locating clinics, etc.



Addressing Dental Visit Fears

- Dental visits should be positive and non-threatening
- Both parent and child fears should be actively addressed
 - Appropriate storybooks for children
 - Talking to others who have been
 - Desensitization visits
- Procedures should be explained in plain language



What About Dental Care During Pregnancy?

- Most routine procedures can be performed
 - Dental examinations
 - **Dental x-rays (using lead apron)**
 - Routine fillings and extractions
 - Root Canals
- Major elective procedures should be deferred
- Tetracycline, nitrous oxide, and codeine should be avoided



Exercise: How Might You Engage Someone?

- Scenario One: You note a child who is not concentrating in class and has halitosis (“bad breath”)
- Scenario Two: One of your regular school volunteers has a swollen face and mentions having felt “run down” for past 5 days
- Scenario Three: You are counseling a new mother on nutrition for herself and her infant

DC Medicaid



DCHealthySMILES

District of Columbia Department of Health Care Finance (DHCF)

Free Dental Services for Children and Adults

Call to Make an Appointment for

Free Dental Services Today!

Toll-free: 1-866-758-6807

TTY: 1-877-672-7638

- 2 Dental Examinations/Cleanings Per Year
- X-Rays • Surgical Services • Fillings/Sealants
- Fluoride Treatment • Dentures

- At minimum, Medicaid dental benefit for children must include procedures that
 - ✓ Relieve pain and infections
 - ✓ Restore teeth
 - ✓ Maintain dental health
- Adult Medicaid services in DC are similar
 - Cover preventive care and restorative dentistry



Medicaid Transportation Benefit

From Department of Health Care Finance website (<https://www.dc-medicaid.com/dcwebportal/providerSpecificInformation/recipientFaqs>)

4. Will Medicaid transport a recipient and their children to the doctor?

Medicaid will provide non-emergency transportation services to Medicaid eligible beneficiaries that have appointments with Medicaid providers. You must contact MTM at 1-866-796-0601 or (202) 263-4640 (DC Office) 72 hours in advance of your scheduled appointment to arrange transportation to your medical appointment.

“Being able to get to a doctor” is one of the key reasons that eligible beneficiaries don’t utilize care – Make sure that you clients understand that transportation options are available!

Don't Forget About Your Neighbors!

- Many individuals and organizations are stakeholders
 - Business Owners
 - Faith Leaders
 - Parents and Grandparents
 - Caretakers
 - Other Educators
- Can spread oral health knowledge by word-of-mouth
- Aid grassroots efforts and projects



Consumer Dental Information

- Key Websites Sites I Recommend:
 - American Dental Association’s “Mouth Healthy” website – www.MouthHealthy.org
 - Academy of General Dentistry “Know Your Teeth” – www.knowyourteeth.com
 - American Academy of Pediatric Dentistry – www.mychildrensteeth.org
 - National Institutes of Health Oral Health Information - <http://www.nidcr.nih.gov/OralHealth/>

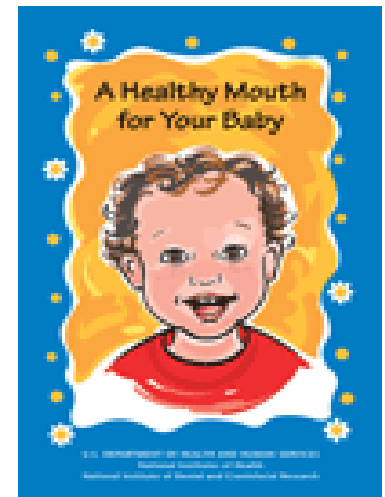
Additional Resources

- National Maternal and Child Oral Health Resource Center at Georgetown Univ.

www.mchoralhealth.org

- National Institutes of Health
Institute of Dental and
Craniofacial Research (NIDCR)

<http://www.nidcr.nih.gov/oralhealth/>



Remember: YOU are a key “Force Multiplier” in Conveying the Oral Health Message!



Be an 
**Oral Health
Champion**

Questions?

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