



Creating SMILES of a Lifetime!



Learning objectives

- Upon completion of this module, trainees will:
1. Understand the AbCd MT program goals, components, and services
 2. Be able to provide a caries risk assessment, oral health anticipatory guidance, including appropriate nutritional messages
 3. Demonstrate the knee-to-knee exam and fluoride varnish application (dentist and medical providers only)



Learning objectives

4. Build a dental-primary care relationship for oral health and preventive care
5. Be familiar with Early Childhood Caries
 - A. Understand the caries process and early childhood caries
 - B. Recognize caries on an oral exam
 - C. Be able to assess the risk of developing caries



The caries epidemic

In 2000, the first Surgeon General's report on oral health identified:

- Dental and oral disease as a “silent epidemic”
- The mouth is the “mirror for general health”
- “To ignore oral health problems can lead to needless pain and suffering, complications that can devastate well-being, and financial and social costs that significantly diminish quality of life and burden American society,”

Oral Health in America:
A Report of the
Surgeon General



Department of Health and Human Services



Deamonte Driver

12 Years Old



Died
February 25, 2007



Caries and children

Though caries is nearly completely preventable:



It is the single most common childhood chronic disease affecting 58% of children

It is 5-8 times more common than asthma

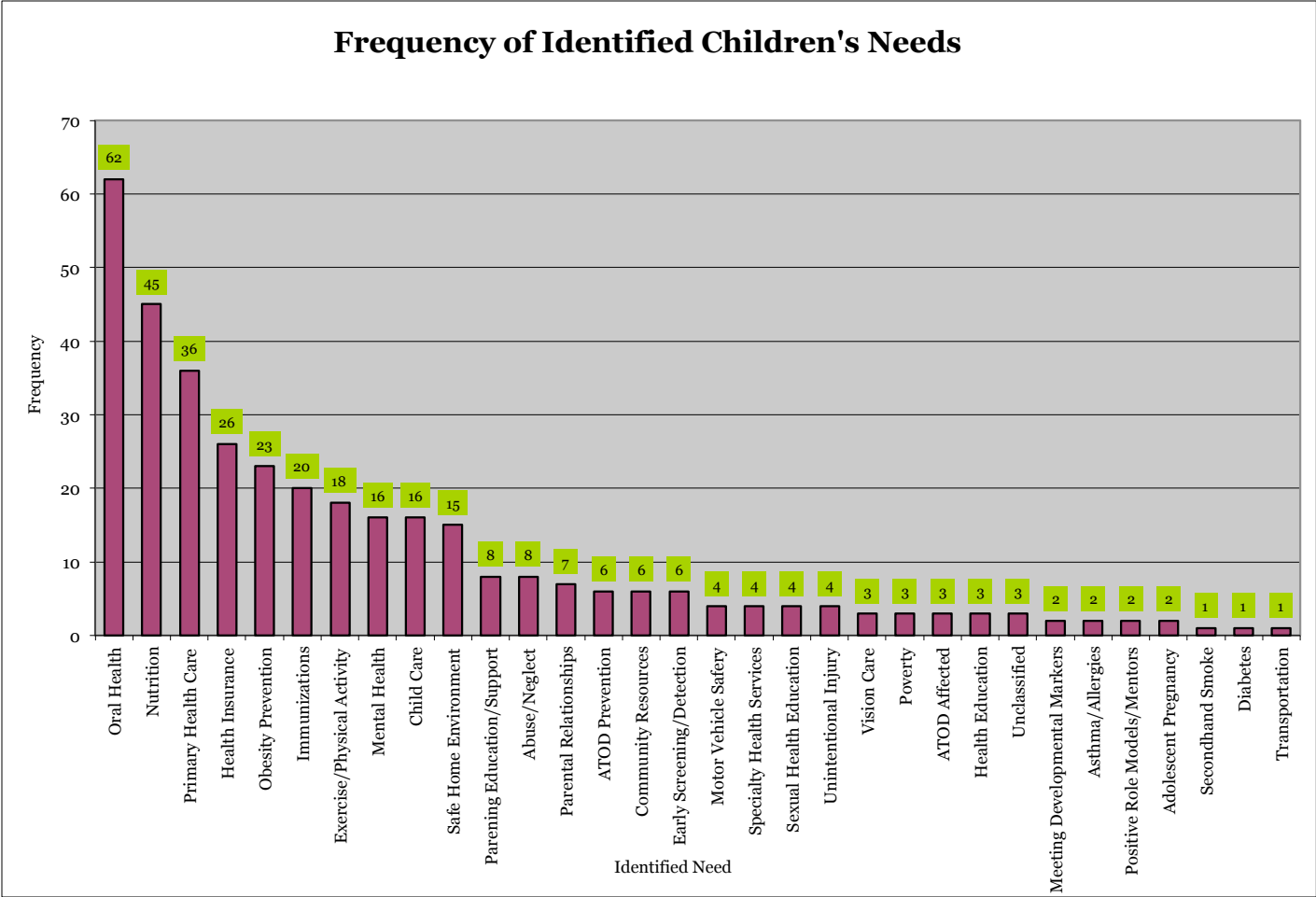
It is the most prevalent unmet health care need in US children

(NIH 2000)



Status of children's oral health in Montana

2008 Montana Preliminary Needs Assessment





Early Childhood Caries (ECC)

- Virulent form of caries that impacts very young children
- Infection is established as an infant





“What’s the big deal? Aren’t they just baby teeth?”



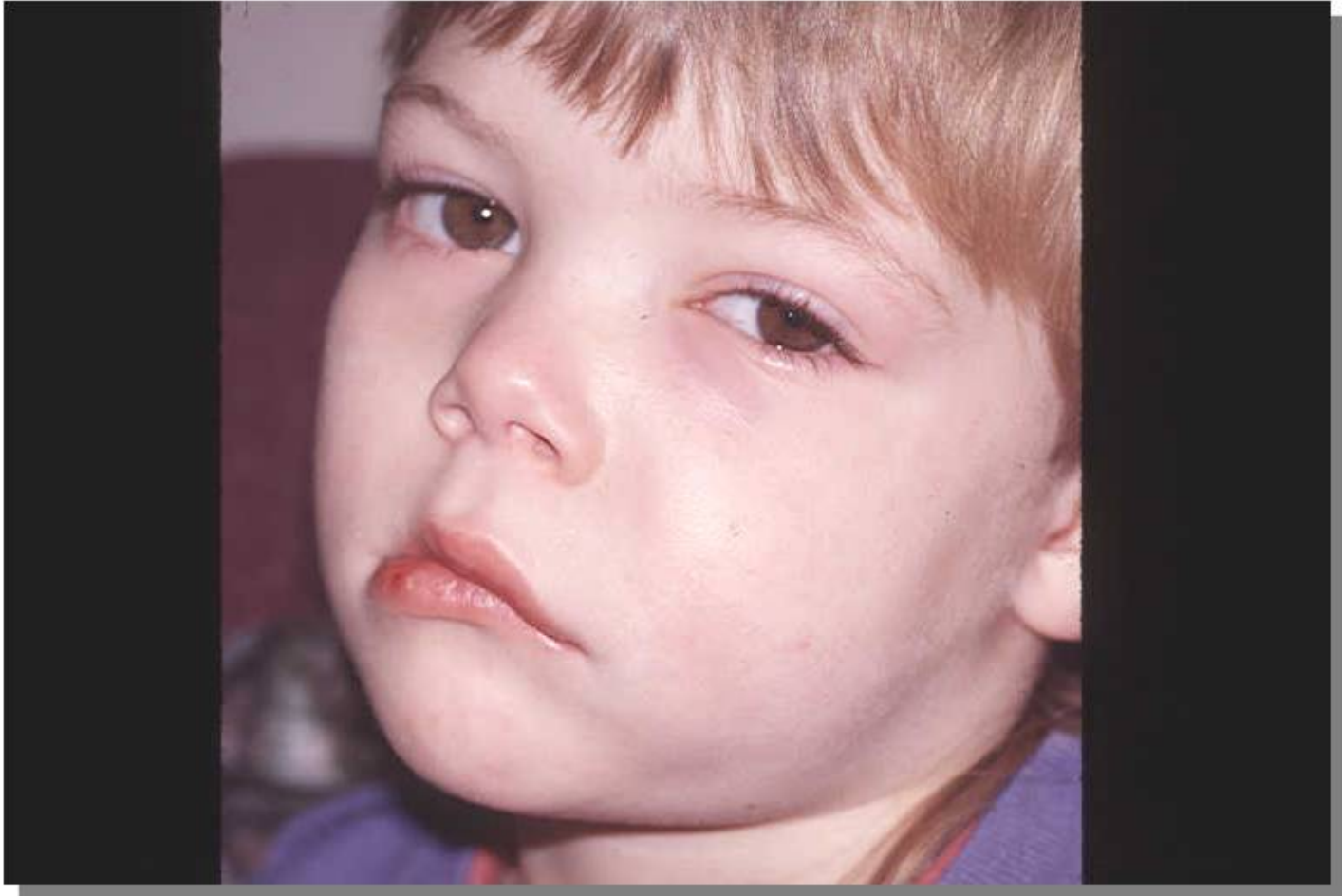


The painful truth

- Primary teeth are important for eating, smiling, speaking, good self esteem, healthy adult teeth and good general health (NIH 2000)
- Know one knows the true impact living in constant pain can have on the growth and development of a child
- Approximately 51,679,100 million school hours are missed annually by school-aged children due to a dental problem or visits, with 117 hours missed per 100 children (Gift 1992)
- Pain and infection due to caries can lead to
 - Failure to thrive
 - Poor self esteem
 - Lost school hours
 - Spread of the infection to other organs
 - Death



ECC impacts many Montana children







Learning Objective # 1

ABCD Program





Our Vision

Through AbCd Montana, the MDA has a vision that *more* of Montana's children will receive *increased* comprehensive dental care at an *earlier* age thereby **reducing disease and suffering and improving quality of life.**



Program partners

- Montana Dental Association
- The Maternal and Child Health Bureau
- The Office of Medicaid
- The Montana Primary Care Association
- Health and Recovery Services Administration (HRSA)
- Local Health Jurisdictions
- Local Dental Societies
- University of Washington, Department of Pediatric Dentistry



Program goals

- Provide a “dental home” for Montana’s vulnerable children
- Reduce the extent of disparities in oral health for children in Montana
- Decrease dental disease rates by providing Medicaid enrolled children, ages 0 to 5 years, with access to early comprehensive and preventative dental care with a particular emphasis on the **age one dental visit**



Program components

- Outreach to families to reduce barriers to oral health care:
 - transportation services, translator services, enrollment assistance
- Oral health education for dental teams, medical teams, health professional students and other child health advocates
- Enhanced reimbursement for dentists who demonstrate advanced clinical competency and knowledge in caring for very young children
- Reimbursement to medical professionals for fluoride varnish application including risk assessment



Future goals and components

- The measurement of risk-adjusted patient centered health outcomes per dollar spent
- Feedback to providers about provider specific risk-adjusted health outcomes per dollar spent compared to State norms



Why participate in ABCD?

- Establishes dental home
- Reinforces good oral hygiene
- Promotes positive dental visits
- Shortage of pediatric dentists
- Do well by doing good
- The need is too great to ignore



Results – published research

- Children in an ABCD county (Spokane) had experienced better oral health after ABCD began than a non-ABCD county (Pierce) during the same time period. (JADA 9/2005)
- The total average increase in cost/child for ABCD compared favorably with the cost of Medicaid reimbursement for one filling. (JADA 9/2005)
- Medicaid-insured children in a county offering ABCD (Spokane) who were enrolled in the program were five times as likely to have received dental care in the previous year compared to those not enrolled in the program. (Public Health Reports 2000)



Program components

<18 month	>18m and <36m	>36m and < 72m
Caries risk assessment (CRA) Nutritional counseling Oral hygiene instructions Oral evaluation patient < 3 Fluoride varnish	Caries risk assessment (CRA) Nutritional counseling Oral evaluation patient < 3 Fluoride varnish	Child prophylaxis Nutritional counseling Comprehensive Oral evaluation Fluoride varnish
CRA = high risk 6/year	CRA = high risk 6/year	Up to 3/year with approval

\$150.09

\$128.20

\$118.82

A key component is the **Caries Risk Assessment (CRA)** which allows providers to care for high risk children at a more frequent interval.



Caries Risk Assessment

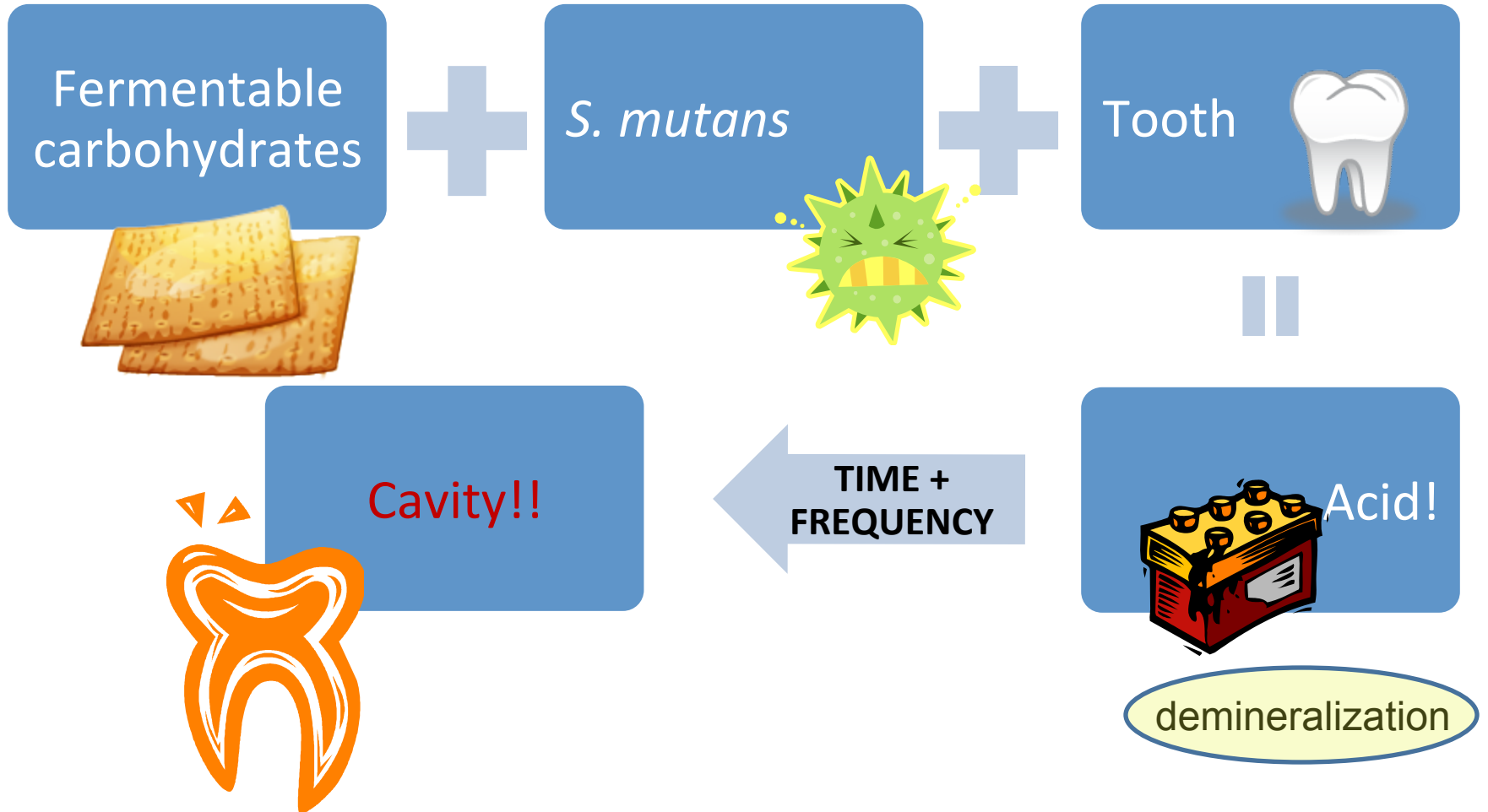
Assessment	Low/Med	High
Primary Caregiver has caries in last 12 months*		
Obvious white spots (enamel caries) on teeth*		
Child has had restorations placed in last 2 years		
Heavy plaque on teeth or bleeding gums		
Child has continual access to a bottle or sippy cup with liquids other than water		
Child has >3/day between meal snacks of sugars/cooked starches/sugared drinks		
Child sleeps with a bottle or sippy cup of a drink other than water		
Low total exposure to topical and systemic fluorides		
Sibling w/ Hx of ECC		
Child is allowed to use the breast as a pacifier		
Child has saliva reducing factors (medications or genetic)		
Child is developmentally disabled		



CRA documentation

- CRA must be completed annually for children under 36 months
- CRA must be retained in the patient chart
- The CRA is what allows a provider to see a child under 36 months 6/year
- A child who is under 36 months may be seen a total of 6/year is high risk
- Providers will receive the enhanced rate for these visits

Formation of caries





Review of the process of caries

- Is an infectious disease
- Is an ongoing chronic disease process (similar to diabetes)
- Is multi-factorial
- The infection of caries can exist when no obvious cavities are present – a cavity is the end point of the disease



Mom's mouth matters!

Moms and babies share 70% identical bacteria!





Vertical transmission

- Caries is most often transmitted by the child's primary caregiver
- Window of infectivity is when the child is 12-30 months of age although there may a second phase during adolescence
- Studies have shown that:
 - 20% of 14 month old infants are infected



Vertical transmission of caries

The *earlier* that cariogenic bacteria occupy ecological niches in the child's mouth the greater the percentage of the child's plaque will be comprised of these bacteria. (Caulfield 1982 & Caulfield 2005)



Horizontal transmission

- May occur within or outside family
- Think of it like you would lice...



Streptococcus Mutans (SM)

- The primary bacterium responsible for decay
- Initiates the carious lesion by producing acid
- Sustains it with acid production

Acid tolerant (aciduric).

- It is able to live in a highly acidic environment
- Many bacteria would die in a pH around 5 or 5.5



Plaque formation

- Begins shortly after a tooth is cleaned
 - Phase I
 - Formation of the pellicle (biofilm)
 - Composed of salivary glycoproteins
 - Forms within 20 minutes of cleaning
 - Precursor of plaque formation
 - Bacteria are attracted and colonize it
 - Colonization
 - Grows in numbers of bacteria and species
 - Adherence of added numbers of bacteria cause the plaque to grow in size and complexity



Plaque Formation

- Dental plaque that is associated with dental disease is different from plaque present in more healthy mouths
- Specifically...
 - Higher numbers of *SM* are associated with higher rates of dental caries and higher numbers of gram-negative bacteria are associated with higher rates of gingival inflammation.



Reducing *SM*

Removal of supragingival plaque deposits
and

Limiting sucrose intake

Promotes the formation of relatively more
gram-positive bacteria over gram-negative
bacteria and increases pH



Saliva

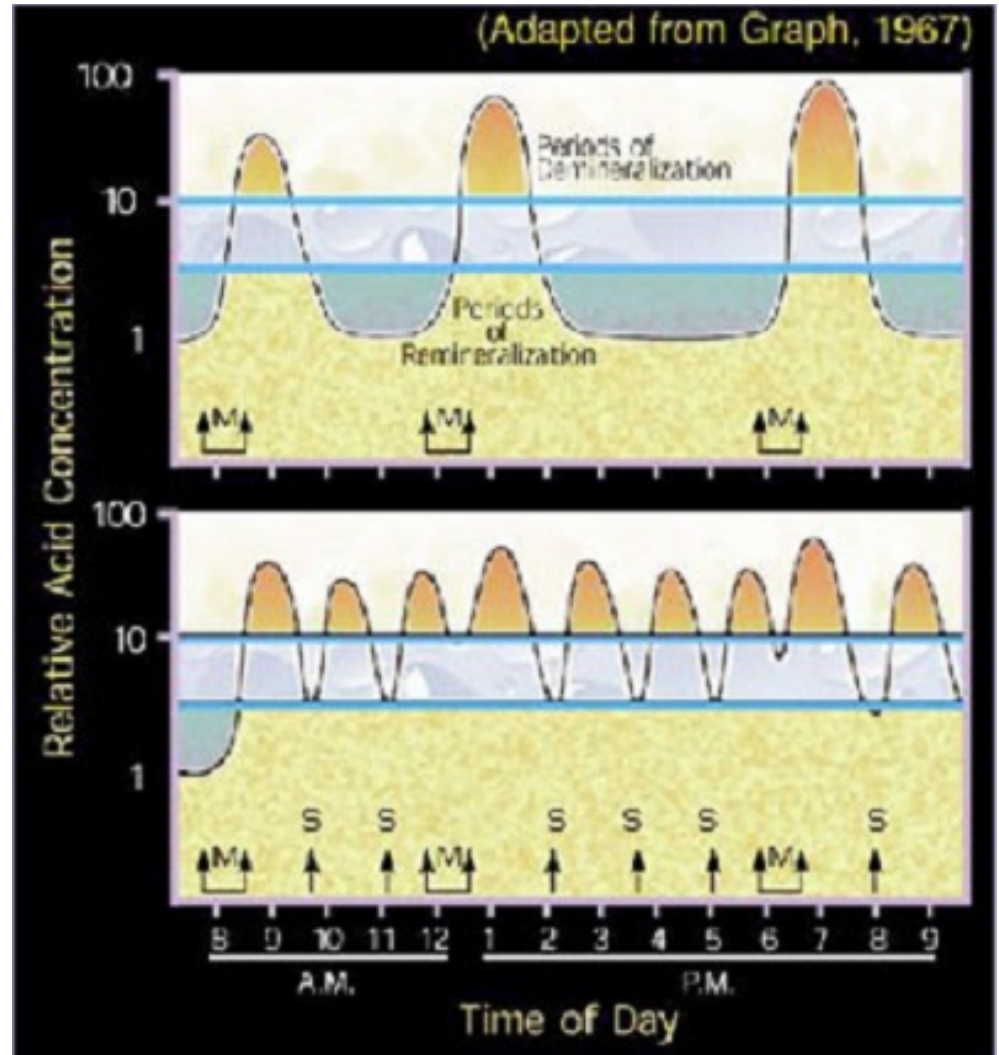
- Buffers and remineralizes areas of demineralization
- Antimicrobial factors and the buffering components of saliva can protect tooth enamel from cariogenic microorganisms



Diet, acid and demineralization

Regular Meals (M)

Regular Meals (M)
plus Sweet Snacks (S)





The Caries Balance

Protective Factors

- Salivary flow & buffering capacity
- Fluoride exposure
- Eating protein foods
- Xylitol, iodine, others?

Pathological Factors

- Acid producing bacteria
- Sub-optimal saliva flow or function
- Frequent eating/drinking of fermentable carbohydrates

remineralization

demineralization

No
Caries

Caries



Early Childhood Caries (ECC)

Early Childhood Caries (ECC) is now the preferred term for the conditions formerly known as:

- Baby bottle tooth decay
- Bottle rot
- Nursing caries





Characteristics of ECC

- Distinctive pattern – usually maxillary anterior teeth first
- Many teeth affected
- Caries develop rapidly
- Caries develop on tooth surfaces normally at low risk
- Primary teeth have a more rapid progression of caries...
 - Lower mineral content
 - Thinner enamel
 - Thinner dentin
 - Pulp larger
 - Flat contacts interproximally make diagnosis harder



ECC: stages

- White Spot Lesions
- Mild
- Moderate
- Severe

ECC: enamel caries



ECC: mild caries



ECC: moderate caries



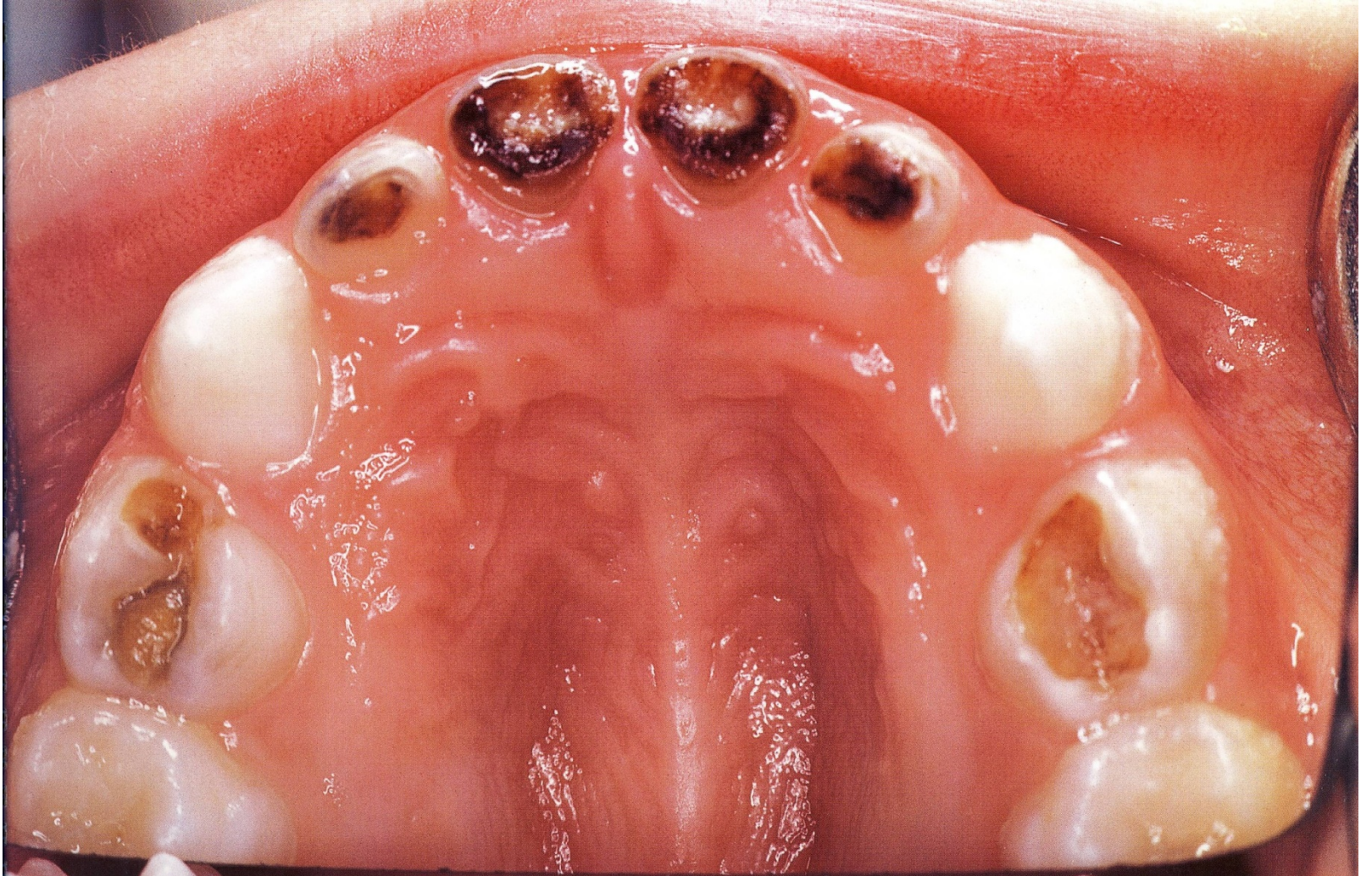
ECC: severe caries

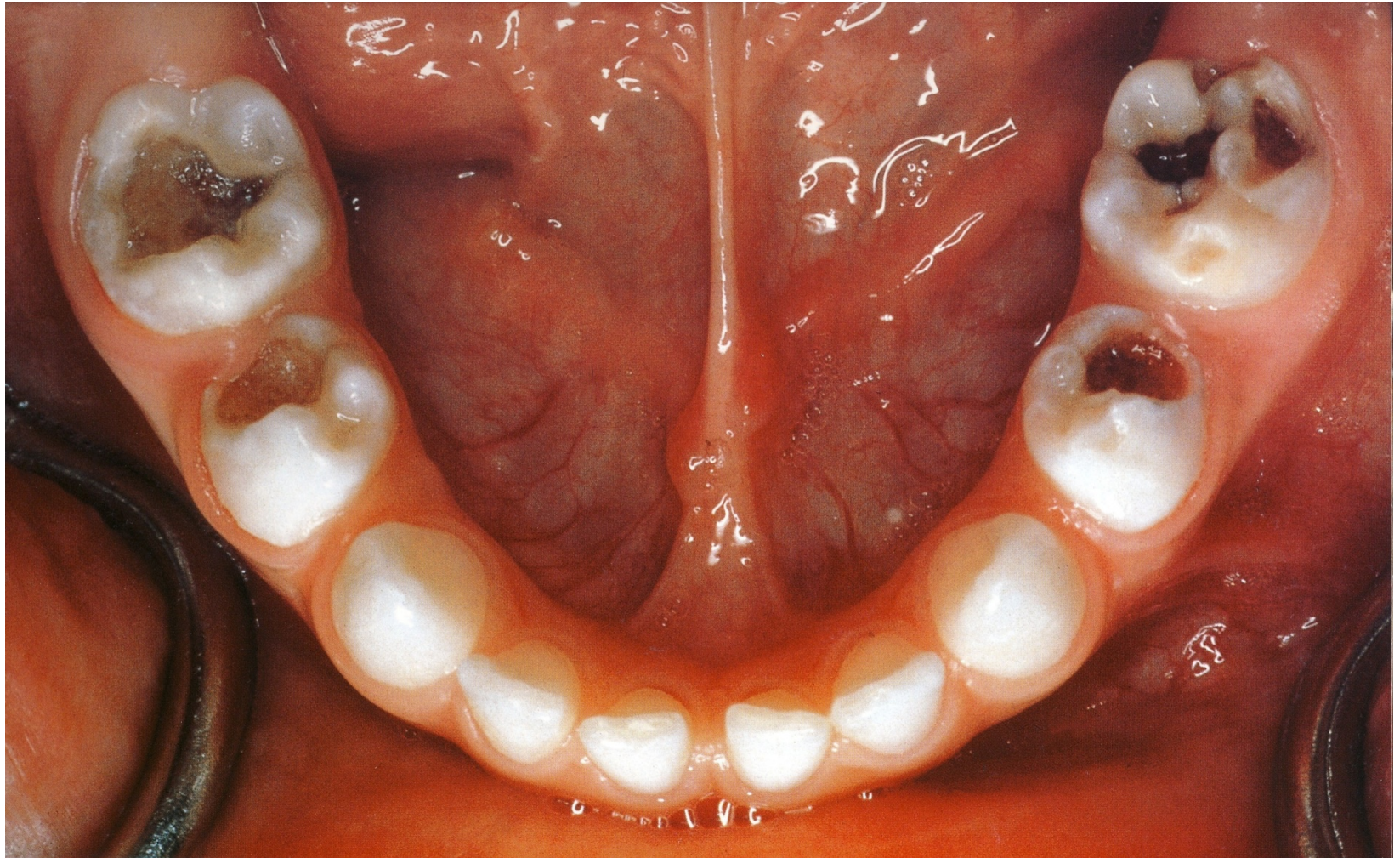




EEC: typical order of decay

- Maxillary anterior teeth
- Maxillary posterior teeth
- Mandibular posterior teeth
- Mandibular anterior teeth









What happens now?

If left untreated

- Painful infection with long term consequences

General anesthesia often needed

- Extent of disease
- Young/immature behavior of child
- Emotionally traumatic for the family
- Expensive \$2000-\$10,000 per case



Risk factors for ECC

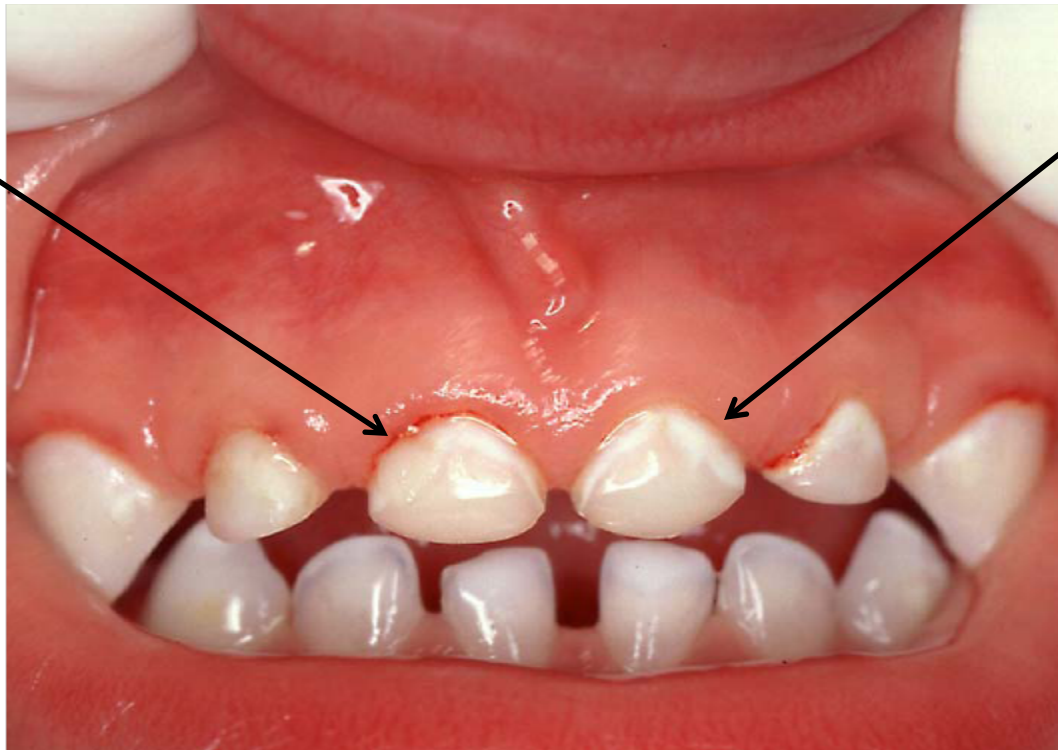
- White spot lesions
- Plaque
- Family history of caries
- Frequent feeding/snacking of fermentable carbohydrates
- Low fluoride exposure
- Enamel defects
- Chronic medical conditions



Enamel caries, plaque and bleeding gums

- Plaque on baby's teeth
- White spots on teeth near gums
- Gums bleed (gingivitis)

Gingivitis =
bleeding
gums



Early caries



White spot lesions

Enamel caries

Begins when pH drops below 5.5

Discernable at the beginning of the process

Takes the shape of the plaque

- May be crescent shaped
- Visible along the crest of the gingival tissue



White spot lesions

- First visible sign of clinical caries
- Phase of pathology immediately prior to actual cavitation
- Sound enamel has a lustrous surface that reflects light
- Plaque causes leaching of the enamel mineral to occur
- Water infiltrates into the demineralized area
- The refractive index of the enamel is changed and these areas appear white



Examining white spot lesions

- Avoid rubbing or probing with explorer
 - Possible to push too hard and crush intact outside enamel layer since there is a subsurface lesion
 - Cariologist recommend against caries detection with explorer due to this
 - Cariologist also recommend against their use due to the possibility of transmitting viable pathogenic microorganisms from one place to another
- Use selectively due to these potential problems

Risk factors: poor oral hygiene



- Teeth covered by plaque is an indicator of poor oral hygiene
- Children with plaque on their teeth are at high risk for decay as plaque contains the bacteria that cause caries



Frequent access to sugary liquids

Bottle propping



Carrying a bottle of juice or milk between meals



Frequent access to sugary snacks





Organic goodness??





Risk factors: lack of fluoride

- Fluoride is an important part of caries prevention because it:
 - Inhibits bacterial metabolism
 - Inhibits demineralization
 - Enhances remineralization



Fluoride

- Systemic
 - Community water sources
 - Supplementation
- Topical
 - Toothpaste
 - Varnish
 - Mouth rinse



Water fluoridation

- Children who do not have fluoridated water in their community may require fluoride supplements
 - In 1992 62% of the U.S. population was served by fluoridated water
 - Healthy People 2010's objective is that 75% of the population be served by fluoridated water



Montana water fluoridation

- Montana remains difficult to fluoridate
- The DEQ fluoridation “map” is on www.BrightSmilesMontana.com



Fluoride supplementation

Age	Fluoride ion level in drinking water		
	<0.3 ppm	0.3-0.6 ppm	>0.6 ppm
Birth - 6 months	None	None	None
6 months - 3 years	0.25 mg/day	None	None
3 - 6 years	0.50 mg/day	0.25 mg/day	None
6 - 16 years	1.0 mg/day	0.50 mg/day	None

Approved by the ADA, AAP, and AAPD

Fluoride toothpaste



- Fluoride containing toothpaste:
- Amount depends on age:
smear, rice-sized or pea-sized
 - Must be a supervised event as
infants and toddlers can't spit



Preventive: professionally applied fluorides

- In the forms of gel, foam, rinse, or varnish
- Can be applied by dentists, dental hygienist and dental assistants during dental visits
- Primary care medical providers can apply fluoride varnish during well-child visits*

*The establishment of a dental home with continuous communication between dental and medical providers is essential



Preventive: fluoride varnish

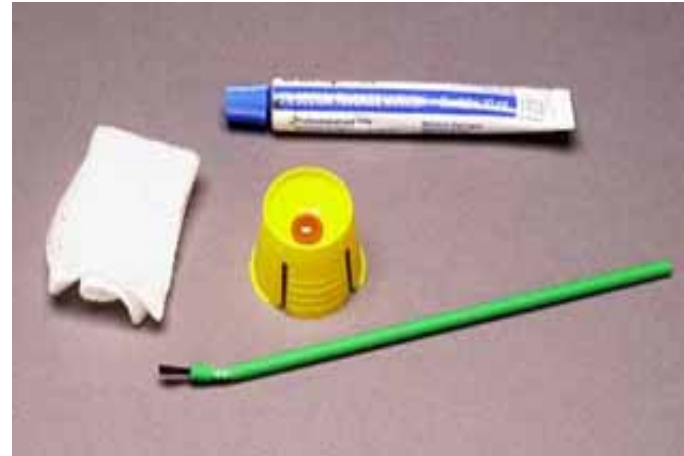
- Children 3 years of age and younger can swallow fluoride gel, foam, and mouth rinse
- Fluoride varnish is the preferred treatment because there is little risk of acute fluoride toxicity with proper application

Fluoride varnish



Fluoride varnish

- Safe
- Effective
- Quickly completed





Varnish: characteristics

- Dry tooth facilitates fluoride uptake
- Sets on contact with moisture
- Not rendered inactive by plaque
- Taste is tolerable



Varnish: efficacy

The Cochran Systemic Review concluded that:

- The application of fluoride varnishes, applied 2-4 times per year, results in a significant decrease in the incidence of dental caries of 46%
- Efficacy is not related to:
 - The level of caries activities in patients
 - The level of other exposure to fluoride
 - Primary versus permanent teeth



Risk Factors: enamel defects

- Low birth weight (LBW-less than 1500 grams, 3.3 lbs) is correlated with enamel defects (hypoplastic teeth)
 - Hypoplastic teeth are teeth in which the outer structure (enamel) has not formed correctly
- Hypoplastic teeth are more susceptible to tooth decay
 - 62.3% of children with LBW had hypoplastic primary teeth



Chronic medical conditions

Children with special health care needs are more likely to have caries because:

- Frequent feedings may be necessary
- Oral aversions may impede home care
- Motor skills may be delayed
 - Longer use of baby bottle
 - Unable to brush
- Medication



Chronic medical conditions

Frequent use of medication also increases the risk of caries

- Increased use of medication may decrease saliva and cause gingival overgrowth
- Children taking liquid medication experienced more tooth decay in their primary upper front teeth
- 20% of children taking liquid medication had 2 or more cavities in their upper front teeth compared to 2% of children not taking liquid medication



Caries Risk Assessment

Assessment	Low/Med	High
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Child is developmentally disabled		



Risk assessment

- Risk assessment as a concept
 - The process that is going to help us identify who is going to get decay before they get it...we can prevent the disease from occurring
- Risk analysis
 - Ability to identify the high-risk population and intensify the treatment for that group
 - Target your care to those who really need it



Risk assessment

- Caries risk assessment
 - Important tool in communication with parents
 - The protocol is an excellent model that teaches us about the caries process
 - It approaches caries as a risk analysis problem
 - Counsel/teach regarding the causes of the disease and how to prevent the disease



Learning Objective # 2
Family Oral Health Education: *Anticipatory
Guidance, Nutritional Counseling and Oral Hygiene
Instructions*





Cultural competency and Native American health

- Respect traditional healing practices
- Involve family and community
- Become part of the healing circle
- Make sure that communication is a two-way street
- Respect the village
- Empower your clients



Motivational interviewing

- The practitioner identifies where the client is in regard to his/her readiness to change (*What stage of change is the person in?*) and then attempts to move the client forward
- A successful visit or interaction doesn't have to end with the client taking immediate action



Stages of change



Not Ready



(Raise Doubt)

Unsure



(Explore idea of change)

Ready



(Plan)



Prerequisites for behavior change

- A sense of the importance of change
- A sense of confidence in one's ability to change



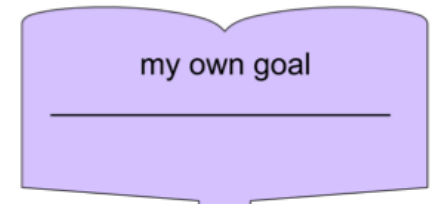
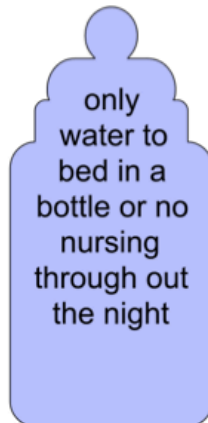
Open the conversation in a positive
way

- Focus on the positives vs. negatives
- Use OARS
 - Open-ended Questions
 - Affirmative Statements
 - Reflective Statements
 - Summary Statements



Goal setting: Ways to manage your child's disease

- These things are very important to your baby's health.
- No parents do these perfectly.
- It's best to work on one at a time.
- You won't be pushed into changing.
- Which one (if any) do you want to discuss?





Use scaling questions to access importance and confidence

- Raise Importance
- Build Confidence

i.e. “You rated your confidence in not letting Billy have a bottle of milk at night a “5”. What makes it a “5” and not a “6”?”



Help patients set realistic goals

- Goal should be “patient driven” vs... provider driven
- Identify with patient possible roadblocks to change and how they could overcome these
- Identify supports (people who will help or provide encouragement for change)
- Action or Change Plans are helpful tools
 - Follow-up with caregiver at next visit on progress towards goal



Use E-P-E technique to gather and give information
Elicit-Provide-Elicit

E: Elicit patient's ideas first

“Tell me about your experiences with brushing your child's teeth?”

P: Provide your information/advice next (ask permission to share advice first)

“Some parents have found letting a child pick a flavor a flavor of toothpaste increases their child's willingness to have their teeth brushed.”

E: Elicit patients reaction/commitment

“What do think about that?...Is that something you would be willing to try?”



Key activities in a discussion

- Showing empathy through reflective listening
- Developing a discrepancy between the patient's real and ideal behavior
- Do not argument
- Rolling with Resistance (“dancing vs... wrestling”)
- Enhancing self-efficacy-the idea that change is possible



Anticipatory guidance

- As a part of health supervision, dental professionals should provide parents and caregivers anticipatory guidance
- Anticipatory guidance is patient counseling that focuses on prevention, health promotion, and health education



Anticipatory guidance and oral health education topics

General topics

- Importance of baby teeth
- Vertical transmission
- Caries is preventable
- Age appropriate caries prevention strategies
- Nutrition
- First dental visit around first birthday
- Fluoride supplementation
- Tooth eruption/teething issues
- Nonnutritive sucking
- Bed time bottle/nursing
- Injuries



Oral health anticipatory guidance

- Available on BrightSmileMontana.com
- Can be used by dental staff to provide age appropriate dental counseling
- Can be given to patients to go home with

**HEALTHY SMILES
are
HAPPY SMILES!**

**A GUIDE TO
PRENATAL & CHILD
DENTAL HEALTH!**

FOR ALL AGES:

- ✦ Cavities are preventable!
- ✦ Your baby's teeth are important for eating, smiling, speaking, good self-esteem, healthy grown-up teeth and good general health
- ✦ Schedule regular dental visits for you and your baby by AGE ONE
- ✦ Cavity-causing germs can be passed from caregiver to their babies. Avoid sharing with your baby anything that has been in your mouth.

PRENATAL:

- ✦ Your oral health directly affects your baby's oral and general health
- ✦ Obtain a dental exam and any needed dental treatment before your baby is born
- ✦ Dental treatment including dental radiographs are safe for pregnant women
- ✦ Floss and brush your teeth daily with fluoridated toothpaste
- ✦ Choose your baby's dentist

BIRTH TO SIX MONTHS:

- ✦ Schedule your baby's first dental visit by AGE ONE
- ✦ Clean your baby's gums and/or teeth every day with a wet wash cloth
- ✦ Do not put your baby to bed with anything but water in a bottle

SIX MONTHS - ONE YEAR:

- ✦ Schedule your baby's first dental visit by age one
- ✦ Clean your baby's gums and/or teeth every day with a wet wash cloth or a toothbrush
- ✦ Do not put your baby to bed with anything but water in a bottle
- ✦ Avoid nursing / bottle feeding more than every 3-4 hours
- ✦ Ask your dentist or baby's physician about fluoride supplementation to prevent cavities
- ✦ Check your baby's teeth daily for white and/or brown spots which can be the sign of early cavities
- ✦ Wean your baby to a cup by age one



Prenatal

- Pregnant women should achieve and maintain oral health
- Dental treatment is safe and effective while pregnant
- Prevention strategies such as fluoride, xylitol and sugar reduction essential



Xylitol

- 5 carbon sugar
- Plant derived
- Long-term intake in humans shown to be safe
- Accumulates intracellularly in SM and inhibits growth
- Best effect at 4.0 to 6.88g/day
- No data to support OTC xylitol products are caries preventors
- Chew 5-10min minutes 2-4 times a day
- Use with prenataally or with mothers of infants to reduce SM transmission



Transmission caries

- Avoid
 - Testing the temperature of the bottle with the mouth
 - Sharing utensils
 - Orally cleaning a pacifier or bottle nipple



The first dental visit

- Children should see a dentist by their first birthday or as soon as first tooth erupts
- Providing a “dental home” is an important step in establishing a lifetime of preventive dental care

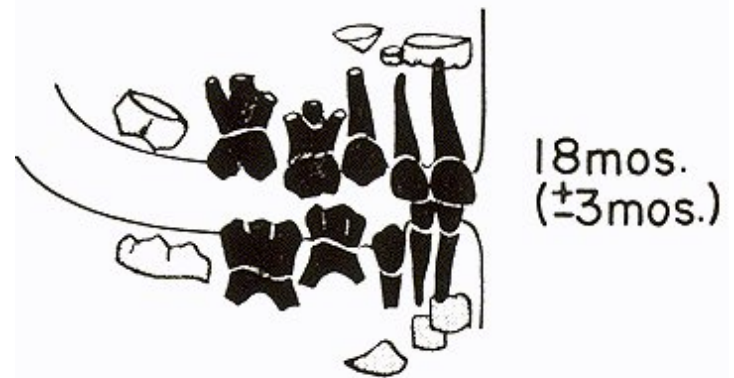
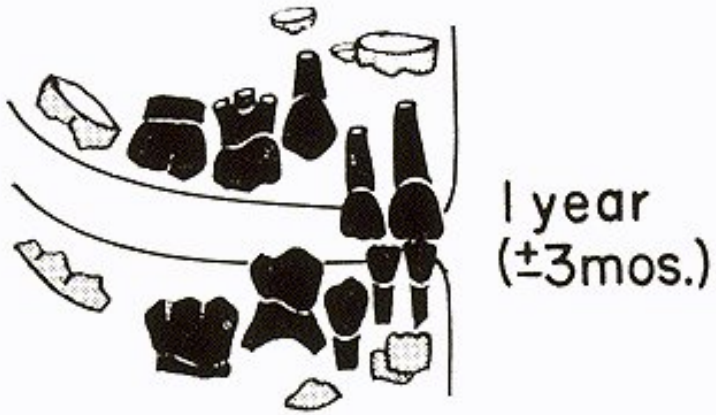
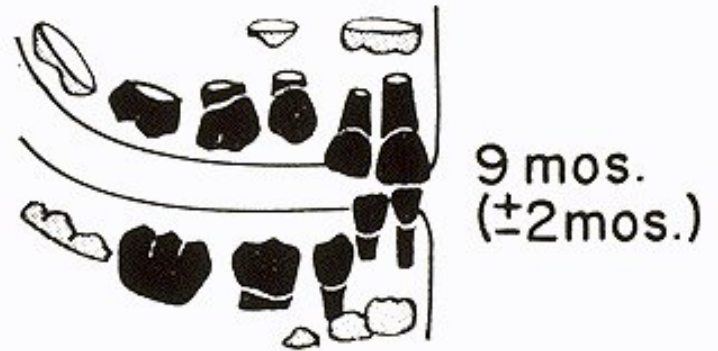
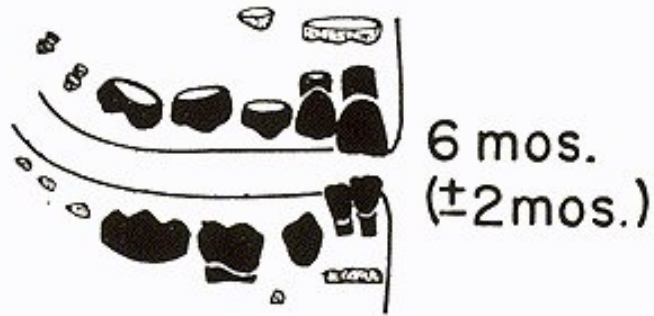


Preventive: the dental home

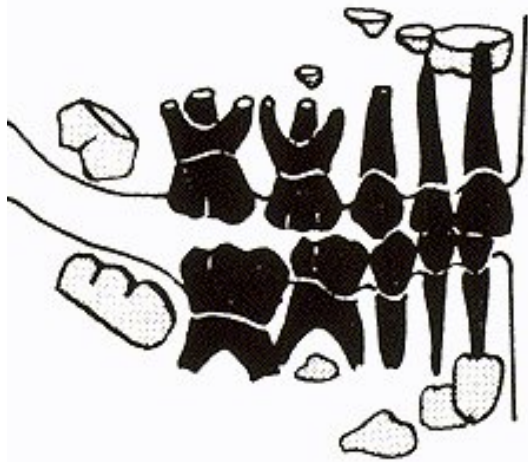
A dental home has primary care characteristics which include:

- First contact
- Continuous
- Comprehensive
- Coordinated
- Emphasis on wellness and prevention
- Emphasis on anticipatory guidance

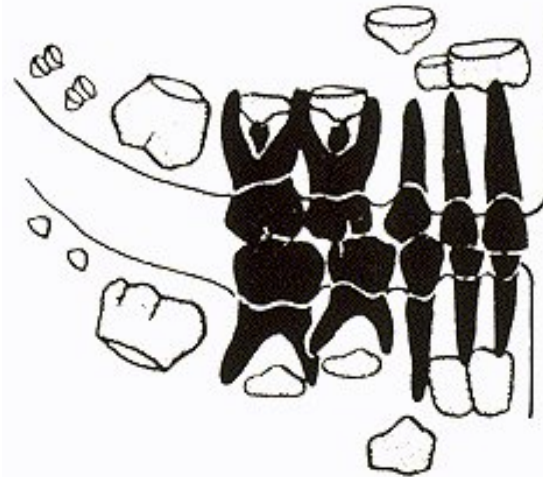
Dental development: eruption



Dental development: eruption



2 years
(± 6 mos.)



3 years
(± 6 mos.)

Dental development: eruption hematoma

- A bluish swelling over an erupting tooth
- Usually asymptomatic
- No treatment is required unless there is pain
- Usually rupture on their own and the tooth will come in normally





Dental development: teething

- Symptoms:
 - Baby may become fussy, irritable, and sleepless
 - Baby may have sore and tender gums when teeth begin to erupt
- No evidence that teething is associated with fever and/or diarrhea
- Before attributing any signs or symptoms of potentially serious illness to teething, clinicians and parents must rule out other possible causes

Dental development: teething



Examples of safe teething rings

Dental development: non-nutritive sucking

Types of non-nutritive sucking:

- Pacifiers, thumb or fingers, or other objects
- Patients may present with an open bite
- Intervention is not needed until permanent central incisors erupt





Tooth brushing and toothpaste

Oral hygiene is a supervised event!

< 2 year

- Cleans teeth with soft toothbrush 1x/day
- No toothpaste or a smear if high risk

2-3 years

- Brush with rice-sized amount of fluoridated toothpaste 2x/day
- Caregiver performs

> 3-8 years

- Brush with pea sized fluoridated toothpaste 2x/day
- Caregiver performs or supervises



Oral hygiene

- 100% parental responsibility is needed for infants
- 100% parental responsibility is needed for toddlers
- 100% parental responsibility is needed for pre-school children



Tooth brushing

- Grade School
 - Allow some independence; however, until a child has the dexterity to write in cursive they do not have the fine motor skills necessary to brush proficiently...they need help still!
- Middle School
 - Continue to monitor...teenagers can be teenagers and not put the needed attention into their oral hygiene.



Tooth brushing

- Demonstrate correct techniques
 - **Show** caregivers rather than tell
- Parents/caretakers have control of this disease!!!!
 - Empower them to prevent decay!



Flossing

- Very important that children are having their teeth flossed
 - Removes plaque between teeth that is impossible for bristles to reach
 - Develops lifelong habits
 - *Set An Example!!!*
 - Kids will follow their parents lead
 - 12% of fathers and 20% of mothers floss daily!!!!
 - 45% of fathers and 28% of mothers have NEVER flossed!!!



Nutritional Messages

- Cariogenic snacks between meals should be limited
- Children should not carry around juice, milk, or soda in a bottle or sippy cup
- No “diluted” juice – it causes caries too!
- If a baby is put to bed with a bottle it should contain only plain water



Injury prevention

- Injury Prevention
 - Baby/toddler proofing home
 - Seatbelts/car seats
 - No walking with a toothbrush
 - Access to toothpaste and fluoride Rx



Dental Medical Partnership





Partners in prevention

- Increases the number of children receiving oral prevention services
- Increases awareness of the importance of oral health in the medical community
- Builds strong and sustaining dental practices
- Promotes collaboration with primary medical provider especially patients with chronic medical conditions
- Can increase referrals to AbCd Montana certified dentists



Partners in prevention

- Infants/toddlers have approximately 12 well-child visits by age 3
- Physician may provide preventive oral services
 - Screening
 - Caries Risk Assessment
 - Family oral health education/anticipatory guidance
 - Fluoride varnish treatment
 - Referrals



Learning Objective # 3

- *Knee-to-Knee*
- *Lift the Lip*
- *Fluoride Varnish Application*





Knee-to-knee exam

- **Be prepared!!!!**
- Forewarn parents that this is safe and might be loud
- Crying/screaming might be useful
 - Easier to see
- Quick recovery



Knee-to-knee exam: steps

Provides good positioning for an oral exam and fluoride varnish application and can be used by parents at home if they are having difficulty brushing their child's teeth

To complete a knee-to-knee exam:

1. The parent and the examiner sit knee-to-knee
2. The parent places the child on their lap facing the parent
3. The parent puts the child's legs around the parent's waist and secures the child's legs under their arms
4. The child is tipped back into the examiner's lap
5. The parent holds the child's hands
6. The examiner stabilizes the child's head with one hand and "lifts the lip" with the other



Knee-to-knee: steps

Steps to complete the knee-to-knee:

1. Place the child in the knee-to-knee position
2. Use toothbrush to prompt the child to open their mouth
3. Place mirror in child's cheek to prevent it from fogging up
4. Examine the front surfaces of the 4 upper front teeth
5. Using the mirror, examine the back surfaces of the 4 upper front teeth
6. Examine the rest of the mouth, using the mirror where appropriate

Lift the Lip technique



- This technique is easy for staff and parents to use
- The front teeth can be screened quickly for caries and plaque



Knee-to-knee: tooth brushing



- During a knee-to-knee examination it is a great time to demonstrate proper brushing techniques to parents
- Parents can also lift the lip to demonstrate their brushing technique



Helpful hints

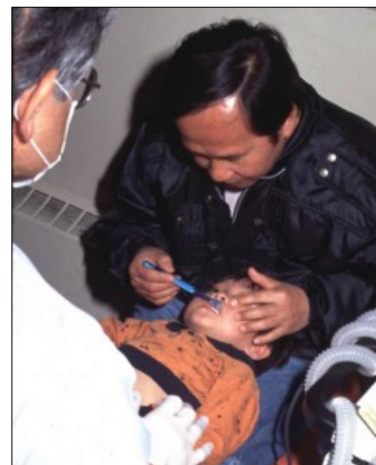


- Enlist parent's support and assistance
- Identify people on your team who are effective with infants and toddlers
- Learn to cope with crying



Teach parents

- Teach
- Demonstrate
- Practice with parents lifting the lip and brushing during the examination





Behavioral aspects of treating infants and toddlers





Behavior: hints

- Tell-Show-Do
- Play and establish rapport
- Communicate that your office is a safe place for children
- Use extra hands if you need to restrain the child's head
- Assist children in reaching their full potential - ***catch them doing something right!***

Varnish: application

1. Place child in the knee-to-knee position and lift the lip
2. Dry teeth with a gauze sponge



Varnish: application

3. Brush varnish on the entire dry tooth



Varnish: application

4. Fluoride varnish sets on contact with saliva



Varnish: application



- Instruct parents that teeth may appear yellowish temporarily after varnish application
- Instruct parents not to brush their child's teeth until the next day
- Children can eat or drink immediately after a fluoride varnish application
- Treatments every 2-6 months are recommended for children at high risk for caries (i.e. white spot lesions, visible caries, etc.)



Interim restoration therapy

Tray Set-Up:

- Small spoon excavator
- Conditioner
- Micro applicator brush
- Cotton 2X2 or rolls (half size)
- Auto cure glass ionomer
- Fluoride varnish

- Excavate margins of cavitated lesion
- Isolate with cotton
- Apply cavity conditioner for 15 seconds – remove with cotton 2X2
- Apply glass ionomer – let set – adjust occlusion with wet glove
- Apply fluoride varnish





Learning objectives met

1. ABCD Program
2. Anticipatory Guidance
3. Knee-to-knee, Lift the Lip, & fluoride varnish application
4. Dental/Medical provider relationship
5. Early Childhood Caries (ECC)

Questions?



Further assistance

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