

## Community Workshop Agenda

<b><u>Day One</u></b>	<b><u>Time</u></b>
Welcome, Overview, and Introductions	60 minutes
Module 1: The Caries Balance	60 minutes
Module 2: Caries Risk Analysis for Individuals and Groups	60 minutes
Lunch	
Module 3: Oral Health Screening and Fluoride Varnish for Infants and Toddlers	120 minutes
Module 4: Effective Health Education and Community Oral Health Messages	60 minutes
<b><u>Day Two</u></b>	
Module 5: Systemic Fluoride Interventions	60 minutes
Module 6: Topical Fluoride Interventions	30 minutes
Module 7: Effectiveness of ART(PRAT) in a Prevention Program	60 minutes
Lunch	
Module 8: Infection Control	60 minutes
Module 9: Working with Infants and Children	120 minutes
<b><u>Day Three</u></b>	
Module 10: Presentation and Discussion of Community-Based Oral Health Plan	60 minutes
Group Exercise #1: Roles and Responsibilities	60 minutes
Group Exercise #2: Community Oral Health Messages	60 minutes
Lunch	
Module 11: Creating Sustainable Systems	60 minutes
Review of Community Workshop Learning Objectives	60 minutes
Closing Exercise and Evaluation	60 minutes

## **Community Workshop Learning Objectives**

### Overall Goal

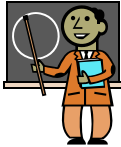
Participants will receive training to understand the process of dental caries and best practices to prevent dental caries, with a focus on oral health screening and fluoride varnish for infants and young children, and the promotion of fluoride toothpaste beginning with eruption of the first primary tooth. Furthermore, participants will work together to implement a community-based oral health plan.

After completing this workshop, participants will be able to:

1. Identify pathological and protective factors for dental caries.
2. List best practices for caries prevention specific to different age groups.
3. Describe a caries risk analysis for individuals and groups.
4. Perform an oral health screening and fluoride varnish application for infants and toddlers using the principles of infection control.
5. Describe the effectiveness of systemic fluoride and list ways to promote salt fluoride use in Central America.
6. Describe the effectiveness of fluoride toothpaste and fluoride varnish and list ways to promote their use in Central America.
7. Explain appropriate protocols for application of fluoride varnish and PRAT for each age group.
8. Describe ways to improve the effectiveness of oral health education.
9. Discuss the community-based oral health plan that has been agreed upon for your community and list ways to become involved in the prevention of dental caries.
10. Describe your role in the evaluation and sustainability of the community-based oral health plan that has been chosen for your community.

## Welcome, Overview, and Introductions

Time: 60 minutes



**Training Tip:** Try to start on time. Have your equipment and PowerPoint presentations set up and ready to go! Make sure you know how to dim the lights and work all of the equipment. If you set up early, you'll have time to greet people as they arrive. Have each person sign in on a sheet of paper and fill out a nametag.

### Training Packet Materials:

You will refer to the entire Training Packet and more specifically,

- Agenda
- Learning Objectives
- PowerPoint handouts
- Name Tags
- Sign-in sheet
- Pens or pencils

## Welcome

We want to welcome all of you to the Community Workshop.

## Introductions

**Introduce yourself and your co-trainers or have each trainer introduce him or herself. Give your name, a brief statement of your professional background, and a personal statement about why you are involved in this project. You may want to write your introduction notes on an index card or right here on this page.**



**Training Tip:** This is a good time to point out where the bathrooms are, if there is food or drink available, and any other housekeeping issues.

## Overview of the Community Workshop

Our goal today, in addition to meeting the specific learning objectives for the Community Workshop, is to spark a commitment from each and every one of us to work towards improving the oral health of Central American children.

You each have in front of you a Training Binder that includes the materials we will be covering. You can follow along on PowerPoint handouts so that you shouldn't need to take many notes, just listen and be open to new concepts and information that you learn today.

The Training Binder includes:

- Agenda
- Learning Objectives
- PowerPoint Handouts
- Module Handouts

If you take out the agenda, we can look at the content covered in the Community Workshop. There is information on dental caries and prevention, caries risk analysis, oral health screening for infants and toddlers, fluoride varnish, PRAT, salt fluoridation, effective health education, and infection control. There is also information and a practice session on ways to work with infants and children to prevent cavities.

We (the trainers) have received training to develop Community-Based Oral Health Plans and to bring this workshop to our communities to implement these oral health plans. Later in the training, we will present our Community-Based Oral Health Plan and work together to implement the plan.

The Workshop on Caries Prevention for Communities in the Region of the Americas was developed in cooperation with the following partners:

- Pan American Health Organization
- Gorgas Institute
- U.S. Department of Health and Human Services, Public Health Service, Indian Health Service, Division of Oral Health

Now, let's look at the Learning Objectives for this course.  
(Read the Learning Objectives.)

You can see that this will be a very thorough training with opportunities for learning through lectures, video, demonstrations, discussions, and group exercises.

We encourage you to ask questions and, if we get behind schedule, we will continue answering questions during breaks or at the end of the day.

## Opening Exercise

We will go around the room, and each person will give their name, what they do, and why they came today.



***Training Tip: It's OK if this takes awhile. It's very important that your community members get to know each other, and you will get to better understand why each community member attended your training. Allow 3-5 minutes per person.***

## Call to Action

Oral health is a critical aspect of general health and dental caries is one of the most prevalent infectious diseases in the world. The burden of oral disease in the Region of the Americas remains high as compared with other Regions in the world, especially among poor children and the elderly.

**Each and every one of you** is key to improving the future oral health of Central American children. So let's begin.

## **Module 1: The Caries Balance**

**Time: 60 minutes**



### **Learning Objective:**

**Identify pathological and protective factors for dental caries.**

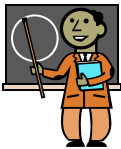
### **Additional Materials Needed:**

- Flipchart and markers
- PowerPoint presentation
- PowerPoint handout

### **Brainstorming Session**

•Write on board or newsprint “What Causes Cavities?” and ask participants to brainstorm all of the things that they think cause cavities.

•Next, write “What Prevents Cavities?” and ask participants to brainstorm all of the ways that they think cavities can be prevented.



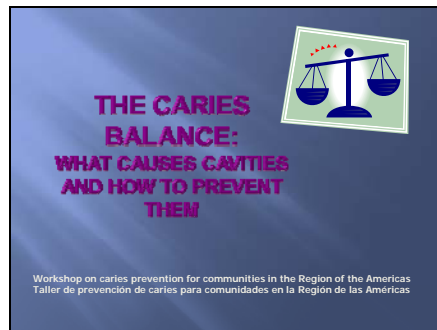
***Training Tip: You don't have to correct their answers, just leave them posted for now. This gives you clues to misconceptions and knowledge of the group you are training. You can refer back to specific responses as you present this module.***



***Training Tip: If there are 2 trainers, one can write the answers while the other is talking. If people don't provide answers quickly, just wait because someone will almost always volunteer eventually and get the ball rolling. Write down all answers, whether you think they are right or wrong. Let this go on for 5-10 minutes or until there are no more new ideas.***

As the brainstorming begins to slow down, begin the PowerPoint presentation by stating, “Now, let's learn more about what causes cavities and how to prevent them.”

Slide 1



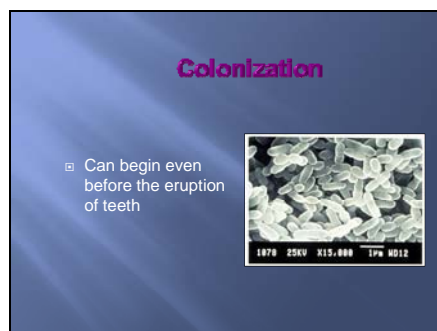
Tooth decay is not a simple infection, but rather a process that involves a balancing act between pathological factors (what causes the disease) and protective factors (what prevents the disease). Some of the information that we will be discussing in this module requires a shift in how we think about tooth decay, how we treat it, and how we prevent it.

Slide 2



Children are not born with the bacteria that cause dental caries. Dental caries is an infectious, transmissible disease caused by mutans streptococci, lactobacilli, and other acid-producing bacteria. While the transmission is primarily vertical between mothers or other primary caregivers and infants for the majority of children, studies have also demonstrated horizontal transmission from infants to infants, as well as from older children to infants.

Slide 3




We now know that the organisms that cause dental caries can begin to colonize in the mouth of an infant even before the eruption of teeth.

Slide 4

### Acidogenic Bacteria

- ❑ Acidogenic bacteria produce acids from carbohydrates
- ❑ Demineralization
- ❑ Visible tooth decay



Back to those bacteria. They are called acidogenic because they produce acids from carbohydrates, which causes demineralization of the enamel and eventually, visible tooth decay.

Slide 5

### White Spot Lesions

- ❑ The first visible sign of tooth decay




The first visible sign of tooth decay or demineralization is a chalky “white spot” lesion. So when we look at babies, we are looking for both white and brown spot lesions.

Slide 6

### Remineralization

- ❑ Calcium and phosphate in saliva can “heal” early tooth decay
- ❑ Enhanced by fluoride
- ❑ Stronger than before
- ❑ Ongoing process



The reversal of demineralization is remineralization, which happens when the tooth heals from the calcium and phosphate provided by saliva. This natural tooth repair is enhanced by fluoride if it is present in the mouth, and the renewed fluoride enhanced mineral is more resistant than before to acid from the bacteria. The process of demineralization and remineralization is going on in most of our mouths as part of our daily eating, snacking and oral hygiene activities.



Slide 7

### Treatment of Tooth Decay

- ❑ "Treat" enamel lesions with fluoride and antimicrobials until lesion is into the dentin
- ❑ Treat with traditional methods only when lesion is into the dentin.




It is important to rethink the way we “treat” dental caries.

We want to intervene at a stage where we can prevent the disease or “treat” white spot lesions with fluoride.

Slide 8

### Can ECC be Prevented?




Can dental caries be prevented?

Slide 9

### Yes!

- ❑ Interventions with pregnant women and mothers of infants
- ❑ Interventions with babies and young children




Yes! Through interventions with families, we can reduce the pathological factors and strengthen the protective factors.

Let's talk about how to prevent dental caries...

Slide 10

**Fluoride**



- ❑ Inhibits demineralization
- ❑ Enhances remineralization
- ❑ Inhibits plaque bacteria

Fluoride is a key factor in the prevention and reduction of tooth decay. Fluoride works by inhibiting demineralization, enhancing remineralization, and inhibiting plaque bacteria. In other words, it works in many different ways to prevent cavities!

Slide 11

**Salt Fluoridation**



- ❑ Experience has shown that putting fluoride in salt can reduce dental caries by as much as 64 percent at a cost of 6 cents per person per year.

The practice is extremely cost effective, saving an average of \$250 per person per year in dental treatment for every \$1 spent. It is also highly equitable, benefiting equally rich and poor, young and old, urban and rural dwellers, those with access to professional dental services and those without.

A book from the Pan American Health Organization (PAHO) shows how salt fluoridation has proven to be one of the most cost-effective public health interventions in history and shows how countries can implement their own programs.


*Promoting Oral Health: The Use of Salt Fluoridation to Prevent Dental Caries* was written by Saskia Estupiñán-Day, head of PAHO's Oral Health Program. The book traces the history of salt fluoridation, and explains why the practice is better suited to countries in Latin America and the Caribbean than fluoridation of water.

We'll learn more about salt fluoridation later in the workshop.

Slide 12

### Fluoride Toothpaste

- Encourage daily use for babies, children, and adults!



Fluoride toothpaste is effective at preventing dental caries and daily use should be encouraged for babies, children, and adults. You are never too old to benefit from fluoride toothpaste. As long as you have teeth, using fluoride toothpaste is a good idea

Slide 13

### Fluoride Toothpaste

- For babies, as soon as the first tooth comes in, begin using a small smear of fluoride toothpaste daily.
- For children 3 and older, use a pea-size dab of fluoride toothpaste daily.



***Read slide***

You might tell parents to put the toothpaste on the width of the toothbrush, not the length. This results in a much smaller dab of toothpaste. A pea-size dab of fluoride toothpaste is enough fluoride toothpaste for everyone three years of age and older.

Slide 14

### Fluoride Mouthrinses

- Not for babies and young children
- Child must be able to effectively spit



Fluoride Mouthrinse


Fluoride mouthrinses like ACT or Fluorigard are effective at-home regimens when used daily, but they cannot be recommended for children under 6; until they can effectively spit to assure that they don't routinely swallow it.

Used effectively, fluoride mouthrinses can decrease dental caries in high-risk populations over 30 percent.

Slide 15

**Fluoride Varnish**

- ❑ Professionally applied topical fluoride treatment
- ❑ Safe for babies and young children



Fluoride varnish is a highly-concentrated fluoride product that can be beneficial for use with babies and young children.

Slide 16

**More on Fluoride Varnish**

- ❑ Use 3 times in a 2-week period for remineralization of white spot lesions
- ❑ Apply 3-4 times a year for high-risk babies and young children


Fluoride varnish can be used 3 times in a two-week period for remineralization of white spot lesions. For prevention purposes, it can be applied 3-4 times a year.

We'll be talking more about fluoride varnish throughout the day.

Slide 17

**Dental Sealants or PRAT**

- ❑ Prevent cavities on the biting surfaces of teeth.
- ❑ Work best in combination with fluoride to protect the smooth surfaces of teeth.



Dental sealants are plastic coatings applied to the biting surfaces of teeth to protect them from cavities.

In Central America, we often use PRAT, which involves putting a fluoride-releasing material on the biting surfaces of teeth to prevent cavities and also to treat small cavities. We'll be talking more about this later in the Community Workshop.

Slide 18

**Limiting Fermentable Carbohydrates**

- ❑ Sugary foods and drinks
- ❑ Simple carbohydrates like white crackers
- ❑ Need to limit both frequency and total sugar intake




What about diet?

It is important that we talk with families about limiting the frequency of ingestion of simple carbohydrates, including sugary foods and drinks, and foods like white crackers and potato chips. Remember, it is the frequency of fermentable carbohydrate intake that contributes to dental caries.

Slide 19

**Limit Total Sugar Intake**

- ❑ Tell families to limit the sugar in their diets.
- ❑ Increased obesity and diabetes among children requires limiting both frequency and total sugar intake



We have a responsibility to counsel families to limit both total sugar intake and the frequency of exposures per day to enhance both general overall health as well as oral health.

Slide 20

**Weaning**

- ❑ Recommend using a cup at 6 months of age
- ❑ Consider weaning at 12-14 months of age
- ❑ Don't let baby sleep with the bottle or walk around with a bottle or sippy cup all day



Furthermore, children should begin using a cup at 6 months of age. Parents should consider weaning from the bottle at 12-14 months of age, transitioning to an open cup that isn't easily carried around all day. It is important to counsel families not to let their babies sleep with a bottle or sippy cup because this greatly increases the exposure to carbohydrates, thus upsetting the caries balance. Prolonged exposure to the bottle effectively produces an acid bath around the teeth.

Slide 21


### Summary

For all babies and young children	For high-risk patients
<ul style="list-style-type: none"><li>▣ Salt fluoridation</li><li>▣ Daily use of fluoride toothpaste</li><li>▣ Limit sugar and other simple carbohydrates</li></ul>	<ul style="list-style-type: none"><li>▣ Fluoride Varnish</li><li>▣ Consider anti-microbials for mothers and older children</li><li>▣ Fluoride Mouthrinse when child can spit</li><li>▣ Dental Sealants or PRAT</li></ul>

To summarize, prevention of dental caries consists of salt fluoridation if available, daily use of fluoride toothpaste, and fluoride varnish treatments, especially for high-risk children. High-risk children would also benefit from dental sealants or PRAT and, as soon as they can spit, daily use of a fluoride mouthrinse. We'll learn more about who is at high-risk in the next module. Finally, we can counsel families about the role of carbohydrates in the caries balance and encourage them to limit the child's exposure to fermentable carbohydrates.

Slide 22

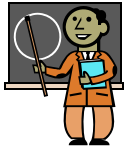
Which of these prevention strategies do you think will work in your community???



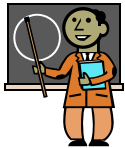
*Turn off projector*

## Discussion

- Which of these prevention strategies do you think might work in your communities?
- Are there any questions about the material covered in this module?
- Did you learn anything new?



***Training Tip: If you are comfortable with the discussion, you might refer back to the brainstorming list and ask the group “How does the list of “what causes cavities” we generated compare to the information you learned from the presentation?” You can also ask “How does the list of “how to prevent cavities” compare to what you just learned? If the issue of oral hygiene comes up, stress that it is the fluoride toothpaste that is the greatest weapon against tooth decay. This is especially helpful if the beginning lists had items that are not backed up by science. You can do some “myth busting” here.***



***Training Tip: We are asking some open-ended questions here and you don’t have to feel awkward if you don’t know all of the answers. When you don’t have an answer, you can do a couple of things. You can ask the other trainees if anyone else knows the answer, or you can tell the person that you would like her email address at the break, and you will get back to her/him.***

## **Module 2: Caries Risk Assessment for Individuals and Groups**

**Time: 60 minutes**



### **Learning Objective:**

**Describe a caries risk analysis for individuals and groups.**

### **Additional Materials Needed:**

- Flipchart and markers
- PowerPoint presentation
- PowerPoint handout

### **Brainstorming Session and Discussion:**

Now that you know more about what causes dental caries and how to prevent dental caries, who would you say is at greatest risk for developing this disease?

*List responses on flipchart.*

OK, let's take a look at the presentation on Caries Risk Assessment and see if we missed anything.

*Begin PowerPoint presentation.*



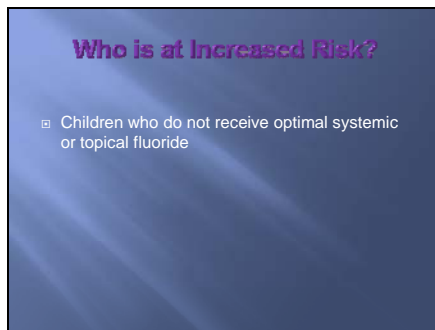
Slide 1



There are different levels of risk for dental caries. Many children in the United States, and even in Central America, do not have any cavities at all! These children probably aren't going to benefit from additional prevention programs. On the other hand, many children have lots of cavities, beginning when their first teeth erupt into their mouths when they are less than one year old.

So...how do we find these high-risk children to make sure that they receive more prevention programs?

Slide 2



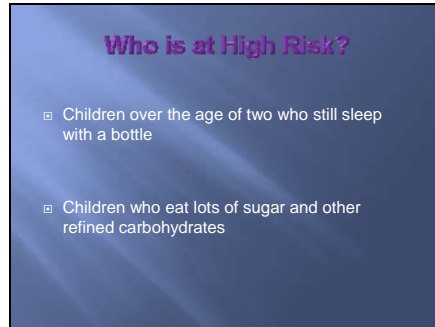
One way to provide systemic fluoride to families is through water fluoridation. In fact, water fluoridation has long been considered the cornerstone of prevention in the United States. In Central America, most communities do not have fluoridated water, but families can benefit from salt fluoridation.

Ask families if they use fluoridated salt and check to be sure that they are using it appropriately. Families who do not use salt fluoridation will be at higher risk for dental caries.

You also want to ask if the children brush their teeth daily with a fluoride toothpaste. As soon as the first tooth comes in, caregivers should brush a child's teeth with a small smear of fluoride toothpaste. As the child gets older, he can brush his own teeth.

We will be talking more later about how fluoride varnish works to prevent cavities.

Slide 3

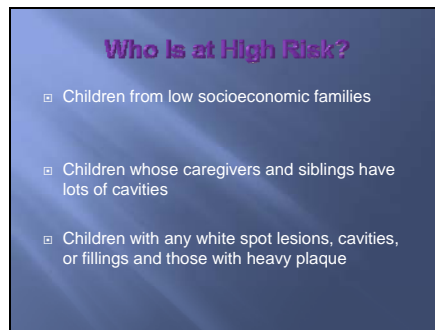


Children over the age of two who still sleep with a bottle or who walk around all day sipping from a bottle, sippy cup, or other container, are at increased risk for dental caries.

Any children who eat lots of sugar and other refined carbohydrates are at increased risk for dental caries.

That goes for adults too! No one should eat or drink sugared foods throughout the day. It's not good for your teeth, and it's not good for your overall health!

Slide 4



It is a fact that dental caries can be linked to the income level and education of the parents. While this does not always hold true, you want to keep this in mind as you work with both individuals and groups to improve their oral health.

Also, children whose parents and siblings have had lots of cavities are much more likely to have cavities themselves, so sometimes we ask questions like "Have her older brothers or sisters had lots of cavities?"

Finally, young children who already have lots of plaque or who have already experienced white spot lesions or cavities, including fillings, can be considered at high risk for future dental caries.

Slide 5

### Who is at High Risk?

- Children with special needs, which includes children who are physically or mentally disabled, or children who are medically compromised.

When interviewing the caregivers of children with special needs, be sure to get information on medications, special diets or food preferences, medical conditions and current and planned medical treatment. You want to know if the child is physically and mentally able to brush his own teeth, and if not, you want to know if the caregiver brushes the child's teeth.

Slide 6

### Who is at Low Risk?


- Children who come from families with few dental caries and who have little plaque and no white spot lesions or other signs of cavities, are generally at lower risk for dental caries
- Caries risk can change if the diet changes or if the systemic or topical fluoride changes.

### *Read first bullet*

Keep in mind that caries risk can change. We've all seen patients who had few cavities and then show up one year with lots of cavities. This is often related to a change in diet, like sipping sweetened coffee drinks all day.

Slide 7

### Assessing Risk for Groups



- Schools
- Daycare Centers
- Retirement Homes
- Other Community Groups???


Sometimes we need to assess the caries risk for a group. For instance, if we want to apply fluoride varnish in a daycare or school setting, it is cost effective to apply the fluoride for all of the children, especially if we can document that as a group, they are at high risk for dental caries

This is much quicker and therefore more cost effective than assessing individual risk.

Slide 8

### Look at the Numbers

- ▣ Prevalence of dental disease for the group
- ▣ Socioeconomic level of the group
- ▣ Groups of special-needs children



If a group has a low socioeconomic status or a documented high prevalence of dental caries, we often assume that most of the children are at high risk, and we implement school and community-based interventions for these children.

We can also assume that most groups of special-needs children will be at high risk for dental caries.

Slide 9

### High-Risk Groups

- ▣ High-risk groups need increased levels of fluoride and other prevention services!

Groups of children or adults at high-risk for future dental caries need increased levels of fluoride and other prevention services!

Slide 10

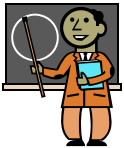
### How About YOUR Community?



***Turn off projector.***

## Discussion

1. Do you think your community is at high or low risk for dental caries?
2. Are some parts of your community at different risk than others?
3. Can you list ways to identify high-risk groups in your community that you might like to work with?



*You want the group to begin thinking about target populations in your community. Lead this discussion and guide them towards groups where you might intervene with prevention activities.*

## **Module 3: Oral Health Screening and Fluoride Varnish for Infants and Toddlers**

**Time: 2 hours**



### **Learning Objectives:**

- List best practices for caries prevention specific to different age groups.
- Perform an oral health screening for infants and toddlers.

### **Additional Materials Needed:**

- PowerPoint presentation
- PowerPoint handout
- 7 Steps handout
- Tips for Managing Child Behavior handout
- Flipchart and markers
- Fluoride Varnish video

### **Introduction**

This module will address Early Childhood Caries, what causes it, and how to prevent it. This module will show you the steps to providing oral health screenings and fluoride varnish treatments for infants and toddlers. There is a lot of information in this module, and I know you'll probably have lots of questions afterwards, so we will make sure we have time for your questions at the end of the module.

Keep in mind that the overall goal of the oral health screening is to improve access to care for young children, to provide counseling for their families, and to prevent Early Childhood Caries.

While we go through this module, think about how this might work in your community.

Slide 1



If we are going to prevent dental decay in the primary teeth, often called Early Childhood Caries, it is critical that we aim prevention programs at children between six months and three years of age.

Slide 2




**What is Early Childhood Caries, or ECC?**

The nationally-accepted definition is any tooth decay, including filled or extracted teeth due to decay, in the primary dentition.

**Severe ECC** is characterized by a distinctive pattern of tooth decay in infants and young children, often beginning on the maxillary anterior teeth and rapidly progressing to the other primary teeth as they erupt. ECC can begin to develop as soon as teeth erupt into the mouth at 6-10 months of age which is why an early oral health assessment and fluoride varnish treatments are so important.

Slide 3

- ▣ Most prevalent chronic disease of childhood
- ▣ 5 times more prevalent than asthma
- ▣ 7 times more prevalent than hay fever




Tooth decay is the single, most prevalent chronic disease of childhood in the United States.

It is five times more prevalent than asthma and seven times more prevalent than hay fever.

Slide 4

**ECC is Expensive to Treat!**

- ▣ ECC is very expensive to treat
- ▣ 40-50% of children treated with severe ECC have new decay within 4-12 months
- ▣ We must treat the infection!



**How much does it cost to treat ECC?**

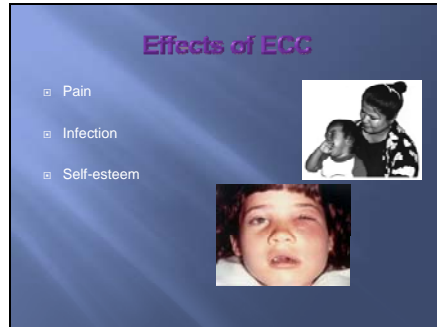
Severe ECC can cost thousands of U.S. dollars to treat. Some of these children need to be hospitalized, and treatment may need to be completed under general anesthesia. ECC places a huge financial burden on insurance companies and public dental clinics, as well as on parents least able to afford treatment.

**Is traditional treatment effective?**

Once the disease is established and caries penetrate to dentin and beyond, restorative care is essential. Close monitoring for follow-up care is needed. Unless there is follow through using contemporary preventive education and other strategies, various studies have shown that 40-50% of children treated for ECC have recurrent decay within 4-12 months. With only traditional treatment and no preventive follow-up, the disease rages on.



Slide 5



**Pain:** children with ECC learn to live with pain day in and day out. As they get older and go to school, some of these children experience an increase in missed school days and an inability to concentrate when they are in school. Pain can also affect a child's sleep and nutrition, again resulting in poor overall health and well being. After treatment, parents report that their child is sleeping better, doing better in preschool, and simply happier.

**Infection:** Research has linked pain and infection associated with ECC to a failure to thrive and delayed growth patterns. We can no longer ignore this infection until a child is 3 or 4 years old, anymore than we would ignore any other infection that a child might have.

**Self-esteem:** children need their front teeth for eating, and also for smiling. A beautiful smile can be important for good self-esteem.

Slide 6



We want to destroy the myth that the primary teeth are not important. The primary teeth are important for several reasons:

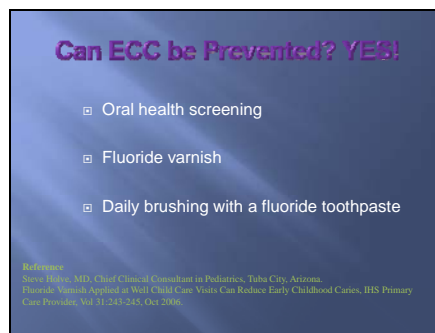
**Eating:** it is difficult to bite an apple or other healthy foods without the front teeth. Early tooth loss can result in poor nutrition and diminished physical growth. Tooth decay can also result in exposed nerves within the teeth that make them sensitive to hot and cold, thereby further affecting eating habits and good nutrition.

**Talking:** children who have their front teeth extracted at an early age generally talk with a lisp.

**Holding space** for the permanent teeth. Baby teeth fall out in a wonderful pattern that guides the permanent teeth into their proper places. When teeth are extracted early due to decay, the permanent teeth are more likely to come in crooked.

**Smiling** We all want our children to have beautiful smiles and good self esteem!

Slide 7



**Yes!** ECC can be prevented!

### **Oral health screening and Fluoride varnish**

Research by Dr. Steve Holve showed that children who received 4 fluoride varnish treatments between the ages of 9-24 months of age had over 30% fewer cavities.

### **Daily brushing with a fluoride toothpaste**

Fluoride toothpaste used daily, beginning when the first tooth erupts, might be the best thing families can do for their children's oral health. This is a message we want to reinforce over and over with the families we work with.

Slide 8

### Oral Health Screening

- ❑ Soon after the first tooth erupts, and before one year of age, babies should receive an oral health screening.
- ❑ If they are at high risk for dental caries, they should also begin to receive fluoride varnish treatments.
- ❑ Nurses, teachers, and other community health workers can be trained to provide these important services.

*(read slide)*

We will be talking more about how we can prevent cavities among the children in our communities, but this effort will require a community-wide program, to be sure we reach all babies, especially the ones at high-risk for developing dental caries.

Slide 9

### Step #1: Get Ready

- ❑ 2X2 gauze
- ❑ Baby/child toothbrush
- ❑ Fluoride Varnish
- ❑ Exam gloves
- ❑ Optional Items



### Step #1: Get Ready

Here is the list of supplies needed for oral health screening and fluoride varnish applications. You will want to have needed supplies ready for both procedures because once the child is positioned, you will accomplish the oral health assessment and fluoride varnish application all in a matter of minutes.

Optional items might include a direct light source, like a flashlight and toys to keep the child distracted.

Slide 10



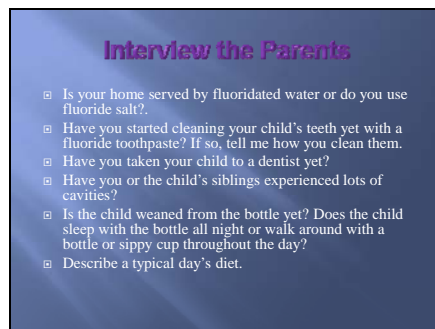
## **Step #2: Greet the Child and Interview the Parent Voice Control and Nonverbal Communication**

When approaching a child, pay attention to voice control and nonverbal communication. If your voice is calm and your nonverbal communication says that you are relaxed and friendly, the child will respond better to you.

## **Positive Reinforcement and Distraction**

Other good tools to build rapport with the child include positive reinforcement and distraction. Use distraction techniques like toys, stories, and humor. If the child is older, involve the child in holding the toothbrush or helping you count the teeth.

Slide 11



## **Interview the Parents**

Talk with the parent, building trust with both the parent and the child, and asking both closed and open-ended questions on the following topics:

*(read slide)*

This information will give you clues about the child's risk for dental caries.

If you are working in a daycare or school setting and the parents are not available, you will skip this interview.

Slide 12



### **Step #3: Position the Child in the Knee to Knee Position**

Note again the knee-to-knee position. The child is initially held in the mother's arms and slowly lowered to the health professional's lap. Ask the parent, or another helper, to hold the child's hands and help keep the child from wiggling.

This can also be done in daycare centers using teachers or other volunteers as helpers.

For children 3 and older, the child can stand in front of you.

Slide 13



### **Babies Cry as a Form of Communication**

Many young children will cry when lowered back into the health provider's lap. This is normal behavior for a young child and gives you a wonderful opportunity to see the child's teeth. The key is to do the screening quickly.

### **Keep Your Cool!**

Use self-talk...this is to help YOU cope. Tell yourself that the child is fine and you will be done in a couple of minutes. Over time, you will become less sensitive to the crying.

Slide 14

**Step #4: Brushing the Teeth and Oral Health Screening**

- ❑ Remove plaque so you can see teeth clearly
- ❑ Discuss home care
- ❑ Reinforce the daily use of fluoride toothpaste



#### **Step #4: Brushing the Teeth and Oral Health Screening**

By introducing the toothbrush first, you are using something the child is familiar with, and you can let a toddler “help” with the cleaning of the teeth, while showing the mother proper oral hygiene and positioning techniques. This is a good time to reinforce the importance of cleaning the teeth daily using fluoride toothpaste and a child-size toothbrush. You can even use some toothpaste during the toothbrush cleaning to reinforce its use at home.

Slide 15

**Cleaning the Teeth at Home**

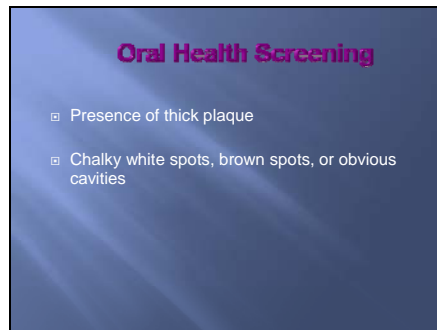
- ❑ Begins when first tooth erupts
- ❑ Let older children and caregivers practice while you watch



#### **Cleaning the Teeth at Home**

Inform caregivers that the earlier they start cleaning the baby's teeth, the easier it will be as the child grows older. At home, parents can use the knee-to-knee position or the caregiver can hold the baby on her lap, facing outwards, and clean the teeth from behind. Some caregivers clean the teeth during bath time or while the child is on the changing table, approaching the baby from the front. Encourage families to find a method that works for them, and to be sure to include fluoride toothpaste as part of this daily routine.

Slide 16



### Oral Health Screening

Use the toothbrush to “count” the child’s teeth, while looking for the following things:

- Plaque
- Chalky white spots, brown spots, or obvious cavities

### Tip: Use the toothbrush as a mouth prop

The toothbrush can also serve as a mouth prop, preventing the child from biting down on your fingers...ouch!

Slide 17



### White Spots

These are what chalky white spots look like. Remember, the chalky white spots can actually be remineralized with the use of fluoride varnish.

The small brown spot on the front tooth in the second photo is a more advanced cavity.

Slide 18



### **Brown Spots**

As the decay progresses, brown spots will look like this.

Slide 19

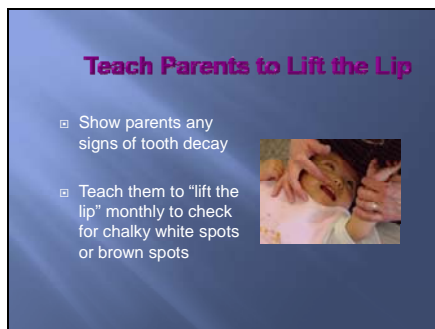


### **Severe ECC**

This is a picture of severe ECC and abscessed teeth.

**These children need to see a dentist soon!**

Slide 20



### **Teach Parents to Lift the Lip**

If you see any signs of tooth decay, you can point these out to the parent. Encourage the caregiver to lift baby's lip while cleaning at home and keep an eye out for chalky white or brown spots, being sure to look at both the front and back of teeth, and near the gum line.

At this point, you have gathered the data you need to provide a risk assessment. Using the information you gathered from the interview and your observations from the dental screening, you can determine if the child is at low or high risk for dental caries.



Slide 21

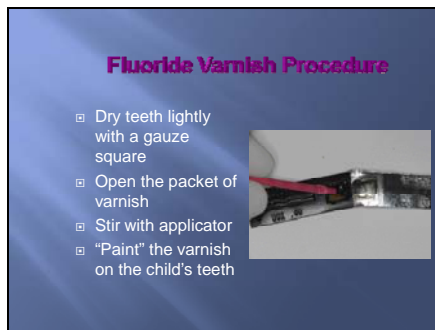


### **Step #5: Apply Fluoride Varnish**

For any child at high risk for tooth decay, you will want to provide a fluoride varnish treatment to all of the teeth. Fluoride varnish is safe and effective for use with babies and young children.

We recommend that you use the individual dose product, since it is all inclusive with its own applicator, contains the appropriate amount of fluoride, and keeps the procedure simple and safe.

Slide 22



- ❑ Dry teeth lightly with a gauze square
- ❑ Open the packet of varnish
- ❑ Stir with applicator
- ❑ "Paint" the varnish on the child's teeth


### **Fluoride Varnish Procedure**

*(read slide)*

Slide 23

### Fluoride Varnish Procedure

- Begin with lower teeth. Do the outsides of all teeth and then the insides.
- Repeat with upper arch
- Develop a pattern that works for you




### Fluoride Varnish Procedure

It is usually good to begin on one side of the mouth and “paint” the varnish on all of the outsides of the teeth and then return and do all of the insides, or tongue-sides of the teeth. Do one arch at a time, beginning with the lower teeth because this is where the saliva will pool. The total procedure shouldn’t take more than a couple of minutes and even less time for babies with only a few erupted primary teeth. If saliva flow is heavy, you may need to dry a few teeth at a time and paint the varnish on, using a “wipe and paint” technique.

Slide 24

### Fluoride Varnish Procedure

- When in doubt, follow the manufacturer's instructions




### Fluoride Varnish Procedure

If in doubt, follow the manufacturer’s instructions because this product is likely being improved even as we speak.

Slide 25

### Parent Instructions

- Mild yellow or brownish tint that will disappear when the teeth are brushed
- Don't brush until the next day for optimal benefit



### Parent Instructions


Depending on the fluoride varnish product you choose, it might leave a mild yellow or brownish tint on the teeth. The tint will disappear when the teeth are brushed, but we don’t want the parents to clean the child’s teeth until the next day.

The fluoride treatment works best if it is left on the teeth overnight.

Slide 26

**All done!**

- ▣ Raise the child back into their caregiver's arms for comforting
- ▣ Most children stop crying at this point
- ▣ Give them a toothbrush or toy to play with while you talk with the caregiver.




### All done!

Now it is time to raise the child back up into the mother's lap. Most young children will stop crying at this point. This is a good time to give the child the toothbrush or a soft toy to play with while you talk with the caregiver.

Slide 27

**Step #6: Summarize and Referral**

- ▣ Summarize findings
- ▣ Follow-up and referral



### Step #6: Summarize and Follow Up


After providing a few key messages to the family, you will want to record any signs of tooth decay, document if the child is at low or high risk, and whether a referral to a dentist is needed.

Reinforce the importance of these referrals to the family, and the fact that tooth decay is an infection and it needs to be treated, not just with fillings, but with diet, fluoride, and sealants or PRAT.

Slide 28

**Reinforce Home Care**

- ▣ It's what families do at home that really counts!

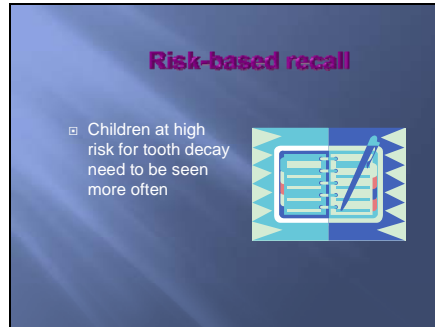


### Reinforce Home Care

This is another opportunity to reinforce with the family that it is what they do at home that will most likely prevent ECC.

Remind them once again to brush their child's teeth with a small smear of fluoride toothpaste daily!

Slide 29



### **Risk-based recall**

Finally, you will want to let the caregiver know when you would like to see the child again. Children at high risk for tooth decay need to be seen more often.

If the child is at high risk for ECC, you will want to stress the importance of fluoride varnish applications 3-4 times a year.

Slide 30



We will be talking about oral health screenings and fluoride varnish treatments that include having the parents present, but these services can also be provided in daycare centers and schools.

### **Question**

Can any of you think of ways that we might reach high-risk babies and their families in your community?

*You can list the ideas on newsprint, and discuss them briefly, but we just want to get people thinking about how this might work in their community.*

*Turn off projector.*

## Questions

- 1) How many of you have seen children with ECC?
- 2) Do any of you have stories of children with ECC that you would like to share with us?
- 3) Can you picture yourself applying fluoride varnish?



***Training Tip: People have been listening for quite awhile now. It is important to let them comment on what you presented and to share their own stories about children with ECC and their families. It is also important for them to express any concerns about providing screenings and fluoride varnish applications.***

## **Fluoride Varnish Video**

Let's look at a video of an up-close look at the application of fluoride varnish on both a baby and an older child.

***Play video.***

What do you think now that you've watched the video? Does this look like something you might be able to do? Do you have any questions?

## **Handouts**

Let's look at the handouts in your binders

- 1) Fluoride Varnish Application: 7 Steps for Community Workers
- 2) Tips for Managing Child Behavior

***Read through the handouts together, answering questions as they arise.***

Later in the Community Workshop, you will all get a chance to provide oral health screening and fluoride varnish for infants and young children. When we have our practice session, you can keep these handouts nearby to help you remember the 7 steps for fluoride varnish application.

# Fluoride Varnish Application: 7 Steps for Community Workers

## 1. Get Ready

Set out a paper towel with a child's toothbrush, gauze squares, fluoride varnish, and exam gloves.

## 2. Greet the Child and Interview the Parents

Ask the following questions:

- Have you started cleaning your child's teeth with a fluoride toothpaste?
- Have you taken your child to a dentist yet? When was the last visit?
- Have you or any of your other children had many cavities?
- Does your child take a bottle or sippy cup to bed at night or frequently walk around with a bottle or sippy cup throughout the day?
- How often does your child snack throughout the day? On what?



**Note:** As the family answers the questions, you can educate the family.

**Note:** If you are providing fluoride varnish in a daycare or school setting where the family is not present, you will omit this step.

## 3. Position the child

Babies: Assume the knee-to-knee position with the child sitting in the parent's or another person's lap and lowering the child's head onto your lap.

3 and older: The child can stand or sit in front of you.

## 4. Brush the Teeth and Provide an Oral Health Screening

Demonstrate how to brush a child's teeth, showing the caregiver how to do the same at home. This is a good time to remind the family about the importance of using fluoride toothpaste daily.

"Count" the child's teeth aloud, using the toothbrush to keep the mouth propped open and to avoid getting bit. Assess the child's oral condition, looking for chalky white spots, obvious tooth decay, or tooth defects.

## 5. Apply Fluoride Varnish

Provide fluoride varnish if the child is at high risk for tooth decay. Apply the varnish to all surfaces of all of the teeth.

## 6. Summarize and Follow-up

If the family is present, discuss your findings and recommendations for follow-up and home care.

**Note:** In a daycare or school setting, you will need a system for referring children who have dental caries to a dental health professional for treatment.

## **Tips for Managing Child Behavior**

### Voice Control

Use a soft voice, pleasant tone, and speak slowly to influence and direct the patient's behavior.

### Nonverbal Communication

This includes the use of appropriate touching, paying attention to your own body language, and using pleasant facial expressions.

### Tell-show-do

This involves verbal explanations of what you plan to do, demonstrations of the noise, smells, visual, and tactile aspects of what is coming next, and then proceeding, trying not to deviate from the explanation and demonstration.

### Positive Reinforcement

Give positive feedback at each step to reward desired behaviors. Assist children in reaching their full potential by catching them doing something right.

### Distraction

This is the use of toys, other props, and staff, having them distract the child with talk, or even silliness, while you work.



“ Behavior management is as much an art form as it is a science.”

*Adapted from “Clinical Guideline on Behavior Management”, Clinical Affairs Committee, American Academy of Pediatric Dentistry*