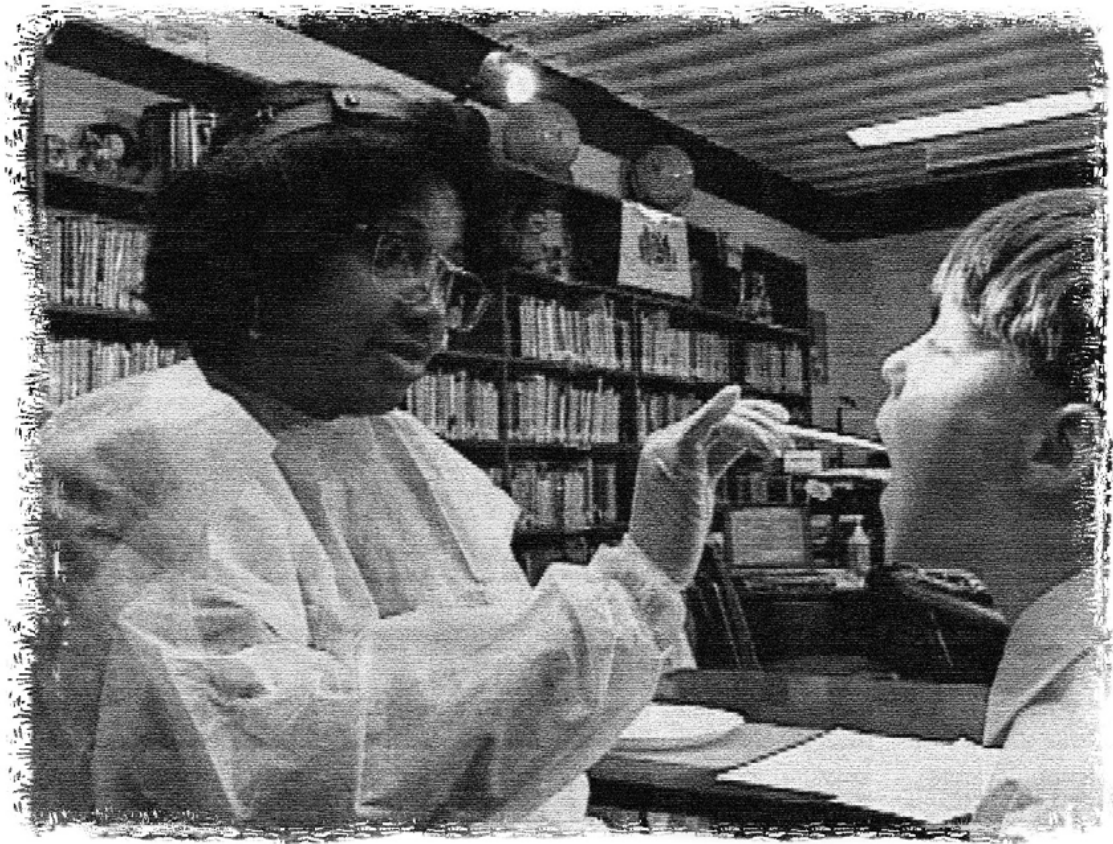




## *Using the BSS to Collect Data*



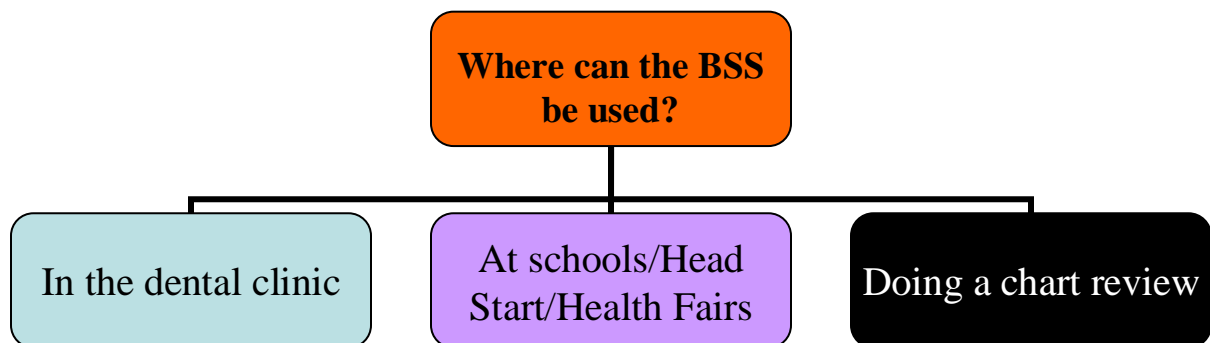
# Introduction

The Basic Screening Survey (BSS) is used by states to assess oral health status. Developed by the American Association of State and Territorial Dental Directors, this survey can be done in the dental clinic, at health fairs, at other screening opportunities, and through a retrospective chart review.

Before embarking on a screening survey, it is important to understand its limitations. A dental screening is not a thorough clinical examination and does not involve making a clinical diagnosis resulting in a treatment plan. A screening is intended to identify gross dental or oral lesions, and is conducted by dentists, dental hygienists, or other appropriate health care workers, in accordance with applicable state law. The information gathered through a screening survey is at a level consistent with monitoring the national health objectives found in the United States Public Health Service's Healthy People document. Surveys are cross sectional (looking at a population at a point in time), and descriptive (intended for determining estimates of oral health status for a defined population). [From the ASTDD BSS Manual, 2003]

Why do a Basic Screening Survey? This survey will help you determine baseline data for the population you serve. With respect to the IHS Early Childhood Caries Initiative, most of the data we have now on the prevalence of ECC is either old or unreliable: (1) the last IHS Oral Health Survey was done in 1999, so that data is over 10 years old now; (2) RPMS data, in most situations, is not very reliable in assessing population oral health status because it only includes patients presenting to the dental clinic and most dental clinics were not consistent in using the IH tracking codes in the past and these codes were removed in early 2009 from the DDS package.

The survey is also important in two other ways. First, it will allow you to measure the extent of ECC in your community as compared to your state. The National Oral Health Surveillance System website - <http://www.cdc.gov/nohss/index.htm> - will allow you to make comparisons between your community's ECC prevalence rate with that of your state and surrounding states. Second, the survey can be used to track the effectiveness of your ECC prevention activities over time.



# ***What kind of equipment do I need?***

Unless you're doing a chart review, it is recommended that you have the following things to conduct the basic screening survey:

- Light source – portable dental light, pen light, or head lamp
- Tongue blade and/or disposable mirror
- 2" X 2" gauze – to remove gross debris from the teeth
- Gloves and masks
- The BSS form

Dental explorers are not usually used for the BSS but can be used.

# ***How do I sample?***

Through the Basic Screening Survey, we are NOT trying to create perfect data. There will be some problems with the data collected. Most data collected will be convenience sampling, meaning that you will be conducting the survey where children are present – Head Start, health fairs, and at the dental clinic. Convenience sampling may not be as scientifically reliable as other types of sampling such as randomized sampling, but it is inexpensive and easy to do.

For the IHS ECC Initiative, the goal is to conduct the Basic Screening Survey on 0-5 year-olds. This age group can be reached through any of the following ways:

- At Head Start (the BSS can count as an exam for Head Start's purposes)
- In cooperation with WIC programs
- At health fairs
- In the dental clinic
- Through chart reviews

So now that you have a plan, the first question usually is "how big of a sample size do I need to have?" This question is not easy to answer. Generally, if you want to be more precise (with the results being within 1 or 2% of the true value), you would survey a relatively large sample. However, it is often difficult to get a large number of 0-5 year olds to screen, and the IHS ECC Initiative is focused on prevention and early intervention, so you don't want to spend an inordinate amount of time just on data collection. We would recommend that you use the BSS to get as much data as you can within a small time period so that you can proceed with other parts of the initiative!

# Consent

Do you need informed consent to conduct the Basic Screening Survey? The answer to that question really lies with your own philosophies.

For Head Start patients, general consent is provided through the consent form sent out by Head Start to parents at the beginning of the school year. Therefore, consent to conduct the BSS is not needed. At your dental clinic, the BSS would most likely be conducted at the same time as an examination, so consent is provided on the treatment plan. At schools, you may wish to obtain consent using the sample letter below that is provided in the BSS Manual by ASTDD.

Dear Parent:

Your child's school has been chosen to take part in the \_\_\_\_ dental program's Early Childhood Caries (ECC) Initiative Survey to learn about the health of children's teeth in your community and across the state. The results of the survey will help us plan and implement the ECC Initiative. As you know, a healthy mouth is part of total health and wellness and makes a child more ready to learn.

With your consent, a dentist or dental hygienist will screen your child's teeth to check for tooth decay and other dental problems. Your child will receive a toothbrush and a letter to take home that tells you about the health of your child's teeth. This screening does not take the place of regular dental check-ups.

Please be assured that the dental screening will be carried out in a healthy manner. Dental gloves will be worn, and we will use a new, disposable, sterilized mirror and probe for each child, which will be thrown away after one use. The dentist or dental hygienist will follow all guidelines to prevent the spread of disease set by the Centers for Disease Control and Prevention (CDC) for this type of dental survey. Results of your child's screening will be added to those of other children, and your child will not be named in any "Make Your Smile Count!" report.

Please complete and sign the attached consent form. This will allow your child to be in the ECC Initiative. Return the form to your child's teacher tomorrow. Thank you for working with us to learn how to improve the dental health of the children of our community. If you have any questions about the IHS ECC Initiative please contact Susan Smith at 333/555-5555 or via e-mail at [ssmith@ihs.gov](mailto:ssmith@ihs.gov).

Sincerely,

Enc.

# The BSS Form

**Screen Date:**

\_\_\_ / \_\_\_ / \_\_\_\_\_

**Site/Tribe:**

**Screener's Initials:**

**ID/Chart Number:**

**Birth Date:**

**Age:**

\_\_\_ / \_\_\_ / \_\_\_\_\_

**Gender (circle one):**

1=Male

2=Female

**Sealants on Permanent Molars (circle one):**

0=No Sealants

1=Sealants

2=Cannot be determined or does not apply

**Untreated Cavities (circle one):**

0=No untreated cavities

1=Untreated cavities

**Severe Early Childhood Caries (circle one):**

0=Five or less primary teeth with caries experience

1=Six or more primary teeth with caries experience

**Caries Experience (circle one):**

0=No caries experience

1=Caries experience

**Treatment Urgency (circle one):**

0=No obvious problem

1=Early dental care indicated

2=Urgent care (within 24 hours) indicated

**Comments:**

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Note that this form does **not** count the number of teeth that are decayed, missing, or filled, but rather when used collectively counts the number of patients that have untreated caries, caries experience, and ECC.





# *How do I use this information?*

After you have screened enough 0-5 year-old children, you can compile the data to determine what the caries prevalence is in your community.

$$\text{Caries prevalence} = \frac{\text{Number of children with caries experience}}{\text{Total number of children surveyed}} \times 100$$

$$\text{ECC prevalence} = \frac{\text{Number of children with ECC}}{\text{Total number of children surveyed}} \times 100$$

$$\text{Untreated caries prevalence} = \frac{\text{Number of children with untreated caries}}{\text{Total number of children surveyed}} \times 100$$

Once you have this information, you can then compare it to your state and nationally by going to the National Oral Health Surveillance System website at <http://www.cdc.gov/nohss/index.htm>.

These data can be used to support proposals for program awards (such as the IHS Oral HP/DP program awards) and grants, by showing the disparities between your community and your state or surrounding states.

Furthermore, as your ECC prevention program progresses, you can re-survey children to see what effect your program has had in reducing the ECC prevalence, caries prevalence, and untreated decay prevalence.

## *See also...*

BSS Manual  
Basic Screening Survey Summary

[both of these documents were published by the American Association of State and Territorial Dental Directors]