
Basic Screening Survey (BSS) Triageing

Clinical Training for School Dental Sealant Programs
August 2023



What is BSS?

- Developed by ASTDD and Ohio Dept. of Health
- Used for standardized oral health surveillance
- Not recommended for research

BSS Populations

- Pre-school populations (Including early Headstart and Headstart students)
 - Untreated decay (includes active and potentially arrested carious lesions)
 - Treated decay
 - Treatment urgency

BSS Populations

- Older Adults
 - Dentures and denture use
 - Number of natural teeth
 - Untreated decay
 - Root fragments
 - Need for periodontal care
 - Suspicious soft tissue lesions
 - Urgency of need for dental care

BSS Populations

- School Age (Kindergarten – 12th grade)
 - Untreated decay
 - Treated decay
 - Potentially arrested decay
 - Sealants on permanent first and/or second molars
 - Urgency of need for dental care

Triaging Appropriately

- Triage categories 0, 1, 2
 - Numbering based on CDC SEALS* categories
- Triaging for your program – Use BSS**
 - Then develop “program-specific” protocols for students who triage as a “1” but really need to see a dentist soon.
- Reporting to parents – Use OBD***
 - Required by law

*SEALS: Sealant Efficiency Assessment for Locals and States

**BSS: Basic Screening Survey

***OBD: Oregon Board of Dentistry

Acknowledgment

This following slides are the work of the Association of State and Territorial Dental Directors (ASTDD) who developed the slide deck.

Drs. Eugenio Beltran, Margaret Fontana, Amid Ismail, John Warren, and John Zimmer for provided the clinical photos.

(May 2021)



Untreated Decay

Untreated Decay

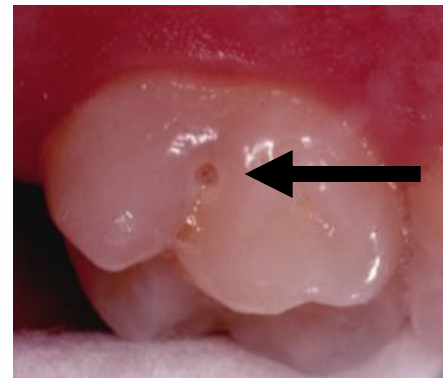
A measure
of untreated
disease



Does this
child have
any cavities
that have not
been
treated?

Untreated Decay

- A tooth has untreated decay when you can easily see breakdown of the enamel surface
- ***Only cavitated lesions are considered untreated decay***



Untreated Decay



Pits & Fissures



Smooth Surface

Untreated Decay

- Retained roots = untreated decay



← Untreated decay

Proximal Surface Decay



NOT Untreated Decay

- Broken fillings without recurrent decay are coded as treated not untreated decay



NOT Untreated Decay

- Teeth with stained pits & fissures and **NO** enamel break are considered sound



This tooth has stain but NO enamel break, so it is SOUND.

NOT Untreated Decay

- “White spot” lesions are not untreated decay



These teeth have “white spots” but no break in the enamel surface. Do not code as untreated decay.

Untreated Decay ?

- SDF may be considered potentially arrested or untreated decay



Untreated = Yes

?

Potentially Arrested Decay



Confirming arrested decay requires a probe to determine if the surface is hard. The BSS does not use probes so the determination of arrested is based on a visual assessment only

Potentially Arrested Decay

- Break in enamel but surface appears hard, dark and glossy
- Usually due to SDF treatment



Examples



Codes for Potentially Arrested Decay

No = student has no
potentially arrested decay

Yes = student has potentially
arrested decay

- Can be coded as:
 - Primary only
 - Primary + Permanent
 - Permanent only

Potentially Arrested Decay



Potentially Arrested Decay



Potentially Arrested Decay



Rule of Thumb

When in doubt, rule it out.

If you are not sure if a cavity is present, assume it is not.

A Few Examples

UniViSS (2008)

Universal Visual Scoring System for pits and fissures (UniViSS occlusal)						
Second step: Discoloration Assessment	First step: Lesion Detection & Severity Assessment					
	Score F No cavitation of a caries lesion	Score E No cavitation or enamel lesion	Score M Microcavity in enamel localised enamel breakdown	Score D Dentin exposure	Score L Large cavity	Score P Pulp exposure
Sound surface (Score 0)	No cavitations or discolorations are detectable.					
White (Score 1)						
White-brown (Score 2)						
(Dark) Brown (Score 3)						
Greyish translucency (Score 4)						

Untreated Decay = No | Untreated Decay = Yes

Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2760425/>, accessed April 2021

White Discoloration



Not visible without prolonged air drying

Untreated decay = NO



May be visible without drying, fissures appear wider but no “break” in enamel integrity

Untreated decay = NO



Has definitive break in enamel surface

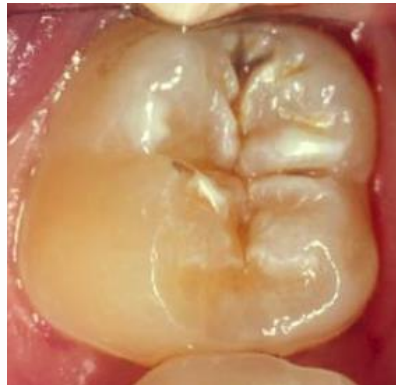
Untreated decay = YES

White-Brown Discoloration



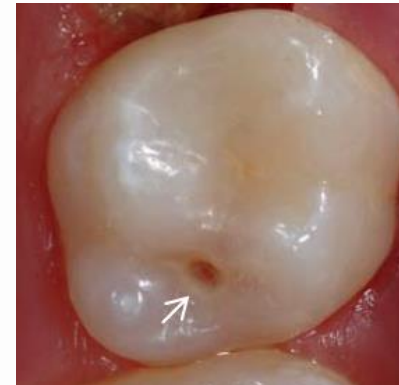
Not visible without prolonged air drying

Untreated decay =
NO



Visible without drying, fissures appear dark & wider but no “break” in enamel integrity

Untreated decay =
NO



Has definitive break in enamel surface

Untreated decay =
YES

Dark Brown Discoloration



Visible without air
drying, stain
Untreated decay
= NO



Visible without air
drying, stain
Untreated decay =
NO



Has definitive
break in enamel
surface
Untreated decay =
YES

Codes for Untreated Decay

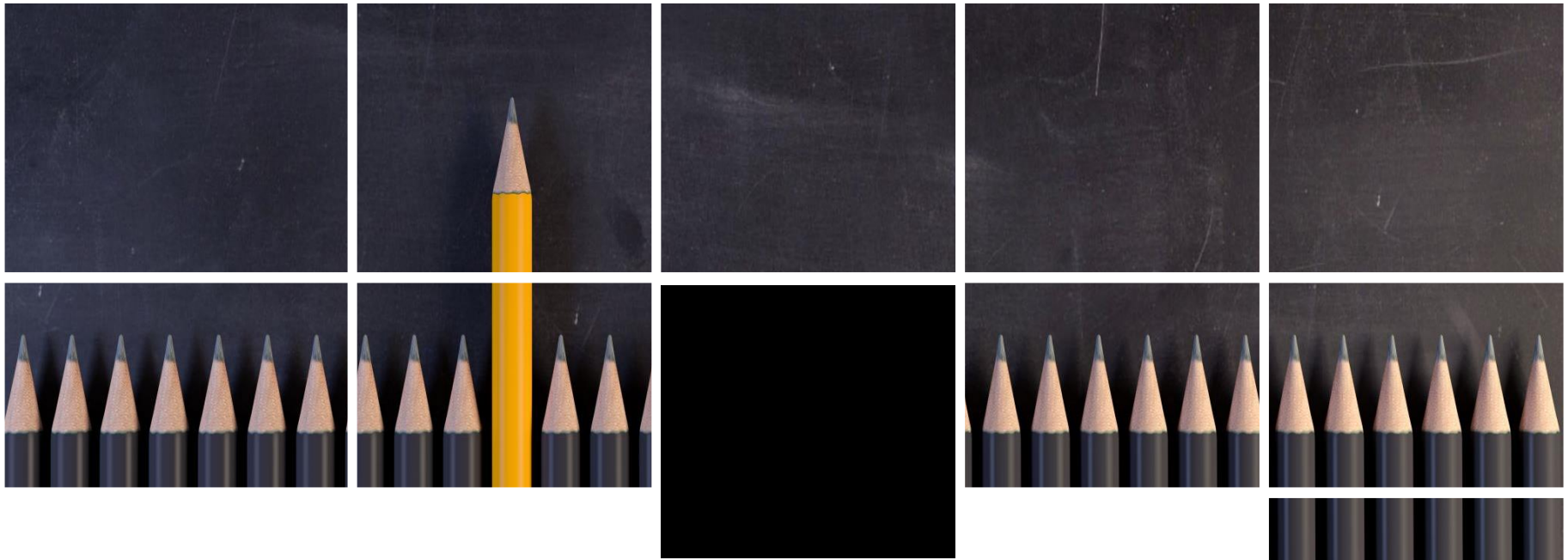
- Coded as 1- Early

Yes = child has
untreated decay

- Coded as 2 - Urgent

Untreated Decay?





Special Circumstances



Developmental Defects of the Enamel



Opaque Defect
Untreated = No



Pitted Defect
Untreated = No

Generalized Lack of Enamel



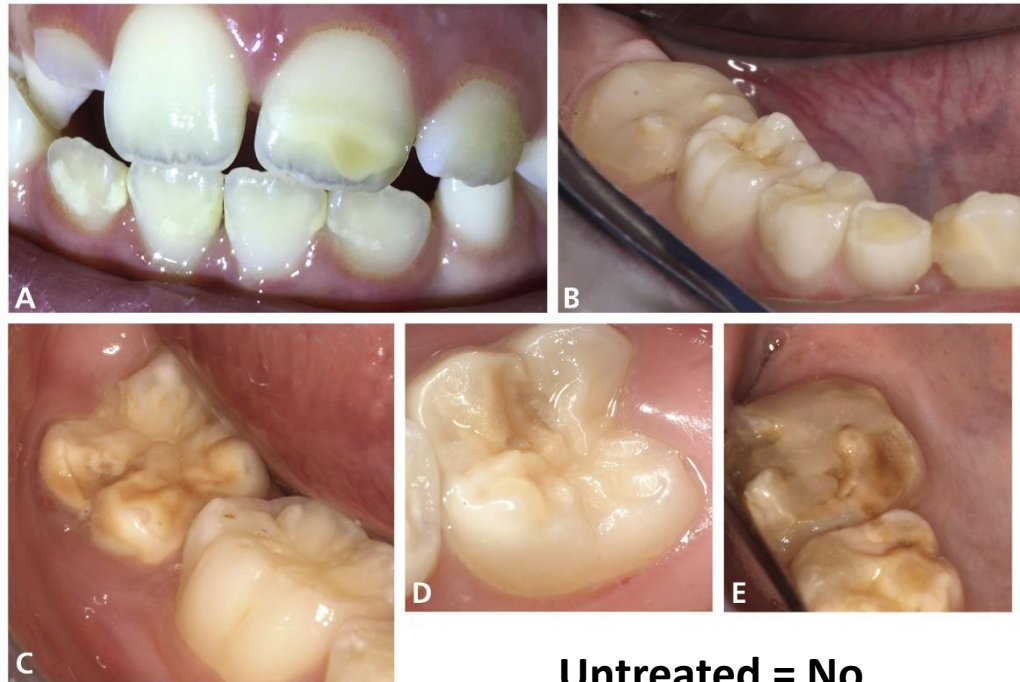
7-year-old
Untreated decay = No

Pitted Enamel Defect



8-year-old
Untreated Decay = No

Molar-Incisor Hypomineralization



Source: [https://jada.ada.org/article/S0002-8177\(20\)30160-4/fulltext](https://jada.ada.org/article/S0002-8177(20)30160-4/fulltext)

Enamel Defects & Decay



Untreated Decay = Yes

Enamel Defects & Decay



Linear defect
Untreated Decay = No



Linear defect plus decay
Untreated Decay = Yes

Enamel Defects & Decay



Untreated Decay = Yes

Urgency of Need for Dental Care

- Three levels based on how soon a child should visit the dentist for a clinical diagnosis and any necessary ***restorative dental care***
 - Urgent need
 - Early care needed
 - No obvious problem (None)

Urgency of Need for Dental Care

- Urgent need
 - Needs dental care within the next week because of signs or symptoms that include ***pain, infection, or swelling***
 - A child with an abscess should always be coded as urgent
 - Even if the abscess is draining

Urgency of Need for Dental Care



This person has an abscess, so they need URGENT care - 2

Urgency of Need for Dental Care



This child has a draining abscess and should be coded as URGENT care- 2

Urgency of Need for Dental Care

- Early dental care - 1
 - Needs to see a dentist because of untreated decay or broken restorations but they do not have pain or an infection
 - Should see a dentist within the next several weeks or before their next regularly scheduled dental appointment

Urgency of Need for Dental Care



This child needs EARLY
dental care - 1

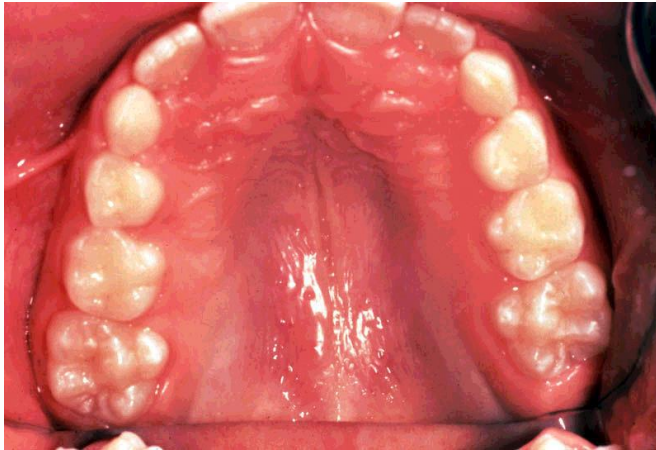
Urgency of Need for Dental Care

- No obvious problems - 0
 - Children with no cavitated decay or other dental problems requiring early attention are considered to have no obvious problem, which means that they should receive routine dental checkups

Urgency of Need for Dental Care

- No obvious problems- 0
 - Decay only on primary teeth about to be exfoliated
 - Child can have decayed teeth but not need treatment
 - Children needing only a prophylaxis or another preventive service should be coded as having no obvious problems

Urgency of Need for Dental Care



This child has no obvious need for dental care - 0

Codes for Urgency of Need for Dental Care

Early = needs early
dental care

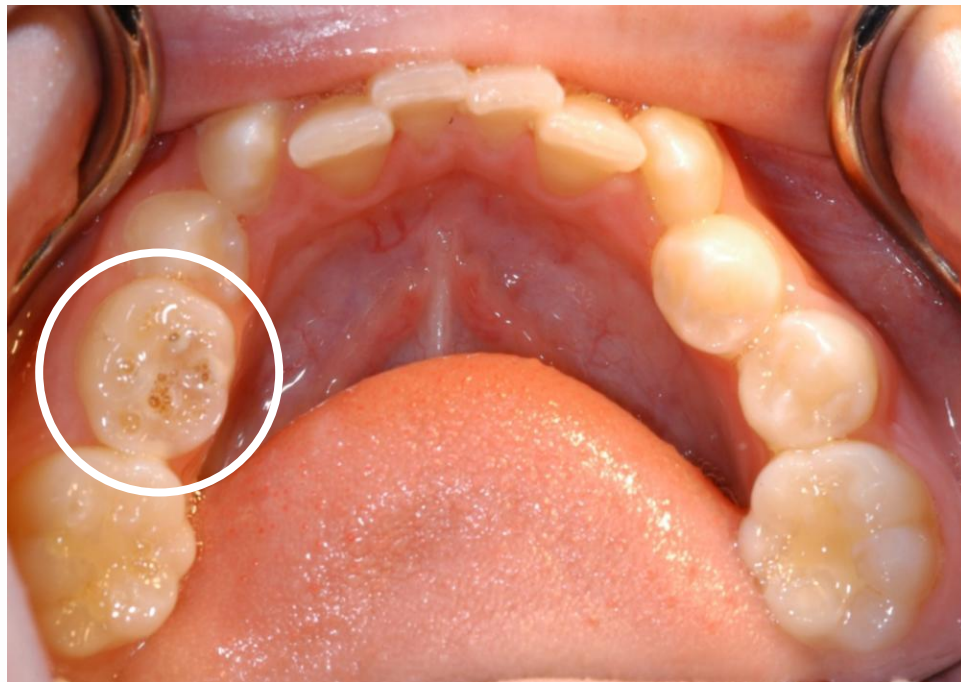
- Coded as 1

Urgent = needs urgent
dental care

- Coded as 2

Triage Review

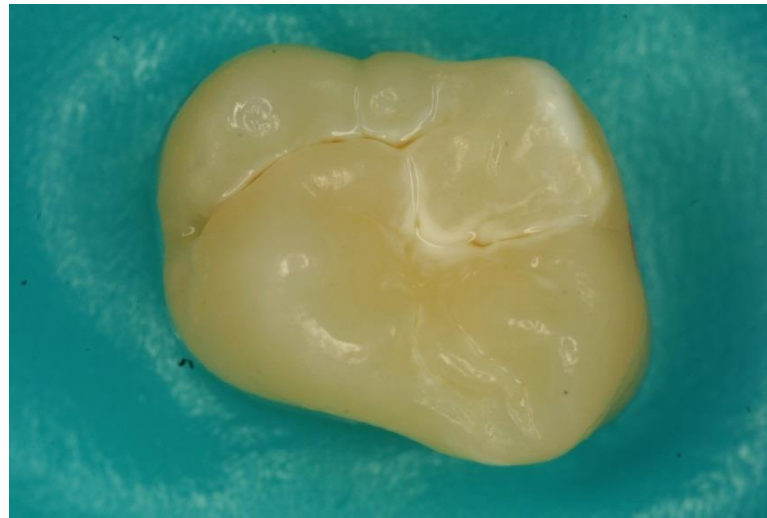
#1: No pain, no abscess



#2: No Pain, no abscess



#3: No pain, no abscess



#4: No Pain, no abscess



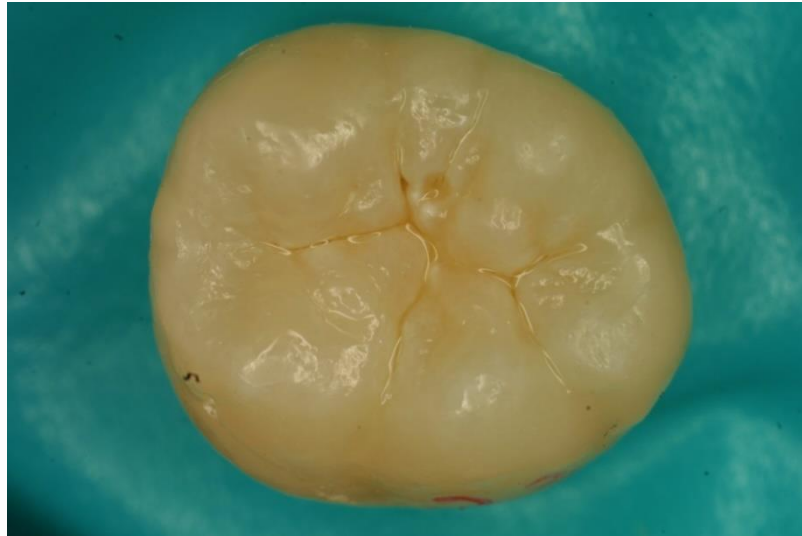
#5: No pain, no abscess



#6: No pain



#7: No Pain, no abscess



#8: No pain, no abscess



#11-#14: No pain, no abscess



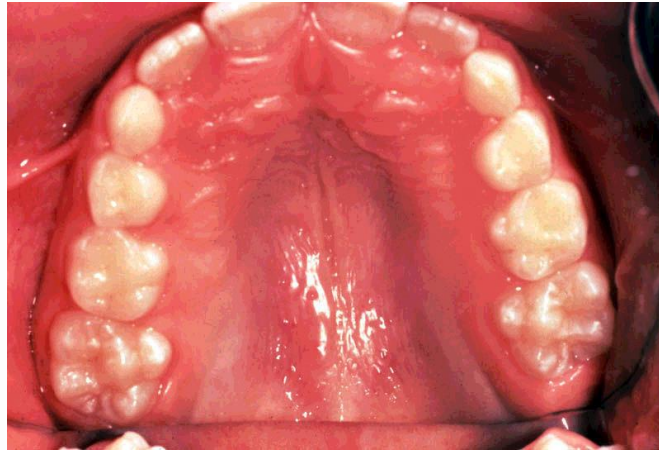
#15: No pain, no abscess



#16: No pain, no abscess



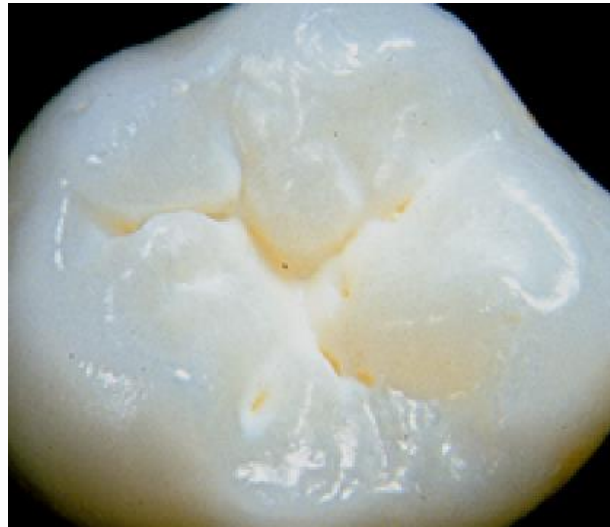
#17: No pain, no abscess



#18: No pain, no abscess



#19: No pain, no abscess



Parent “Results” Letter

- By law, if a screening occurs, parents/guardians are to receive a letter regarding their child’s screening results.
- Put your “clinical hat” back on.
- Information on parent letter does not need to match information on screening form.
- You may add a written note to the parents – never critical, but helpful suggestions. (e.g. “There are signs of early problems. Johnnie needs some help brushing at the gum line.”)

Oregon Board of Dentistry (direct quote)

- “The OBD adopted specific language that must be on any Oral Health Screening Form that would be given to individuals or parents or guardians of minors who would be screened.”

“The following is the language and would need to be on any Oral Health Screening Form that would be used by **any Oregon Dental Hygienist or Dental Assistant in compliance with Oregon Law.**”

Oregon Board of Dentistry (direct quote)

This is an oral health screening for _____.

A screening is just a quick look and does not take the place of a thorough examination by a dentist. Serious oral health problems may be missed in a screening. The person doing the screening may or may not have any dental training. [*Dental Hygienists or Dental Assistants may omit the previous sentence.*]

- No visible signs of oral problems. See your dentist at least yearly.
- Visible signs of oral problems were found. A visit to a dentist is recommended to prevent serious or more costly problems.
- Visible signs or symptoms of serious dental needs were found. An immediate visit to a dentist is recommended.

<https://www.oregon.gov/dentistry/pages/faq-licensees.aspx>

Questions?