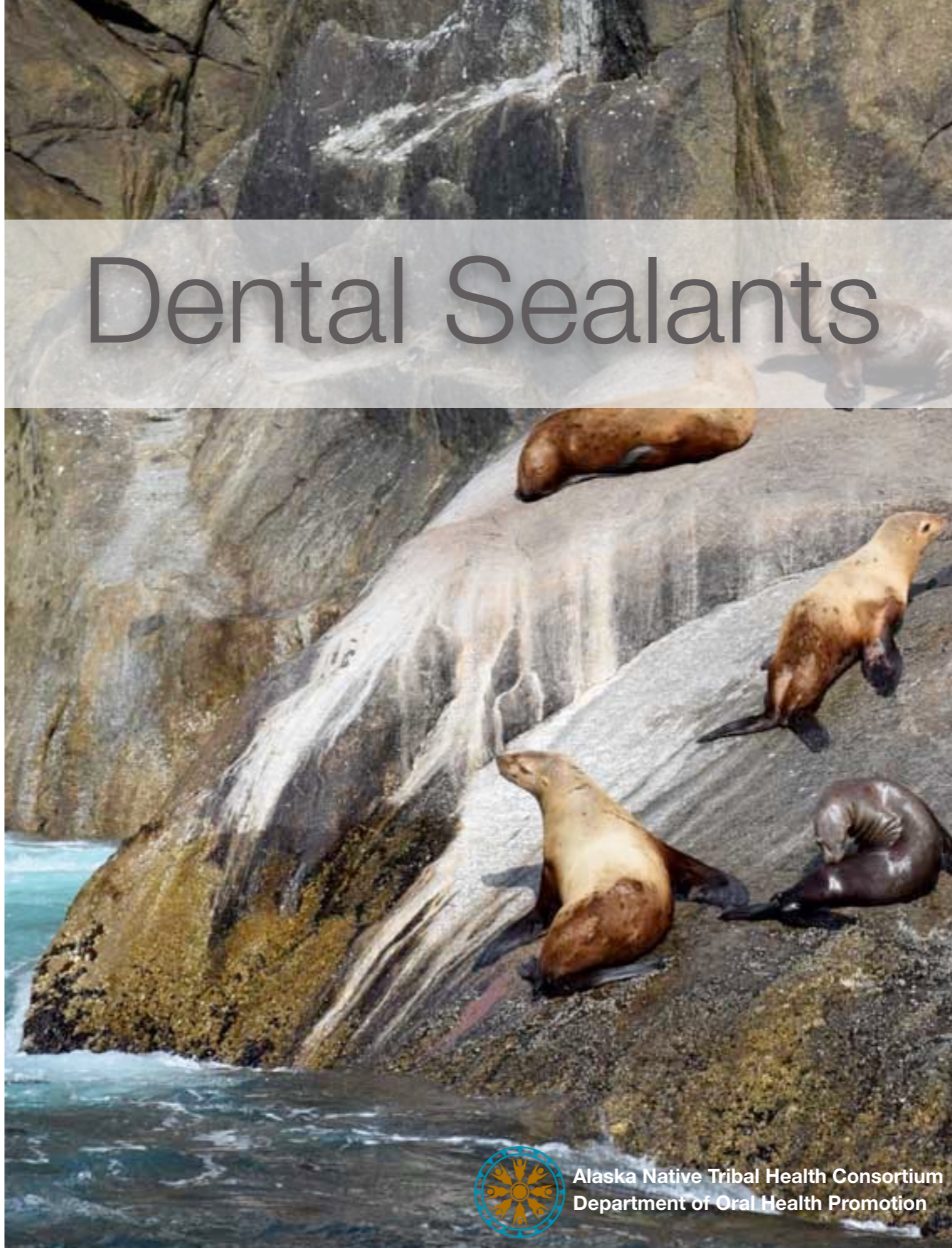


# Dental Sealants



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# Dental Sealants

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To prepare the Alaska Dental Health Aide to provide sealants, the following chapters are presented in this book.

- Introduction
- Prepare
- Sealant Considerations
- UltraSeal XT Sealant Placement
- Fuji Sealant Placement
- Sealant Failure
- Documentation and Recall
- Review
- Resources



Chapter 2

---

# Introduction

---



# Introduction

Notes

## Learning Objectives

- Describe the purpose of sealants
- List two type of polymerization
- Describe the clinical indications for sealants
- Describe the clinical contraindications for sealants
- Demonstrate the steps in the placement of dental sealants
- Discuss ways to inspect a dental sealant to assure retention
- Explain troubleshooting methods to improve sealant retention
- Demonstrate precautions and safety practices for the operator and the patient when placing dental sealants
- Document placement of sealants using SOAPE note

# Introduction

## Terms to Know

[Notes](#)**Buccal**

Toward the cheek. The tooth surface in posterior teeth that is closest to the inner cheek.

**Caries**

Tooth decay.

**Exfoliated**

Normal loss of primary teeth when permanent teeth erupt into the mouth.

**Filled sealants**

Contain a combination of resins, chemicals and fillers. The purpose of fillers is to increase bonding strength and resistance to abrasion and wear. Fuji Triage is an example.

**Hydrophilic**

Tendency to mix with or dissolve in water.

**Interproximal**

The surface next to each other when the teeth are adjacent in the arch. For example on most adjacent teeth the distal and mesial surfaces are next to each other.

**Light-cured**

Type of sealant material that is polymerized through exposure to a curing light.

**Lingual**

The tooth surface toward the tongue.

**Manufacturer's directions**

Instructions that are found in product packaging that describe the best way to use a material.

# Introduction

Notes



## Moderate-high risk

Caries classification that describes patients who currently have or have experienced tooth decay.



## Occlusal

The biting surface of posterior teeth.



## Occlusal interference

If a sealant does not follow the natural contour of a tooth, it prevents the maxillary and mandibular teeth from touching when a patient closes his/her mouth. Sometimes called “a high spot.”



## Opaque

Not able to be seen through; not transparent.



## Operculum

Folds of gingival tissue overlying the crown of an erupting tooth.



## Pits and fissures

Grooves in the occlusal surfaces of posterior teeth.



## Polymerization

The process of changing a simple chemical into another substance that contains the same elements.



## Sealant

Prevents dental caries from occurring in the pit and fissure surfaces of teeth. It provides a protective barrier between the tooth and acid-producing bacteria.

# Introduction

Notes



## Sealant retention

The ability of a sealant to firmly adhere to the tooth surface.



## Self-cured

Type of sealant material that is polymerized by chemical reaction.



## Shelf life

The length of time a dental material may be stored without becoming suitable for use. A shelf life may have an expiration date.



## Unfilled sealants

Unfilled sealants have a higher ratio of resin to filler material. They wear down more easily and need less occlusal adjustment. UltraSeal XT is an example.



## Viscosity

The characteristic of being sticky or the rate of flow for a material.

Chapter 2

---

# Prepare

---





# Prepare

Click to open, slide right to view

Notes

Slider 2.1

My next patient is here.  
I'll review the Medical History  
and Treatment Plan first.



# Prepare

Notes

**Movie 2.1** Following Dental Orders - Sealants



# Prepare

## Sealants Overview

Notes

Dental sealants are thin, plastic coatings painted on the chewing surfaces of posterior teeth and lingual pits of anterior teeth. They act as a barrier to shield the tooth from cariogenic bacteria contained in saliva. Sealants prevent dental caries from occurring in the pit and fissure surfaces of teeth.

Sealants are applied by dental providers, including dentists, dental hygienists, dental assistants, and dental health aides. Sealants can be placed in dental clinics and in community settings like schools and childcare facilities.

Getting sealants is simple and painless. They are painted on as a liquid and quickly harden to form a shield over the tooth. Sealants are part of a preventive program that includes the use of fluorides, dietary counseling, plaque control, and regular dental examinations. Almost without exception, the placement of dental sealants is painless and non-traumatic – allowing for positive dental experiences for children.

# Prepare

Notes

**Movie 2.2 Seal in a Smile**



**Movie 2.3 Explaining Sealants to Your Patient**



# Prepare



Notes



Presentation 2.1

DENTAL SEALANTS  
Dr. Mary Williard

A small speaker icon in the bottom right corner of the presentation window, indicating audio content.

# Prepare

Notes

FAQs 2.1

FAQs

FAQs 2.2

FAQs

# Prepare

Notes

## Who Should Get Sealants?


Children and adults who have one or more of the following characteristics are good candidates to receive dental sealants:

- If the patient is at moderate or high risk for tooth caries.
- If the patient has caries limited to the enamel of the pits and fissures of teeth.
- If the patient has existing pits and fissures that are susceptible to caries.
- If the patient has sufficiently erupted permanent teeth with susceptible pits and fissures.

The American Academy of Pediatric Dentistry (AAPD) recommend sealants be placed on newly erupted primary and permanent molars, and premolars with deep pits and fissures before decay attacks the teeth. The following are general age guidelines when teeth erupt and sealants can be applied:

- 24-36 months to seal primary molars;
- 5-7 years to seal first permanent molars;
- 11-13 years to seal second permanent molars.

# Prepare

A photograph showing a group of people in a boat on the water. The people are wearing jackets and hats, suggesting a cool environment. The water is dark, and the background is slightly blurred, focusing on the people in the boat.

Notes

What are the indications for sealants?

- Permanent molars and premolars with deep and/ or irregular pits and fissures.
- Primary molars can also be sealed if they have deep and/ or irregular pits and fissures.
- Newly erupted teeth.
- Teeth with deep buccal and lingual grooves.
- Maxillary incisors with deep lingual pits.
- Susceptible teeth in patients who are at moderate or high risk for dental caries, possibly due to high sugar intake, poor oral hygiene, xerostomia, orthodontics, and poor fluoride exposure.



# Prepare



Notes

What are the contraindications for sealants?

- Tooth has an obvious lesion on the occlusal or proximal surface and needs a restoration.
- Tooth already has a large occlusal filling.
- Pits and fissures are shallow and self-cleaning.
- Tooth will soon be exfoliated (lost).
- Teeth cannot be sufficiently isolated and moisture contamination is likely because of patient behavior or partial eruption of a tooth.
- Known allergies to the material(s) used in sealant material.
- Children who are too young to cooperate during the procedure.

Chapter 3

---

# Sealant Considerations

---



# Sealant Considerations

## Types of Sealant Materials

There are various types of sealant materials many of these are categorized based on:

### Method of Polymerization

- Self-cured are materials dispensed as two components, and when the components are mixed, the polymerizations begins. This is usually completed within 60 seconds resulting in a hardened sealant.
- Light cured are materials hardened after being activated by visible light.

### Fillers

- Filled sealants contain a combination of resins, chemicals and fillers. The purpose of fillers is to increase bonding strength and resistance to abrasion and wear. Filled sealants are usually opaque. A sealant with high filler content may need more occlusal adjustment after placement.
- Unfilled sealants have a higher ratio of resin to filler material. They wear down more easily and need less occlusal adjustment. They have a high viscosity (rate of flow) that allows the material to flow more readily into the pits and fissures. Unfilled sealants may be clear or tinted. Colored sealants can be readily seen, possibly making them easier to place and evaluate at recall dental visits.

# Sealant Considerations

Notes

## Types of Sealant Materials continued

### Water Affected

- Hydrophobic sealants tend not to combine with or unable to dissolve in water. These sealant materials usually fail if contaminated with water or saliva.
- Hydrophilic sealants have an attraction for water, readily absorbing or dissolving in water. These sealant materials may be able to tolerate and be effective if contaminated with some water or saliva.

### Fluoride

- Some, not all, sealants have fluoride added.
- Some sealants release fluoride after polymerization.
- Some sealant materials (Fuji) can be recharged with fluoride applications (toothpaste, rinses, varnishes, gel/foam).
- Provides antibacterial properties.
- Leaches out of the sealant over time and into the adjacent enamel.



# Sealant Considerations

Notes

## Types of Sealant Materials continued

### Glass Ionomer and Resin-Based

- Glass ionomer sealants are a good choice for teeth that are partially erupted and difficult to isolate because they are moisture tolerant.
- Resin-based sealants are used for fully erupted teeth. They provide higher bond strength and may provide a longer retention rate.

# Sealant Considerations

Notes

## Safety Precautions When Using Sealants

- Follow standard infection control precautions.
- Dispose of unit dosed material after use.
- Etchant agents contain phosphoric acid. When etching, avoid contact with oral tissues, eyes and skin. In case of accidental contact, immediately flush the area with large amounts of water. If eye contact is involved, immediately rinse with water and seek medical attention.
- Sealant material contains acrylate resins. Do not use sealants on patients with known acrylate allergies.
- If the sealant contacts the gloves, remove and discard the glove, wash hands immediately with soap and water, and then re-glove.
- If accidental eye contact or prolonged contact with oral soft tissue should occur, flush with large amounts of water. If irritation persists, contact a physician.
- The curing light can cause damage to the retina. Protective eyewear should also be provided for the patient during sealant procedures.

# Sealant Considerations

## Isolation

Notes



Movie 3.1 Isolite



Chapter 4

---

# UltraSeal XT Sealant Placement

---





# UltraSeal XT Sealant Placement

Notes

## Setup

It is importance to have everything ready and available. Sealants have a limited working time. Not having to search for materials will provide a better chance of keeping the working field dry and allow the procedure to be completed before the sealant cures.

Air/ water syringe

Mouth mirror

Explorer

Cotton pliers

Scaler

High volume evacuation suction tip

Saliva ejector

Toothbrush

2x2 gauze

Cotton pellets

Cotton rolls

Cotton roll holder

Dri Angles

Bite Block

Rubber Dam – if an option

Isolite – if available

Sealant material

A/B well

Microbrush

Floss

Articulating paper

Educational materials

### Drag and Drop 4.1 UltraSeal XT Set Up



# UltraSeal XT Sealant Placement

Notes

Slider 4.1 UltraSeal XT Placement



# UltraSeal XT Sealant Placement

Notes

**Gallery 4.1** UltraSeal XT - Tap the picture, and swipe left to view the gallery.





# UltraSeal XT Sealant Placement

## Directions for Use:

Notes

1. Attach Inspiral® Brush tip or Blue Micro® tip to Ultra-Etch® 35%.
2. Attach Blue Micro tip or Black Micro® FX® to PrimaDry® syringe.
3. Attach Inspiral Brush tip to UltraSeal XT plus syringe. Adjust Inspiral Brush tip bristles to desired length by grasping and moving inward or outward.
4. Using oil-free pumice, air polishing prophylaxis system, or thin diamond fissure/prep bur, clean fissures.
5. Isolate teeth being treated to avoid saliva contamination.
6. Apply etch to fissures for 20 seconds.
7. Thoroughly rinse and dry. NOTE: If using sodium bicarbonate in air polishing system, repeat with a 5 second etch and thoroughly rinse.
8. Apply PrimaDry for 5 seconds, clear air syringe then air dry occlusal surface. DO NOT RINSE. NOTE: If using a bond agent do not use PrimaDry.
9. Express a small drop of UltraSeal XT plus to the brush tip prior to applying intraorally.
10. Use a scrubbing motion to apply resin to deep fissures. Avoid pooling resin.
11. Light cure with VALO® LED Curing Light on Standard Power for 20 seconds or 3 seconds on Xtra Power mode. (For lights with output <600mW/cm<sup>2</sup> cure 40 seconds or for lights with output >600mw/cm<sup>2</sup> cure for 20 seconds).
12. Adjust occlusion if necessary.

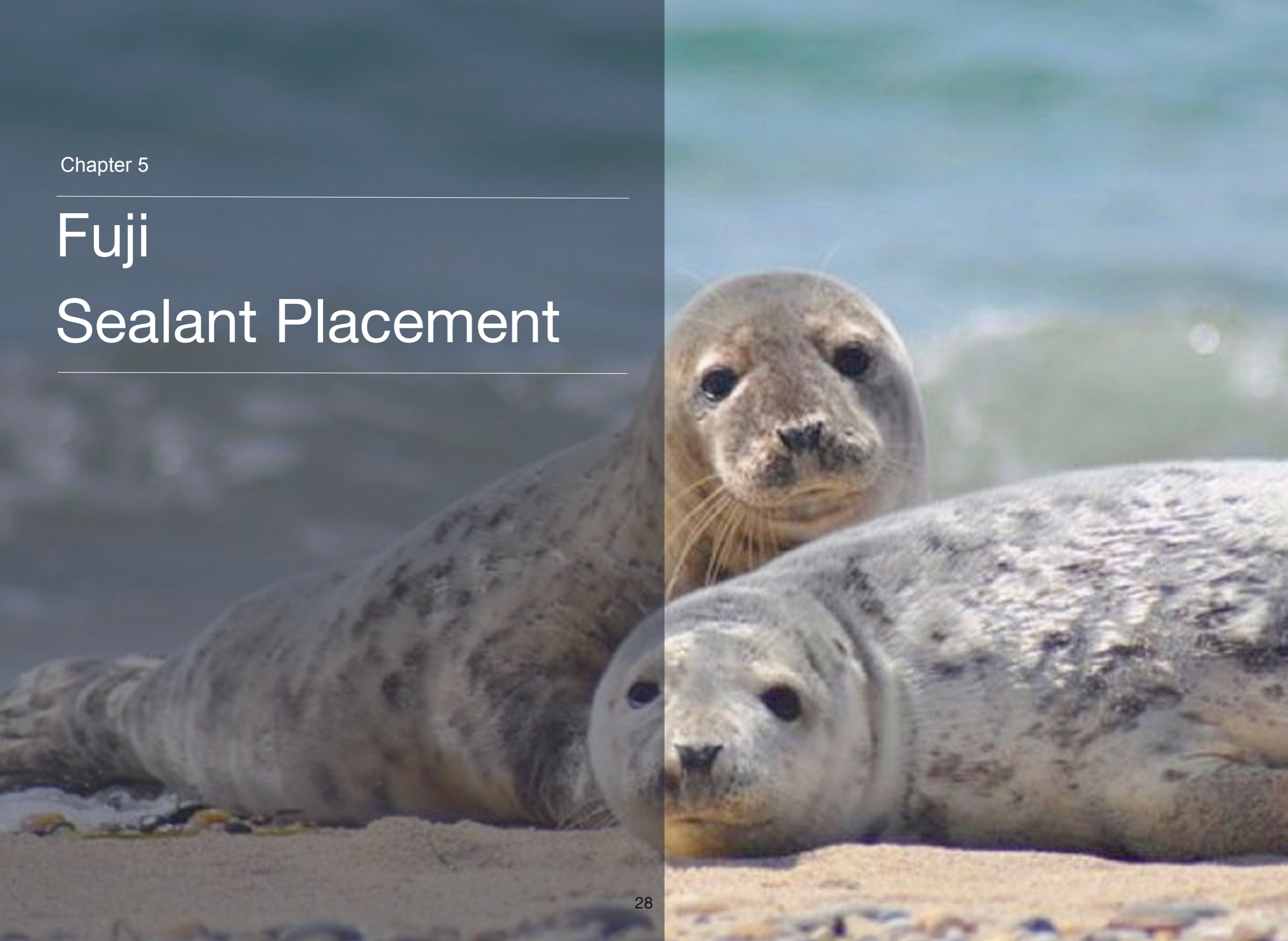
Chapter 5

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# Fuji

## Sealant Placement

---



# Fuji Sealant Placement

Notes

## Setup

It is important to have everything ready and available. Sealants have a limited working time. Not having to search for materials will provide a better chance of keeping the working field dry and allow the procedure to be completed before the sealant cures.

Air/ water syringe	Cotton roll holder
Mouth mirror	Dri Angles
Explorer	Bite Block
Cotton pliers	Rubber Dam – if an option
Scaler	Isolite – if available
High volume evacuation suction tip	Sealant material
Saliva ejector	A/B well
Toothbrush	Microbrush
2x2 gauze	Floss
Cotton pellets	Articulating paper
Cotton rolls	Educational materials
	Triturator

## Drag and Drop 5.1 Fuji Sealant Set Up



# Fuji Sealant Placement

Notes

**Gallery 5.1** Fuji Sealant - Tap the picture, and swipe left to view the gallery.



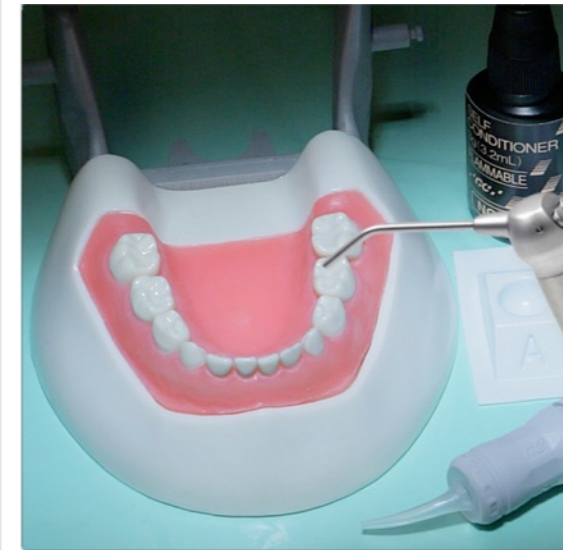
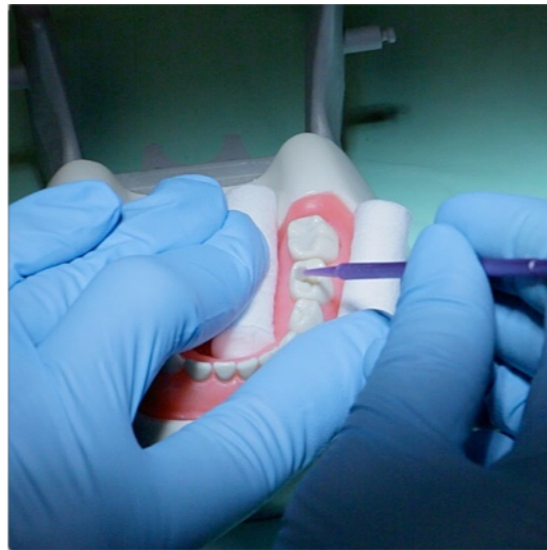
# Fuji Sealant Placement

Notes

## Directions for Use:

### Preparation

- After cleaning the tooth surfaces (prophylaxis with pumice and water) in usual manner, rinse thoroughly with water. Avoid aggravating the operculum.
- If extra retention is desired, application of GC CAVITY CONDITIONER (10 seconds) or GC DENTIN CONDITIONER (20 seconds) is recommended.
- Dry by blotting with a cotton pellet or gently blowing with an air syringe. Best results are obtained when prepared surfaces appear moist (glistening).





# Fuji Sealant Placement

Notes

## Mixing

- Before activation, shake the capsule or tap its side 2 or 3 times on a hard surface to loosen the powder.
- To activate the capsule, push the plunger until it is flush with the main body.
- Immediately place the capsule into a GC Capsule Applier and click the lever once. The capsule is now activated. Note: The capsule should be activated just before mixing and used immediately.
- Immediately remove the capsule from the applier and set the capsule into a capsule mixer or amalgamator. Mix for 10 seconds at high speed (approximately 4,000 RPM).

**Movie 5.1** Mixing

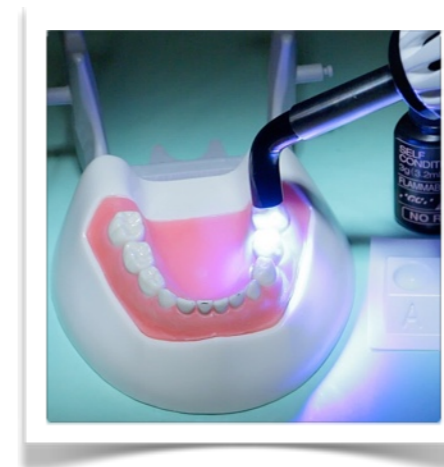
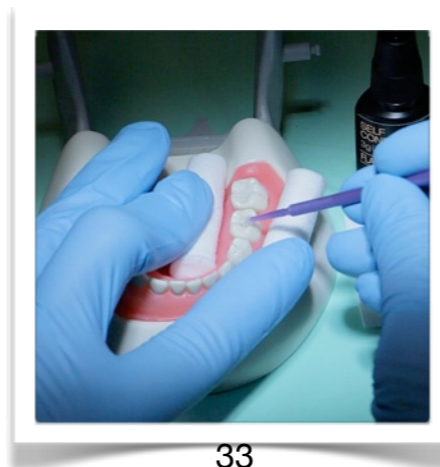


# Fuji Sealant Placement

Notes

## Placement

- Immediately remove the mixed capsule from the mixer and load it into the GC Capsule Applier.
- Make two clicks to prime the capsule then syringe. The working time is 1 minute 40 seconds from the start of mixing at 23°(73.4°F). Higher temperatures will shorten working time.
- Extrude the mixture onto the tooth surface then use a brush to spread a thin film of GC Fuji TRIAGE® directly over the occlusal surface and into the pits and fissures.
- If a faster set is desired, use a visible light curing device\* for 20-40 seconds. Place light source as closely as possible to the cement surface. This function applies only to the Pink Shade (Fuji Triage – Pink). After light cure, it is advisable to protect the surface with a varnish.
- To adjust the direction of the nozzle, hold the applicator with the capsule towards you and turn the capsule body.
- To remove the used capsule, push the applicator release button. Twist the capsule and pull upwards.



# Fuji Sealant Placement

Notes

## Finishing

- After placement, when the material starts to lose the glossy appearance (or after curing with the light curing device), apply GC Fuji VARNISH (blow dry) or GC Fuji COAT LC (light cure) to the sealed area and the margins using a cotton pellet or sponge.
- Finishing under air water spray can be performed 6 minutes from start of mix (chemically set) or 4 minutes if light cured. Use a superfine diamond bur or a silicone finishing point.
- Apply GC Fuji VARNISH or GC Fuji COAT LC to the area again.



Chapter 6

---

# Sealant Failure

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# Sealant Failure

## Why Do Sealants Fail or Do Not Stick to the Tooth?

- Improper etching.
- Tooth not properly cleaned.
- Saliva contamination.
- There are no pits and fissures – deep and irregular allow for better adherence of the sealant.
- The tooth was not dry when sealed.
- Incomplete or slow mixing of self-cure sealants or if polymerization starts before the sealant is placed.
- Air entrapment due to whipping or vigorous mixing during the mixing of self-cured sealants.
- Over-extension of the sealant material beyond the conditioned tooth surface.
- Expired or improperly stored materials.

# Sealant Failure



Notes

Troubleshooting

Chapter 7

---

# Documentation and Recall

---



# Documentation and Recall

## Documentation

**S:** Revisit for sealants. Pain Scale = 0.

**O:** RMH. No significant findings or changes noted. #3, 14, 19 and 30 have deep pits and fissures

**A:** #3, 14, 19 and 30 have pits and fissures at risk for caries as charted on 3-15-15 treatment plan.

**P:** PARQ. Cotton roll isolation. #3 – OL, #14 – OL, #19 – O, B, #30 –O, B: Ultra-Etch, PrimaDry, UltraSeal XT plus placed. Occlusion checked and adjusted. Patient followed instructions and tolerated procedure well.

**E:** Parent informed of procedure and told that patient can resume normal eating and oral hygiene behaviors. Explained to parent and patient the benefit of sealants and that the sealant only protects the tooth surfaces they cover.

**NV:** 6 month recall.



# Documentation and Recall

Notes

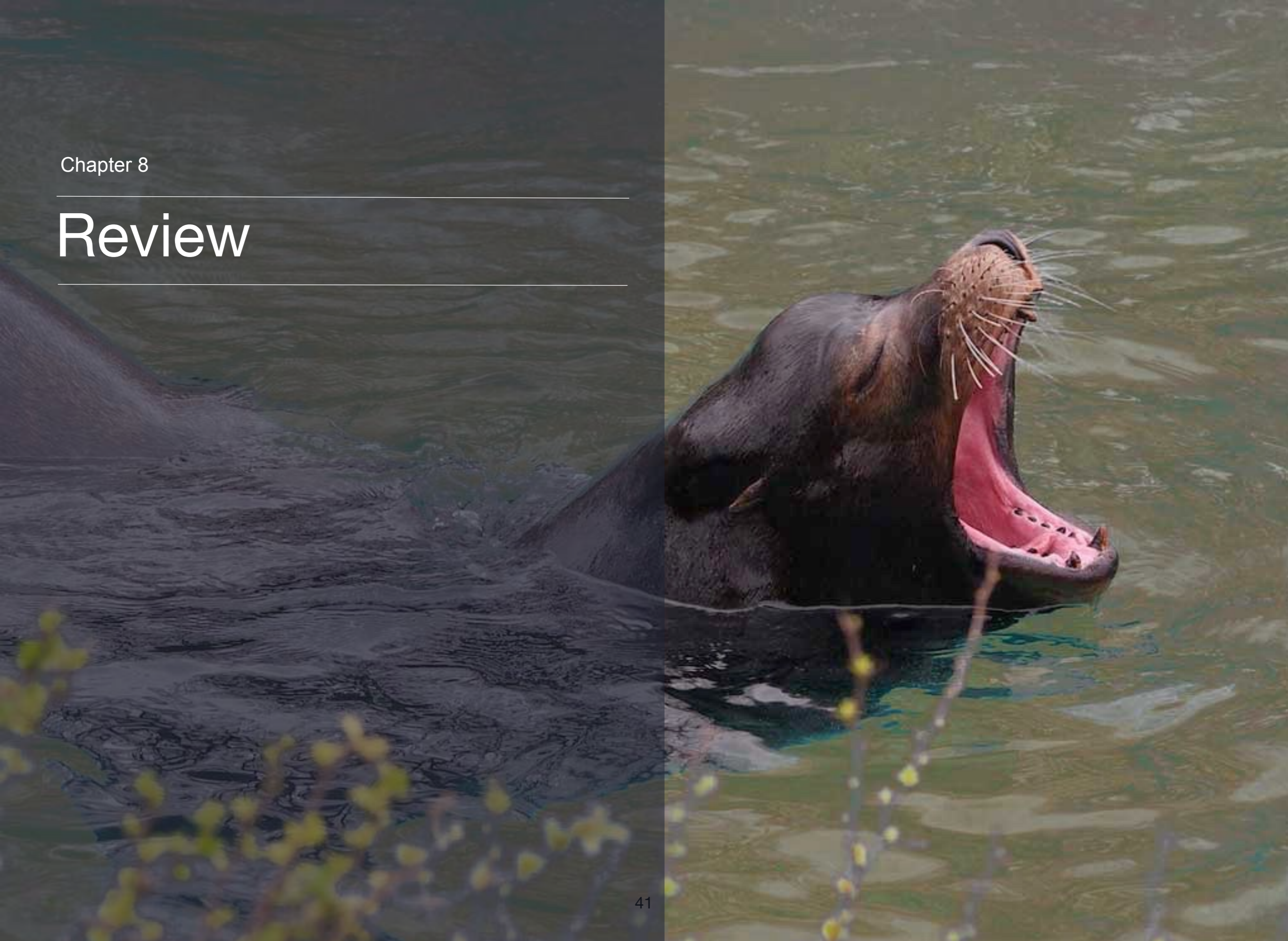
Recall Status of Tooth	Recommended Treatment
All pits and fissures covered	No treatment required
Sealants missing from some or all of the pits and fissures; exposed surface sound	Reseal the exposed pits and fissures
Sealant missing from some or all of the pits and fissures; frank caries present	Restore carious pits and fissures

Chapter 8

---

# Review

---



# Review

Notes

## Review 8.1 Sealants

Question 1 of 9

Sealants are indicated for pit and fissures.

T

F

# Review

Notes



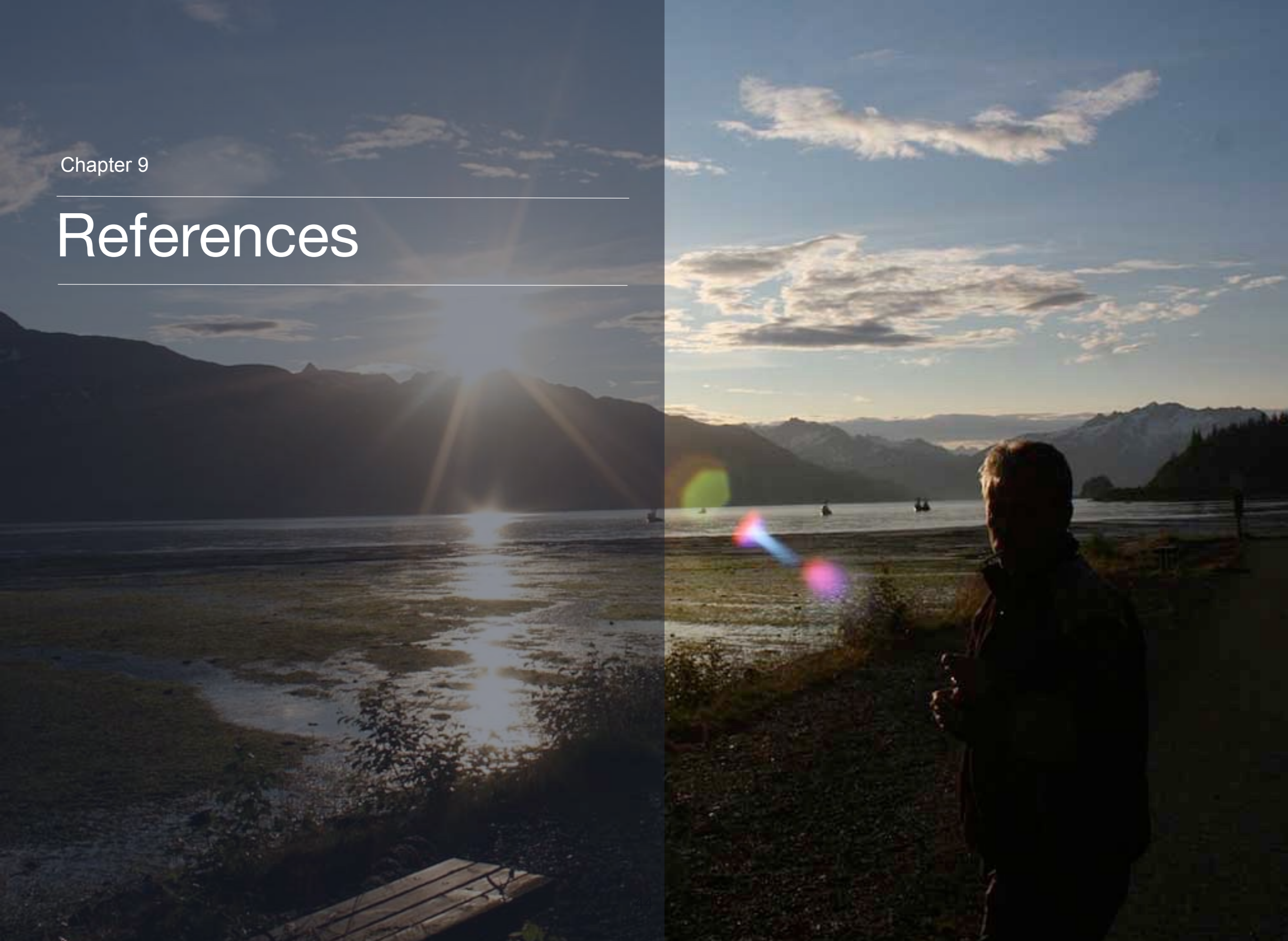
**SEQUENCE**

Chapter 9

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# References

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# Resources

Notes

## Resources

- Alaska Native Tribal Health Consortium/University of Kentucky College of Dentistry, Primary Dental Health Aide Training Manuals and PowerPoint Presentations.
- Bird, Doni L. and Robinson, Debbie S. Modern Dental Assisting. 10th ed. St. Louis, Missouri: Elsevier; 2012.
- [http://www.gcamerica.com/products/preventive/GC\\_Fuji\\_TRIAGE/FujiTriageCap\\_IFU.pdf](http://www.gcamerica.com/products/preventive/GC_Fuji_TRIAGE/FujiTriageCap_IFU.pdf)
- <https://www.ultradent.com/en-us/Product%20Instruction%20Documents/UltraSeal%20XT%20plus.pdf>

Article 9.1 For Best Viewing- Set iPad Orientation Lock To On and Rotate iPad

C O V E R S T O R Y

Executive summary follows page 356

## Evidence-based clinical recommendations for the use of pit-and-fissure sealants

A report of the American Dental Association Council on Scientific Affairs

Jean Beauchamp, DDS; Page W. Caufield, DDS, PhD; James J. Crall, DDS, ScD; Kevin Donly, DDS, MS; Robert Feigal, DDS, PhD; Barbara Gooch, DMD, MPH; Amid Ismail, BDS, MPH, MBA, DrPH; William Kohn, DDS; Mark Siegal, DDS, MPH; Richard Simonsen, DDS, MS

**W**hile dental sealants have been recognized as an effective approach to preventing pit-and-fissure caries in children,<sup>1-6</sup> clinical questions remain about the indications for placing pit-and-fissure sealants, the criteria for their placement over early caries (that is, noncavitated caries) and techniques to optimize retention and effectiveness. This report on the clinical recommendations for use of pit-and-fissure sealants presents a critical evaluation and summary of relevant scientific evidence to assist clinicians with their clinical decision-making process.

### USE OF SEALANTS: AN EVIDENCE-BASED APPROACH

Dentistry is a dynamic profession, continually reshaped by

### ABSTRACT

**Background.** This article presents evidence-based clinical recommendations for use of pit-and-fissure sealants developed by an expert panel convened by the American Dental Association Council on Scientific Affairs. The panel addressed the following clinical questions: Under what circumstances should sealants be placed to prevent caries? Does placing sealants over early (noncavitated) lesions prevent progression of the lesion? Are there conditions that favor the placement of resin-based versus glass ionomer cement sealants in terms of retention or caries prevention? Are there any techniques that could improve sealants' retention and effectiveness in caries prevention?

**Types of Studies Reviewed.** Staff of the ADA Division of Science conducted a MEDLINE search to identify systematic reviews and clinical studies published after the identified systematic reviews. At the panel's request, the ADA Division of Science staff conducted additional searches for clinical studies related to specific topics. The Centers for Disease Control and Prevention also provided unpublished systematic reviews that since have been accepted for publication.

**Results.** The expert panel developed clinical recommendations for each clinical question. The panel concluded that sealants are effective in caries prevention and that sealants can prevent the progression of early noncavitated carious lesions. **Clinical Implications.** These recommendations are presented as a resource to be considered in the clinical decision-making process. As part of the evidence-based approach to care, these clinical recommendations should be integrated with the practitioner's professional judgment and the patient's needs and preferences. The evidence indicates that sealants can be used effectively to prevent the initiation and progression of dental caries.

**Key Words.** Sealant; pit-and-fissure sealant; caries; caries prevention; primary prevention; secondary prevention; evidence-based dentistry; clinical recommendations. *JADA* 2008;139(3):257-267.

Dr. Beauchamp is in private practice in Clarksville, Tenn. At the time these recommendations were developed, she was a member, Council on Access, Prevention and Interprofessional Relations, American Dental Association, Chicago.

Dr. Caufield is a professor, Department of Cariology and Comprehensive Care, New York University College of Dentistry, New York City.

Dr. Crall is a professor and the chair, Section of Pediatric Dentistry, School of Dentistry, University of California Los Angeles.

Dr. Donly is a professor and the chair, Department of Pediatric Dentistry, University of Texas Health Sciences Center San Antonio Dental School.

Dr. Feigal is a professor, Pediatric Dentistry, University of Minnesota, Minneapolis.

Dr. Gooch is a dental officer, Division of Oral Health, National Center for Health Promotion and Disease Prevention, Centers for Disease Control and Prevention, Atlanta.

Dr. Ismail is a professor, School of Dentistry, University of Michigan, Ann Arbor.

Dr. Kohn is the associate director for science, Division of Oral Health, Centers for Disease Control and Prevention, Atlanta.

Dr. Siegal is the chief, Bureau of Oral Health Services, Ohio Department of Health, Columbus.

Dr. Simonsen is the dean and a professor, College of Dental Medicine, Midwestern University, Glendale, Ariz.

Address reprint requests to Julie Frantze-Hawley, director, Research Institute and Center for Evidence-based Dentistry, American Dental Association, 211 E. Chicago Ave., Chicago, Ill. 60611, e-mail "frantsev@ada.org".

Next

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Buccal

Toward the cheek. The tooth surface in posterior teeth that is closest to the inner cheek.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**



Caries

Tooth decay.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Exfoliated

Normal loss of primary teeth when permanent teeth erupt into the mouth.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

Chapter 1 - Terms to Know

## Filled sealants

Contain a combination of resins, chemicals and fillers. The purpose of fillers is to increase bonding strength and resistance to abrasion and wear. Fuji Triage is an example.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Hydrophilic

Tendency to mix with or dissolve in water.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

## Interproximal

The surface next to each other when the teeth are adjacent in the arch. For example on most adjacent teeth the distal and mesial surfaces are next to each other.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Light-cured

Type of sealant material that is polymerized through exposure to a curing light.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Lingual

The tooth surface toward the tongue.

---

### Related Glossary Terms

Drag related terms here

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**Index**

Find Term

**Chapter 1 - Terms to Know**

Manufacturer's directions

Instructions that are found in product packaging that describe the best way to use a material.

---

### **Related Glossary Terms**

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**



Moderate-high risk

Caries classification that describes patients who currently have or have experienced tooth decay.

---

### **Related Glossary Terms**

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Occlusal

The biting surface of posterior teeth.

---

### **Related Glossary Terms**

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

## Occlusal interference

If a sealant does not follow the natural contour of a tooth, it prevents the maxillary and mandibular teeth from touching when a patient closes his/her mouth. Sometimes called “a high spot.”

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Opaque

Not able to be seen through; not transparent.

---

### **Related Glossary Terms**

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Operculum

Folds of gingival tissue overlying the crown of an erupting tooth.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Pits and fissures

Grooves in the occlusal surfaces of posterior teeth.

---

### **Related Glossary Terms**

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

## Polymerization

The process of changing a simple chemical into another substance that contains the same elements.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

## Sealant

Prevents dental caries from occurring in the pit and fissure surfaces of teeth. It provides a protective barrier between the tooth and acid-producing bacteria.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

Chapter 1 - Terms to Know



## Sealant retention

The ability of a sealant to firmly adhere to the tooth surface.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

Self-cured

Type of sealant material that is polymerized by chemical reaction.

---

### Related Glossary Terms

Drag related terms here

---

**Index**

Find Term

**Chapter 1 - Terms to Know**

## Shelf life

The length of time a dental material may be stored without becoming suitable for use.  
A shelf life may have an expiration date.

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### Related Glossary Terms

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## Unfilled sealants

Unfilled sealants have a higher ratio of resin to filler material. They wear down more easily and need less occlusal adjustment. UltraSeal XT is an example.

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## Viscosity

The characteristic of being sticky or the rate of flow for a material.

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