

## Use of Fluoride Varnishes

### 1. Purpose

This Guideline provides recommendations regarding best practice for the use of fluoride varnishes.

### 2. Scope

This Guideline applies to all dental practitioners employed within the Queensland public health system.

### 3. Guideline

#### ***Professionally applied fluoride varnish***

Professionally applied fluoride varnish can be used for both primary and secondary prevention of dental caries. Primary prevention aims to prevent carious lesions that develop on sound tooth surfaces. Secondary prevention includes remineralisation of the initial, precavitated lesion and of root caries.

Fluoride varnishes have advantages over other professionally applied fluoride products. One of the most significant advantages is that varnishes release fluoride over 24 hours and appear to increase the calcium fluoride reservoirs that aid in long-term fluoride release.

Fluoride varnishes contain fluoride ions suspended in an alcohol and resin base. Varnishes can be applied to all teeth, or as a spot application on individual teeth or localised areas. Although varnishes contain a high concentration of fluoride, they set immediately on contact with saliva such that very little is swallowed. The waxy film which adheres to teeth is gradually worn off by chewing or brushing.

Fluoride varnishes are well tolerated by patients, particularly by children, and are relatively easy to apply.

#### ***Indications for the use of fluoride varnish***

Fluoride varnishes are primarily used for preventing dental caries in young children and for individuals determined to be at high risk. Fluoride varnishes are also of benefit for people with special needs and for those undergoing orthodontic treatment.

### **Contraindications**

- Previous hospitalisation due to hypersensitivity/allergic reactions, including asthma
- Systemic illness e.g. colds, influenza
- Ulcerative gingivitis, stomatitis or other pathology of the soft tissues e.g. herpes or aphthous ulceration

Note: Contact allergic reactions related to the resinous component of varnishes are possible, but rare.

### **Frequency of application**

The recommended frequency of application of fluoride varnish is twice per year, however children and adults at higher risk of dental caries may require more frequent applications i.e. up for four times per year.

### **Procedure**

1. Gain informed consent.
2. Remove plaque from the teeth by wiping with cotton gauze or by brushing with a wet toothbrush (DO NOT use toothpaste).
3. Dispense the appropriate amount of fluoride varnish (0.25ml for children and up to 0.4ml for an adult).
4. Dry the teeth using cotton gauze and isolate teeth. Thorough drying is not necessary as the varnish sets in contact with saliva.
5. Apply the varnish using a disposable brush / applicator. Apply a thin layer of the varnish to all surfaces of the teeth. If possible, begin with the upper posterior teeth. Dry two or three teeth at a time with the cotton gauze and apply the varnish immediately.

Note: Varnish is extremely viscous. To apply a thin layer, it is helpful not to overload the brush tip / applicator.

### **Advice for patients / parents / carers post application**

- Varnish works best if it can be left undisturbed for as long as possible
- Wait at least 30 minutes before eating, longer if possible
- Eat soft foods for the rest of the day
- Do not brush until the following day
- Teeth will look yellow for a few days
- Best results are obtained if varnish is applied twice per year, about once every six months

### **Item code**

Item code 121 of the Australian Schedule of Dental Services and Glossary (Tenth Edition) is the appropriate code to record when applying fluoride varnish. A full definition of this code is provided below:

#### **121 - Topical application of remineralisation and/or cariostatic agents, one treatment**

Application of remineralisation and/or cariostatic agents to the surfaces of the teeth. This may include activation of the agent. Not to be used as an intrinsic part of the restoration.

### **Further reading**

This document should be read in association with the following documents:

- The use of fluorides in Australia: guidelines. Australian Research Centre for Population Oral Health, Dental School, The University of Adelaide, South Australia. Australian Dental Journal 2006; 51: (2): 195-199
- The University of Adelaide Practice Information Sheet No. 2 'Professional fluoride applications in the dental surgery'
- The University of Adelaide Practice Information Sheet No. 3 'Home use of fluoride'
- Australian Dental Association Policy Statement 2.2.1 'Community Oral Health Promotion: Fluoride Use' (includes ADA Guidelines for the Use of Fluoride), 2012

## **4. Review**

This Guideline is due for review on: 1 July 2016

**Date of Last Review:** N/A

**Supersedes:** This is a new Guideline

## **5. Business Area Contact**

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## 6. Approval and Implementation

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## Version Control

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1	03/09/2013	OCDO	New document