ASSESSMENT OF CARIES RISK

C **As part of the patient assessment, a social history should be taken which will contribute to dental brief interventions being specific to individuals and tailored to their particular needs and circumstances.**

✓ Dental health professionals should take a common risk factor approach supporting a variety of topic-based brief interventions and when possible provide support to colleagues to expand the delivery of brief interventions across other appropriate settings.

C **The following factors should be considered when assessing caries risk:**

- **clinical evidence of previous disease**
- **dietary habits, especially frequency of sugary food and drink consumption**
- **social history, especially socioeconomic status**
- **use of fluoride**
- **plaque control**
- **saliva**
- **medical history.**

✓ Clinicians should be aware of individuals with a medical or physical disability for whom the consequences of dental caries could be detrimental to their general health. These patients should receive intensive preventive dental care.

D **Specialist child healthcare professionals should consider carrying out a caries risk assessment of children in their first year as part of the child's overall health assessment.**

D **Children whose families live in a deprived area should be considered as at increased risk of early childhood caries when developing preventive programmes.**

✓ A child considered by the healthcare professional to be at high caries risk should be referred to the appropriate health service provider.

ORAL HEALTH PROMOTION IN THE PRACTICE SETTING

B **Oral health promotion interventions should facilitate daily toothbrushing with fluoride toothpaste.**

B **Oral health promotion interventions should be based on recognised health behaviour theory and models such as motivational interviewing.**

PREVENTIVE TREATMENTS

A **Fluoride varnish should be applied at least twice yearly in all children.**

A **Resin-based fissure sealants should be applied to the permanent molars of all children as early after eruption as possible.**

✓ Glass ionomer sealants may be considered if the application of a resin-based sealant is not possible.

TOOTHBRUSHING WITH FLUORIDE TOOTHPASTE

Use of fluoride toothpaste

	Approximate tolerable daily volume of toothpaste ingestion (mls)		
Toothpaste strength (ppmF)	1–3 year old child (13 kg)	4–8 year old child (22 kg)	9–13 year old child (40 kg)
1,000	1.3	2.2	10
1,500	0.86	1.46	6.7
2,800	Not recommended		3.6

✓ To reduce the risk of mild fluorosis and reinforce good oral health the amount of toothpaste used by children up to the age of three years should be supervised.

Smear of toothpaste (approximately 0.1 ml) representing the recommended volume for children under the age of three years

Pea-sized amount of toothpaste (approximately 0.25 ml) representing the recommended volume for children over the age of three years

TOOTHBRUSHING WITH FLUORIDE TOOTHPASTE (contd.)

Age at commencement of brushing

✓ Children should be assisted to brush their teeth as soon as they erupt.

Frequency and duration of brushing

A **Toothbrushing with fluoride toothpaste should take place at least twice daily.**

Supervised toothbrushing

A **Supervision of toothbrushing with fluoride toothpaste is recommended as an effective caries prevention measure.**

✓ Children who are unable to brush their teeth unaided should be assisted to do so.

Toothbrushing practice

A **Children should be encouraged to spit out excess toothpaste and not rinse with water after brushing.**

✓ Children's teeth should be brushed last thing at night before bedtime and on at least one other occasion.

✓ Children's teeth can be brushed with either manual or powered toothbrushes as an effective means of administering fluoride.

Concentration of fluoride toothpaste

A **Following risk assessment, children and young people up to the age of 18 years who are at standard risk of developing dental caries should be advised to use toothpastes in the range 1,000 to 1,500 ppmF.**

✓ Following risk assessment, children up to the age of 10 years who are at increased risk of developing dental caries should be advised to use toothpastes at 1,500 ppmF.

A **Following risk assessment, children aged from 10 to 16 years who are at increased risk of developing dental caries should be advised to use toothpastes at a concentration of 2,800 ppmF.**

This Quick Reference Guide provides a summary of the main recommendations in **SIGN 138 Dental interventions to prevent caries in children.** Recommendations are graded **A B C D** to indicate the strength of the supporting evidence.

Good practice points ✓ are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: www.sign.ac.uk. This Quick Reference Guide is also available as part of the SIGN Guidelines app.

Available on the App Store

Available from Android Market

Healthcare Improvement Scotland

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SIGN 138 • Dental interventions to prevent caries in children

Quick Reference Guide *March 2014*

Evidence