Understanding Use of Anesthesia and Sedation for Oral Health Services

Sedation and general anesthesia are important tools for dentists providing oral health care in situations where a child must remain still, have their pain controlled, or be calmed down. Using these medicines for anesthesia and sedation is generally safe. However, certain types pose some risks.

This Brush Up on Oral Health tip sheet describes anesthesia and sedation used for oral health care. The tip sheet provides a list of questions that Head Start staff can share with parents. Parents can use the list to help them ask the dentist if anesthesia or sedation should be used to treat their child’s tooth decay and what type should be used to make treatment safe and effective.

What Types of Anesthesia and Sedation Are Used for Oral Health Care?

There are several ways dentists use anesthesia and sedation for oral health care. Parents need to know what types are recommended for their child to make an informed decision about whether they should be used for their child. The types of anesthesia and sedation include:

- **Topical anesthesia** is put onto the gums in the form of a gel, liquid, or ointment to numb the area around the tooth receiving treatment before local anesthesia is administered. Use of topical anesthesia is common in routine oral health care.

- **Local anesthesia** is injected into the gums using a needle. It is used for most fillings and tooth extractions. The medicine blocks the nerves that sense or feel pain. The medicated part of the mouth, which may include the cheek, lip, or part of the tongue, feels tingly and then numb. Numbness lasts for 30 to 60 minutes and for many children feels strange. Parents should try to make sure their child does not bite, chew, or scratch the numb part of the mouth.

- **Nitrous oxide** is an inhaled gas that may be used in dental offices to relax a child before and during a procedure. It is frequently used in combination with local anesthesia. It is safe and effective for children who are anxious or fearful.
Sedation medication places a child in a controlled state of consciousness where the child may or may not respond to sound or touch. Children who need sedation should receive it from a professional with advanced training, such as an anesthesiologist, a nurse anesthetist, or a dentist with advanced training in sedation. Children can be sedated and receive dental treatment in dental offices, hospital operating rooms, or outpatient surgical centers. Depending on the medicine used, a child may become alert almost immediately after treatment or within a couple of hours.

General anesthesia medication can be swallowed as a liquid or pill, injected into the arm, or inhaled through the nose as a gas or spray, depending on the type and amount of medication used. General anesthesia means the child is totally unconscious. Health professionals monitor the child's breathing and other vital signs throughout the procedure. General anesthesia carries the most risk to the child's health, and several health professionals with advanced training need to stay with the child until the anesthesia wears off.

Helping Parents Ask Questions About Sedation and General Anesthesia

It is important for parents to know that there are risks to using general anesthesia and sedation and to carefully consider whether to use it. If a dentist recommends sedation or general anesthesia for their child, parents should ask questions to make sure they are comfortable with the recommended use of medication. If parents are not comfortable with the answers to their questions, it is a good idea to get a second opinion from another dentist or the child's physician.

Questions to ask include:

• If the tooth will fall out soon or is not likely to cause pain, is it advisable to leave the decayed tooth untreated?

• Can we do the treatment in a year when my child will be older and better able to cooperate?

• Can the tooth be treated with silver diamine fluoride to stop the decay, or can a temporary filling be placed without using sedation or general anesthesia to delay treatment until the child is older? (For information about silver diamine fluoride, check out Brush Up on Oral Health: Understanding Use of Silver Diamine Fluoride.)

• Is using sedation or general anesthesia necessary? What are the risks of receiving treatment under sedation or general anesthesia for my child?

• What type(s) of anesthesia will you use?

• How will my child be monitored during sedation or anesthesia, and by whom?

For more information about sedation and general anesthesia, see the American Academy of Pediatrics’ Anesthesia or Sedation for Your Child’s Dental Work? and the American Dental Association's Anesthesia and Sedation.