

# Basic Techniques for Management of the Infant and Toddler Dental Patient



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**Disclaimer:** Participants must always be aware of the hazards of using limited knowledge in integrating new techniques or procedures into their practice. Only sound evidence-based dentistry should be used in patient therapy.

## Conflict of Interest Disclosure Statement

- Dr. Vinson has no conflicts of interest associated with this course. She has no relevant financial relationships to disclose.
- Dr. Schwartz was a member of the dentalcare.com Advisory Board.

## Introduction

The purpose of this course is to discuss the benefits of introducing young patients into your practice early, provide the learner with simple tools and tips to have the best possible outcomes when working with young children, and how to perform an oral examination on a young patient.

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## Overview

Even though the prevalence of dental caries in children has remained the same over the last three decades, there are still only a limited number of pediatric dentists available in the United States to treat young children. Introducing the pediatric dental patient during infancy and the toddler stage to the dental office setting can have a mutual benefit for the child, parent, and dentist. Behavior guidance techniques such as tell-show-do and distraction are used to alleviate anxiety, nurture a positive dental attitude, and perform quality oral health care safely and efficiently. Early examination can uncover potential problems, thereby reducing future negative consequences of delayed intervention. Informing parents of the advantages of early dental care for their child is the most effective marketing strategy.

## Learning Objectives

**Upon completion of this course, the dental professional should be able to describe:**

- Benefits of early dental intervention.
- Treatment goals of early intervention.
- Child development.
- Behavior modification techniques to gain patient cooperation.
- Positioning techniques for examination of the infant and toddler.
- Detailed scripts for introducing the toddler patient to the dental environment.

- Examination protocols for the infant and toddler patient.
- Marketing strategies.

## Introduction

Each day, in thousands of dental offices, a pediatric dental patient enters the treatment room. Immediately there is an increase in the heart rate, elevated blood pressure, quivering knees and lips, tears rolling down cheeks. Unfortunately, this scenario can apply to both the patient and the treating dental team.

For a variety of reasons, there are dental practitioners and staff that have an aversion to treating pediatric patients, especially infants and toddlers. This is unfortunate for both the patients and the dentist. By institution of early oral health education and the application of preventive dentistry procedures, the pediatric dental patient can be insured a lifetime of dental health. For the dental practice, ignoring or rejecting the infant and toddler population results in a missed opportunity to contribute to improved oral health for the overall population, establish dental homes early, and attract new patients to the practice.

When questioned by parents as to what age a child's first dental visit should take place, many dentists suggest the asymptomatic child be seen after age three when there is greater likelihood of cooperation for dental treatment. However, dental problems can develop in a child as young as 6 months, right after teeth begin to erupt.<sup>1</sup> Often, the general dentist, when faced with such a young patient, will refer them to the local pediatric dentist with the expectation the patient will return in a few years cooperative and willing to accept dental treatment. There are more children than there are pediatric dentists to see them. General dentists can play a vital role in early dental screenings, application of fluoride varnish, anticipatory guidance, establishing positive dental experiences and perceptions, and can refer patients requiring treatment beyond their clinical abilities/comfort level to a specialist when and if necessary. Data has shown that early dental visits result in a lower rate of dental caries in young children.<sup>2</sup>

Once parents and the pediatric dental patient are referred to a pediatric dentist many are

reluctant to return to the referring dentist. Not only did the pediatric dentist treat the immediate dental problems, but also resolved fears the child had about undergoing dental treatment. Pediatric dentists cater to children in a variety of ways by creating inviting experiences and environments. Children are happy to return to the pediatric dentist because it means playing with video games, watching their favorite TV show or movie, and picking out a prize after treatment. Pediatric dentists have great success at treating young pediatric patients because they put equal emphasis on both providing optimum clinical care and happy experiences. After a few years of such happy experiences at the pediatric dentist, the pediatric patient will resist switching to the general dentist who may provide clinically equivalent care but may not provide the happiness and “fun” they experienced at the pediatric dentist.

By delaying the first dental visit past age three, the general dentist loses the opportunity to treat the pediatric patient who may not return to the office until a much later time.

The sensible solution to attracting and retaining patients and achieve a viable and profitable practice, is to incorporate dental patients into the practice at the earliest age possible. Since 1986, the American Academy of Pediatric Dentistry (AAPD) has been advocating for one-year dental visits, a recommendation that has been supported by the American Dental Association (ADA), the Academy of General Dentistry (AGD), and the American Public Health Association (APHA).<sup>3</sup> Since pediatricians and other pediatric health care professionals are more likely to encounter new mothers and infants than dentists, the AAPD lobbied the American Academy of Pediatrics (AAP) to familiarize their members with the associated risk factors of early childhood dental caries and to urge them to make appropriate referrals for early intervention and treatment. The AAP endorsed the concept of one-year dental visits in 2003 and introduced the policy to AAP members in the May 2003 issue of Pediatrics.<sup>4</sup>

The policy statement recommends an oral health risk assessment by 6 months of age and the establishment of a “dental home” for all

infants by 12 months. The risk assessment can be performed by a qualified pediatrician or other pediatric health care professional.

The concept for the dental home is derived from the AAP’s “medical home.” The AAP states, “Pediatric health care is best delivered where comprehensive, continuously accessible and affordable care is available and delivered and supervised by qualified child health specialists.” The AAPD recommends that pediatric primary dental care be delivered in a similar manner.

An oral health examination by a dentist providing care for infants and young children 6 months after the first tooth erupts or by 12 months of age establishes the child’s dental home and an opportunity to implement preventative dental health habits that meet each child’s unique needs and keep the child free from dental or oral disease.

The 2018 revision of its policy on the dental home expects the dental home to provide:

- Comprehensive, continuous, accessible, family-centered, coordinated, compassionate, and culturally-effective care for children, as modeled by the AAP.
- Comprehensive evidence-based oral health care including acute care and preventive services in accordance with AAPD periodicity schedules.
- Comprehensive assessment of oral diseases and conditions.
- Individualized preventive dental health programs based on caries risk assessment and a periodontal disease risk assessment.
- Anticipatory guidance about growth and development issues (i.e., teething, digit or pacifier habit).
- Management of acute/chronic oral pain and infection.
- Management of and long-term follow up for acute dental trauma.
- Information about proper care of the child’s teeth, gingiva, and other oral structures. This would include the prevention, diagnosis and treatment of disease of the supporting and surrounding tissues and the maintenance of health, function and esthetics of those structures and tissues.
- Dietary counseling

- Referrals to dental specialists when care cannot directly be provided within the dental home.
- Education regarding future referral to a dentist knowledgeable and comfortable with adult oral health issues for continuing oral health care; referral at an age determined by patient, parent and pediatric dentist.<sup>5</sup>
- Recommendations and coordination of uninterrupted comprehensive oral health during the transition from adolescence to adulthood.
- Referral, at an age determined by patient, parent, and pediatric dentist, to a dentist knowledgeable and comfortable with managing adult oral health care needs.

This policy presents a great opportunity to prevent dental disease in the youngest population. However, the success of the policy is dependent upon whether general dentists are accepting of infant patients and welcome infant referrals from pediatricians.

By eliminating or delaying the development of caries, the general dentist has the opportunity to retain the patient in the practice without the stress of providing extensive restorative procedures to a young child incapable of or with limited ability to cooperate. The practice has the opportunity to retain the patient in the practice from infancy into adulthood, providing preventive services such as pit and fissure sealants, cosmetic dentistry, and orthodontics if necessary. Should the patient remain in the community after reaching adulthood, the general dentist has the opportunity of treating their patient's children.



By learning and using some very simple behavioral guidance techniques to make dental treatment for the youngest patient a pleasant experience, the dentist can take positive steps to provide the child patient a lifetime of optimum oral health. The objective of this course is to teach some basic management skills to the dental staff that makes pediatric dentistry pleasant for both the patient and staff for the practice.

### Treatment Goals

Our treatment goal for the pediatric patient is: ***Optimal treatment for the pediatric patient can be completed in the shortest possible period, while insuring he or she will return for treatment willingly.***

Let's analyze this statement with emphasis on the bold words.

**Optimal treatment** – As practitioners, we want to render optimal treatment to patients, primarily because as health practitioners we have a responsibility not to harm a patient. Thus, we want to create an environment for the pediatric patient that results in cooperative behavior where we can provide excellent care.

**Shortest possible period** – Optimal dental treatment for children should be rendered in time intervals vastly different from adult patients. Many young children do not have the attention span or coping skills that afford them the opportunity to sit for lengthy dental appointments. The techniques we use to treat the patient should allow us to complete the treatment in a reasonable amount of time while providing clinically acceptable treatment.

**He or she will return for treatment willingly** – In spite of the need to provide efficient treatment, it is still necessary for us to accomplish it in a manner that will encourage the child to return for subsequent treatment *willingly* and fearlessly. The most ineffective way to examine an 18-month old patient would be to seat them in the dental chair without an introduction while adults restrain the child. Nonetheless, it is doubtful that child would return *willingly* for subsequent treatment after enduring treatment rendered under those circumstances.

The infant and toddler's first visit to the dentist should provide for a foundation of pleasant experiences and attitudes for future oral healthcare. By learning some basic introductory techniques to dentistry, dentists and auxiliaries can provide a non-threatening and comfortable environment for the very youngest of patients.

## Understanding the Child Patient

Most dental personnel can successfully manage child behavior in the dental setting with a basic understanding of child behavior and development. Most importantly one must understand children are not small adults, and children of different ages and abilities have different understandings of their environment. Depending on their stage of cognitive development, temperament, personality, fear of dentistry, demographics, ability to cope, degree of pain felt by the child, and parental attitudes, children will exhibit variations in behavior in the dental setting and during treatment.

## Cognitive Development

Cognitive development theories define how the world is seen by the child based on their age. While the age a child reaches the various stages may vary, the sequence of development is generally constant among healthy children. There are numerous theories of cognitive development. Jean Piaget's stages of child development can provide the clinician with a basic knowledge of cognitive development.

### Piaget's Stages of Cognitive Development

- **Sensorimotor Stage (Birth-24 months):** Infant uses senses and motor abilities to understand the world and there is little to no meaningful verbal communication other than single word commands. This is not to say that children are not aware of their surroundings; they are hyperaware of people around them as they reach this age and are perceptive to nonverbal communication. They understand object permanence at this stage.
- **Preoperational Stage (2-7 years):** Children begin to use language in similar ways to adults and can form mental symbols and words to represent objects. Language is concrete and literal and has limited logical

reasoning skills. Children tend to perceive the world from their own perspective or be "egocentric."

- **Concrete Operational Stage (7-11 years):** Children demonstrate increased logical reasoning skills and can see the world from different points of view. They still have a difficult time with abstract ideas and benefit from concrete instructions.
- **Formal Operations (12+ years):** Children can think about abstractions and hypothetical concepts and reason analytically.<sup>6</sup>

Thus attempting long verbal explanations to children in the preoperational and concrete operational stages will not influence behavior because of the limitations of the child's reasoning skills and difficulty to fully understand long verbal explanations of the effect of behavior on treatment. For these age groups, short direct requests and commands are more effective in obtaining desired behavior.

## Temperament

In addition to genetics and environment a child's behavior may be influenced by their temperament. It is not uncommon that children in the same family who have similar genetic make up and have grown up in the same family environment will exhibit different behavioral responses in the same situation. "Temperament is normally used as a collective term for a set of developing traits that (1) manifest in an organized fashion during early life, (2) are relatively stable during significant periods of life, (3) are relatively consistent across situations, (4) have characteristic neurophysiologic underpinnings, and (5) are partially heritable."<sup>7</sup>

In 1977, Thomas and Chess proposed three categories of temperament or children; easy temperament, difficult temperament and slow-to-warm-up temperament.

### Temperament Classifications

1. Easy temperament - biological regularity, quick adaptability to change, tendency to approach new situations versus withdraw, predominately positive mood of mild or moderate intensity.



2. Difficult temperament – biological irregularity, withdrawal tendencies to the new, slow adaptability to change.
3. Slow-to-warm-up temperament – This category is comprised of withdrawal tendencies to the new, slow adaptability to change, and frequent emotional reactions of low intensity. Such individuals are often labeled “shy.”<sup>8</sup>

### **Personality**

Personality is the outcome of genetic predispositions of certain behavior influenced by environment. Pinkham writes that children of high self-esteem who have favorable and positive views of adults are able to meet the demands of dental appointments more easily than children with poor self-esteem and unfavorable views of adults. Poverty, dysfunctional family life and abuse can lead to these findings.<sup>9</sup>

### **Additional Factors Influencing Behavior in the Dental Office**

In addition to the developmental, genetic and environmental influences on child behavior in the dental office other factors may come into play.

### **Fear**

Dental fear and dental anxiety refer to the strong negative. The etiology of dental fear in children is multifactorial and a product of previous experiences, generalized fear and family (parent, sibling) anxiety regarding dental treatment.<sup>10</sup> Dental fear has been found in most but not all misbehaving patients.<sup>7</sup> A study by Klingberg and Broberg reported dental fear in 9% of children with girls exhibiting more anxiety and behavior management problems than boys.<sup>11</sup> Dental fear has been attributed to lack of trust in the dentist and lack of control over a traumatic event. The dental injection was the most feared procedure followed by “drilling” and “tooth scaling.” Dental fear and anxiety have also been linked to increased general fears such as fear of heights, flying, claustrophobia and multiple other fears as well as lower social and emotional well-being.<sup>12-14</sup>

### **Demographics**

Studies have shown the negative behavior in the dental office is most intense in younger children and decreases as children become older. Children may be influenced by their cultural background once they reach the cognitive development stage.<sup>15</sup>

Some studies have linked dental anxiety and behavior management problems with socioeconomic status and household characteristics, although others have not.<sup>8,16</sup>

### **Pain**

Children in pain will almost always exhibit behavior management problems. Pain has sensory, emotional, cognitive, and behavioral components that are interrelated with environmental, developmental, sociocultural and contextual factors. It is important to take reports of pain seriously, and it's counterproductive to argue with the child that a sensation is uncomfortable but does not hurt or they are just feeling pressure.<sup>17,18</sup>

For the purpose of this course, the author will divide the youngest patients (under three years of age) into two categories: the child that does not possess or has limited ability to communicate with others (usually under 18 months) and the child possessing the ability to communicate with others.

### **Patients with Limited Communicative Ability**

#### **Parents' Role in Treatment**

There is controversy among practitioners whether parental presence in the treatment area hinders or aids in patient behavior management. Nowak writes separation anxiety from parents in children occurs around 6 months of age, peaks between 13 and 18 months of life and then declines. Casamissimo and Adair write that maternal presence is needed especially during stress between the ages of 3 and 5 years. The child's ability to separate from the parent is dependent on various social and developmental factors.<sup>19</sup>

A survey of the AAPD members found that the majority of respondents indicated parents were present in the operatory routinely for emergency examination (61%) and procedures involving special needs children (66%). Thirty eight percent thought the desire of parents to be present in the operatory had increased in the last 5 years.<sup>19</sup> In a recent study by Shroff on pediatric dental patients' parents, 78% of parents surveyed wanted to be present during their child's dental treatment for comfort, while only 38% were okay with the dentist determining if they should be present or not.<sup>20</sup>

In summary, parents were allowed in the room if the patient had limited communicative ability because of chronologic age (under three years) or special needs. The necessity for parent presence for patients between ages three to five years varied with the patient's emotional needs and complexity of treatment. Other factors included the dentist's comfort level with parental presence, and whether the parent's presence had a positive or negative effect on the patient's behavior.

### **Patients with Limited Communicative Ability**

Patients under 18 months of age with limited communicative ability are most effectively treated with physical restraint. However, in light of the discussion in the previous section, the restraint must be administered in a non-traumatic manner. Since children at this age are still very attached to parents, the parent should be actively involved in the restraint wherever possible. The following techniques will permit such participation.

Examination of the young patient with limited communicative abilities is best performed in the "knee-to-knee" position in a private office or quiet area. The dentist and parent sit opposite one another with knees touching. The child sits in the lap of and facing the parent with their legs embracing the parent's lap. While the parent is holding the patient's hands, the child lays backward with the head resting in the dentist's lap. This position enables the child to see and feel the parent while the dentist performs the examination with minimal restraint. The position allows for excellent visualization of the oral cavity by both the parent and dentist.

Products such as pillows and lap cushions are available to facilitate the knee-to-knee lap exam.



An alternative technique is to allow the child to sit in the parent's lap. This position increases patient cooperation by increasing the security of the child. Note the parent restrains the patient's upper body with their arms and hands and the lower body by crisscrossing the legs.

### **Advanced Behavior Guidance**

#### **Protective Stabilization**

The use of protective stabilization devices (papoose board) may be indicated in instances where the patient requires immediate diagnosis, urgent care, and/or limited treatment and cannot cooperate due to emotional or cognitive developmental levels, lack of maturity, or mental or physical conditions; a patient who requires immediate diagnosis, urgent care, and/or limited treatment and uncontrolled movements risk the safety of the patient, staff, dentist, or parent without the use of protective stabilization; and sedated patients to help reduce untoward movements. Proper documentation for protective stabilization includes indications, type of stabilization, informed consent, reason for parental exclusion during protective

stabilization (when applicable), the duration of application, behavior evaluation/rating during stabilization, any untoward outcomes (such as skin markings), and management implications for future appointments.



If the previous non-pharmacological techniques are insufficient to adequately restrain and treat the uncooperative patient, the dentist may have to turn to sedation or general anesthesia if they possess the proper training or refer to those that do, to provide the necessary treatment.



### The Pediatric Patient with Communicative Ability

Once the child achieves reasonable communication skills and has the ability to understand the spoken word, techniques other than physical restraint or pharmacological agents can be used to obtain cooperation for dental treatment. These techniques come

under the heading of behavior guidance. The two behavior guidance techniques most used in pediatric dentistry are desensitization with tell-show-do and positive reinforcement. For the younger patient, desensitization is the more appropriate technique to gain cooperation, since the finer concepts of positive and negative reinforcement may be beyond the comprehension of a toddler. For this reason, this course will concentrate on desensitization techniques.

### Desensitization

Desensitization is defined as the “gradual exposure to new stimuli or experiences of increasing intensity.” In the dental setting desensitization is used to gradually expose the young dental patient to the new dental experience. The concept is best demonstrated by the following scenarios.

**Scenario 1:** A young child is taken to a beach. The parent picks up the child, wades into the ocean waters, and drops the child into the water. The cold, pounding waves shocks the child and results in a traumatized crying child.

**Scenario 2:** A young child is taken to the beach. The parents provide a pail and shovel to the child and sends him to play in the wet sand near the ocean. The child does so and after a few minutes of playing, decides to wash the wet sand from his hands in the ocean water. He walks into the water until it covers his toes, washes his hands, and returns to playing in the wet sand. A few minutes later the child returns to the water, but now wades in until the water is up to his knees, washes his hands, and returns to playing in the wet sand. A few minutes later the child returns to the water but now wades in until the water is up to his waist, stays there a few moments, and then dives into the waves. In the second scenario the child was less traumatized by the ocean experience than in the first scenario because the child was allowed to slowly acclimate himself to the situation instead of being overwhelmed by the new experience.

In the dental setting we desensitize the child to the dental experience through a technique of “Tell, Show, Do.” The child is told and explained



as to what is going to happen, shown by demonstration what is going to happen, and then the dentist or auxiliary does the intended procedure.

In the tell phase of the technique the choice of words used in explaining the procedure is important. Since the young child may have a limited vocabulary it is important to explain the procedure using words understandable at their level.

Table 1 contains a glossary of commonly used dental terminology and substitutions that may be used with young children.

### Introduction of the Dental Experience

Adults interacting with children must realize children view their surroundings from a different perspective than they do on both a psychological and physical level. Because of limited life experiences children may be more frightened when faced with a new and strange situation, resulting in a greater necessity for desensitization and appropriate terminology. Since children are smaller in stature and height their visual perception of their surroundings are different than adults.

When interacting with a young patient, the dentist tries to physically come down to the child's level by sitting rather than standing. In addition, the dentist relaxes the patient by talking to the child in a soft welcoming tone, using simple language the child can easily understand and then slowly drawing the patient to them by taking their hand.

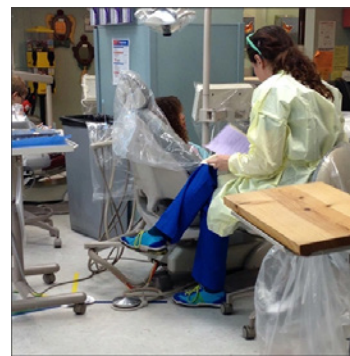


Communication is the most important role in guiding behavior in young children. You need to establish communication with a simple conversation by talking about something familiar to them. It can be as simple as asking their favorite cartoon character or color or what they did earlier that day.



As the conversation progresses, you can begin to introduce more information about today's appointment such as:

*"Hi Maria, I'm Dr. Katie. I like your red shoes. Is that your favorite color? Guess what, it is mine too. Today we are going to count and tickle your teeth so we can give you princess sparkles? Can you sit up in the chair please? It is a special chair that goes up like an airplane. Let's first count your fingers. Great, you have 10 fingers (Counts patients fingers on each hand). The next thing we need to do is count your teeth. Do you know how many teeth you have? That was a great guess. I'm going to turn on my bright sunshine light so I can see your smile better because your mouth can be dark like a cave, and I'm going to see how many teeth I can find in there (The process is repeated using a tooth counter (explorer))."*



**Table 1. Glossary of Substitute Dental Terminology.**

Instead of:	Use:
Explorer	Tooth counter
X-ray or radiograph	Tooth picture/camera
Hurt	Bother
Air syringe	Wind, wind gun
Shot/ injection	Sleepy juice, put tooth to sleep
Low speed handpiece	Mr. Bumpy
High speed handpiece	Mr. Whistle
Prophy angle	Tooth tickler, tickle toothbrush
Fluoride/fluoride varnish	Tooth vitamins
Alginate	Tooth print, pudding, Jell-O mold
Impression	Statue
Extract	Wiggle
Rubber dam	Raincoat
Filling	Star
Stainless Steel Crown	Silver hat
Acid etch or Sealant	Tooth paint
Cement	Tooth glue
Slow speed suction	Mr. Thirsty
High speed suction	Vacuum

By this time the patient should be comfortable enough to proceed with toothbrush instruction and if necessary, a rubber cup prophylaxis and fluoride treatment.

If radiographs are deemed necessary, the reader is referred to the CE course [Radiographic Techniques for the Pediatric Patient](http://www.dentalcare.com), in the [www.dentalcare.com](http://www.dentalcare.com) Continuing Education library. If treatment is necessary at a subsequent visit, similar techniques may be used to desensitize the patient to restorative procedures.

### Examination of the Infant and Toddler

An infant examination can begin with a pre-appointment assessment if possible. This can be accomplished by obtaining information from the parents through the use of a questionnaire mailed to and returned by the parents prior to the office visit. The questionnaire covers the following areas:

- **Biographic Data and Family and Social History** – This provides insight into the family structure and relationships that may reflect the parents' involvement in the child's oral health.
- **Prenatal, Natal and Neonatal History** – The information presented aids in explaining dental abnormalities that occur in the primary dentition (i.e., high risk pregnancies, tetracycline ingestion, febrile episodes).
- **Development History** – Knowledge of the child's attainment of developmental milestones assists the dentist in diagnosing significant growth alterations.
- **Medical History** – Helps alert the dentist to any precautions to safely manage the patient (prophylactic procedures, allergies, etc.).
- **Dental History** – Knowledge of the child's history of previous dental trauma, teething difficulties, oral habits and oral home care provides a basis for future recommendations and management.
- **Feeding History** – An overview of the feeding history enables the dentist to determine what contribution dietary influences have on the development of current and future caries including frequency of snacks and beverages (i.e., prolonged nursing, bottle, or sippy cup use, etc.).
- **Fluoride History** – Is the child drinking fluoridated water and using toothpaste with fluoride.



The clinical evaluation of the patient includes:

- Extra oral examination of the head and neck for abnormalities in size, shape and symmetry of the head, lymph nodes, eyes, ears, nose, lips and mouth.
- Intraoral evaluation of the soft tissues for cysts, clefts, traumatic ulcerations, tongue and frenum lacerations, and gingivitis.

Examination of the dentition includes:

- Evaluation of the jaw relationships (overjet, overbite, midline deviations and crossbites), presence or absence of spacing,
- Presence of dental abnormalities, hypoplastic/hypocalcified enamel and dental caries.

For a more in depth discussion of conditions seen in the pediatric patient the reader is

referred to the CE course [Clinical Encounters in Pediatric Dentistry](#), in the [www.dentalcare.com](http://www.dentalcare.com) Continuing Education library.

After the findings are gathered, the dentist makes an assessment of the patient's risk for dental disease. The AAPD provides resources on caries risk assessment tools, [www.aapd.org](http://www.aapd.org). Based upon the patient's risk assessment, appropriate recommendations for dental disease prevention techniques are made. These include parental responsibility for the following:

- Diet counseling
- Tooth and gum cleaning procedures
- Fluoride assessment
- Recall schedule

### Parental Responsibility

The role of the parent is not limited to supervising oral hygiene procedures in the child. Parents are instructed that they can be the source of the child's cariogenic bacteria through transference of their oral bacteria via direct vertical contact (kissing, sharing of utensils, orally cleansing pacifiers, etc.) during infancy. Reducing the transfer of oral bacteria from the parent to the child by reducing the bacteria of the parents' oral flora is accomplished by adopting the following practices:

- **Oral hygiene** – The parent should be instructed to brush thoroughly twice daily (morning and evening) and to floss at least once every day.
- **Diet** – The parent should be instructed to consume fruit juices only at meals and to avoid all carbonated beverages during the first 30 months of the infant's life.
- **Fluoride** – The parent should be instructed to use a fluoride toothpaste approved by the ADA and rinse every night with an alcohol-free, over-the-counter mouthrinse with 0.05% sodium fluoride.
- **Caries removal** – Parents should be referred to a dentist for an examination and restoration of all active decay as soon as possible.
- **Delay of colonization** – Parents should be educated to prevent early colonization of dental flora in their infants by refraining from the sharing of utensils (i.e., shared

spoons, cleaning of dropped pacifier with saliva, etc.).

- **Xylitol chewing gums** – Recent evidence suggests the use of xylitol chewing gum (6 grams) by the parent can significantly reduce the parent's and child's caries rates.

Parental responsibility for the young child (0 to 3 years of age) includes the following:

- **Oral hygiene** – The parent should begin to brush the child's teeth as soon as they erupt (twice daily, morning and evening) and floss between the child's teeth once every day as soon as teeth contact one another.
- **Diet** – After the eruption of the first teeth, the parent should provide primarily water to drink and formula/milk during meals only. Carbonated beverages should be excluded from the child's diet. Infants should not be placed in bed with a bottle containing anything other than water. Ideally, infants should have their mouths cleansed with a damp cloth after feedings.
- **Fluoride** – All children should have optimal exposure to topical and systemic fluoride. Caution should be exercised in the administration of all fluoride-containing products. The specific considerations of the judicious administration of fluoride should be reviewed and tailored to the unique needs of each patient.
- **Recall schedule** – The recall schedule is based upon the clinical findings, feeding practices and dental development. Depending upon the child's history or potential for developing dental disease, the recall appointment schedule may vary depending on the child's caries risk.<sup>2</sup>

### Attracting Young Patients to the Practice

The strategy involved with attracting younger patients is very simple. Educate parents on the benefits of infant dental care and to your ability and willingness to provide such benefits. This can be accomplished by:

**Distribution of In-office Literature:** Placing literature where parents have access to them will elicit comments and questions about infant dental care. You or your staff should personally hand such material to parents who



are pregnant or are accompanied by an infant during a visit to the office. Information can be obtained through the ADA, the AAPD, from your oral health products representative, or create your own.

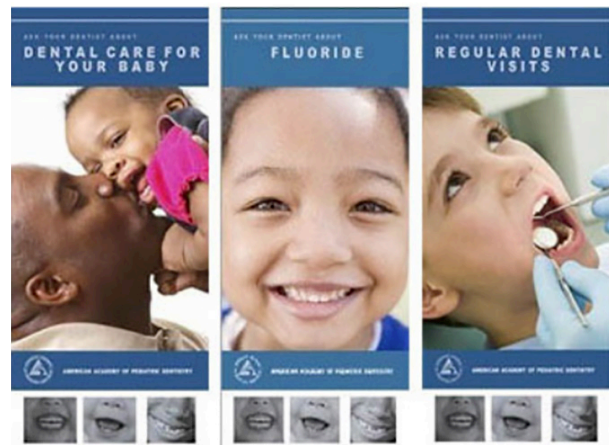
**Pediatricians and Obstetricians:** Ask local pediatricians and obstetricians to distribute information on infant and toddler dental care in their office. By developing a close relationship with these professionals they might permit you to attach your business card or imprint your name on the literature.

### Prenatal Classes and Parent Support

**Groups:** Establish yourself as an authority on infant and toddler dental care by addressing parents attending prenatal classes at your local hospital. Arrange to do presentations for parent support groups at nursery schools and day care centers, especially if a pediatric dentist is not providing such a service.

### Conclusion

Instituting an infant and toddler dental care program greatly reduces a child's chances of experiencing dental caries, while allowing the dentist to implement a highly effective preventive program on a class of patients who have the potential of remaining in the practice for many years. It provides for a win/win/win situation for the child, parent, and dentist.



Courtesy [www.ada.org](http://www.ada.org) and [www.aapd.org](http://www.aapd.org).



## Course Test Preview

To receive Continuing Education credit for this course, you must complete the online test. Please go to: [www.dentalcare.com/en-us/ce-courses/ce54/test](http://www.dentalcare.com/en-us/ce-courses/ce54/test)

1. **Establishment of the “dental home” is expected to provide all of the following except:** \_\_\_\_\_.
  - A. an accurate risk assessment for dental diseases and condition
  - B. an individualized preventative dental health program based on a risk assessment
  - C. a plan for emergency dental trauma
  - D. comprehensive dental care
  - E. a comprehensive plan for orthodontic care
2. **According to the AAPD the recommended age that a child’s first dental visit occur is** \_\_\_\_\_.
  - A. soon after the eruption of the first primary incisors and no later than 12 months
  - B. no later than 18 months
  - C. no later than 24 months
  - D. no later than 3 years
3. **Seeing the child dental patient at the youngest age provides all of the following except** \_\_\_\_\_.
  - A. eliminates or delays the development of caries
  - B. reduces the stress of dental treatment for both patient and dentist
  - C. allows the dentist to retain the young dental patient in the practice into adulthood
  - D. minimizes the need for fluoride supplementation
4. **All of the following are treatment goals for the pediatric dental patient except** \_\_\_\_\_.
  - A. provide optimal dental treatment
  - B. provide treatment that can be completed quickly and efficiently
  - C. have the patient return for treatment willingly
  - D. provide treatment that is lengthy for increased patient engagement
5. **The most likely age under which pediatric patients have limited communicative ability is** \_\_\_\_\_.
  - A. 18 months
  - B. 24 months
  - C. 30 months
  - D. 36 months
6. **Patients with limited communicative ability are best treated with** \_\_\_\_\_.
  - A. distraction
  - B. desensitization
  - C. bribery
  - D. physical restraint
7. **Examination of the young patient with limited communicative ability is best performed in the** \_\_\_\_\_.
  - A. operatory
  - B. private office or quiet area
  - C. play area
  - D. operating room

8. **The most effective and comfortable position during examination of an infant for the patient, parent and dentist is \_\_\_\_\_.**  
A. in a mechanical restraining device  
B. in the dental chair restrained by auxiliaries  
C. in a "knee-to-knee" position  
D. None of the above.
9. **The security a young dental patient experiences may increase by the child \_\_\_\_\_.**  
A. sitting in the parent's lap  
B. sitting alone in the chair  
C. sitting on the floor  
D. holding a toy
10. **For the toddler patient, who possesses communicative ability, the most appropriate behavior modification technique is \_\_\_\_\_.**  
A. positive and negative reinforcement  
B. negotiation  
C. desensitization  
D. pleading
11. **Desensitization is defined as gradual exposure to \_\_\_\_\_.**  
A. new stimuli  
B. experiences of decreasing intensity  
C. experiences of increasing pain  
D. loud noises
12. **In the dental setting a child is desensitized to the dental experience through a technique of \_\_\_\_\_.**  
A. "hop, skip, jump"  
B. "tell, show, do"  
C. "follow the leader"  
D. "Simon Says"
13. **When explaining a sensation to a child, a good substitute for the word "hurt" is \_\_\_\_\_.**  
A. "sting"  
B. "pinch"  
C. "bother"  
D. "mosquito bite"
14. **Children differ from adults in all of the following except \_\_\_\_\_.**  
A. they view their surroundings from a different perspective  
B. they are more frightened when faced with new and strange situations  
C. because of their smaller stature and height their perceptions are different  
D. their response to painful stimuli
15. **When interacting with a young patient, the dentist should try to do all of the following except \_\_\_\_\_.**  
A. physically come down to the child's level by sitting  
B. talk to the child in a soft and welcoming tone  
C. use simple language the child can easily understand  
D. speak in a loud and lively tone

- 16. Which is not part of the pre-appointment assessment:**
- A. Biographic data and family and social history
  - B. Party responsible for payment
  - C. Prenatal, natal and neonatal history
  - D. Developmental history
  - E. Feeding history
- 17. The clinical extraoral evaluation of the patient begins with \_\_\_\_\_.**
- A. inspection of the head and neck
  - B. examination of the soft tissues
  - C. the number and alignment of teeth
  - D. the presence of cysts, ulcerations, frenum lacerations and gingivitis
- 18. The evaluation of the soft tissues includes \_\_\_\_\_.**
- A. inspection of the head and neck
  - B. evaluation of cysts, clefts, traumatic ulcerations, tongue and frenum ulcerations and gingivitis
  - C. the number and alignment of teeth
  - D. jaw relationships
- 19. Oral examination of the dentition includes all of the following except \_\_\_\_\_.**
- A. caries
  - B. the presence or absence of spacing
  - C. hypoplastic enamel
  - D. assessment of tongue function
- 20. Recommendations for appropriate dental disease control include all of the following except \_\_\_\_\_.**
- A. the parent's role in prevention
  - B. diet counseling
  - C. tooth and gum cleaning procedures
  - D. modifications of the radiographic schedule
- 21. Parents can reduce the transference of oral bacteria to their child by doing all of the following except \_\_\_\_\_.**
- A. avoiding kissing their child on the lips for 30 months after birth
  - B. avoiding sharing food utensils with their child and cleaning dropped pacifiers with their saliva
  - C. chewing 4 pieces of chewing gum containing xylitol daily
  - D. allowing their child to use only a bottle until 1-year of age
- 22. Parents should begin to clean their child's teeth \_\_\_\_\_.**
- A. as soon as they erupt
  - B. at 12 months
  - C. at 18 months
  - D. at 24 months
  - E. at 36 months

- 23. Parents should begin to floss their child's teeth \_\_\_\_\_.**
- A. as soon as they erupt
  - B. as soon as teeth contact each other
  - C. at age 18 months
  - D. at age 36 months
  - E. when the permanent teeth begin to erupt
- 24. Recall appointments should be scheduled for children at \_\_\_\_\_.**
- A. 3 months
  - B. 6 months
  - C. 9 months
  - D. 12 months
  - E. It depends upon the child's history or potential for developing dental disease.
- 25. The preferred marketing strategy to attract young patients to the practice is to do all of the following except \_\_\_\_\_.**
- A. educate parents as to the benefits of infant dental care
  - B. demonstrate to parents your ability to treat children
  - C. advise parents of your willingness to treat children
  - D. promote your practice actively with social media

## References / Additional Resources

1. American Dental Association. Statement on Early Childhood Caries. 2000. Accessed March 12, 2020.
2. Qu X, Houser SH, Tian M, Zhang Q, Pan J, Zhang W. Effects of early preventive dental visits and its associations with dental caries experience: a cross-sectional study. *BMC Oral Health*. 2022 Apr 29;22(1):150. doi: 10.1186/s12903-022-02190-6. PMID: 35488264; PMCID: PMC9052678.
3. American Association of Public Health Dentistry. First oral health assessment policy 2004.
4. American Academy of Pediatrics Policy Statement – Organizational Principles to Guide and Define the Child health Care System and/or Improve the Health of All Children: Section on Pediatric Dentistry. Oral Health Risk Assessment Timing and Establishment of a Dental Home. *Pediatrics*. 2003;111:1113-1116. Accessed March 12, 2020.
5. Definition of a Dental Home, American Academy of Pediatric Dentistry reference manual. *Pediatr Dent*. 2018. Accessed March 12, 2020.
6. Yates T. Theories of Cognitive Development - Child and Adolescent Psychiatry: A Comprehensive Textbook, 2nd edition. Melvin Lewis (Ed). Philadelphia, PA. Lippincott and Wilkins. 1996;134-155.
7. Arnrup K, Broberg AG, Berggren U, et al. Temperamental reactivity and negative emotionality in uncooperative children referred to specialized paediatric dentistry compared to children in ordinary dental care. *Int J Paediatr Dent*. 2007 Nov;17(6):419-29. DOI: 10.1111/j.1365-263X.2007.00868.x.
8. Chess S, Thomas A. Temperament - Child and Adolescent Psychiatry: A Comprehensive Textbook, 2nd edition. Melvin Lewis (Ed). Philadelphia, PA. Lippincott and Wilkins. 1996;170-181.
9. Pinkham JR. Personality development. Managing behavior of the cooperative preschool child. *Dent Clin North Am*. 1995 Oct;39(4):771-87.
10. Baier K, Milgrom P, Russell S, et al. Children's fear and behavior in private pediatric dentistry practices. *Pediatr Dent*. 2004 Jul-Aug;26(4):316-21.
11. Klingberg G, Broberg AG. Dental fear/anxiety and dental behaviour management problems in children and adolescents: a review of prevalence and concomitant psychological factors. *Int J Paediatr Dent*. 2007 Nov;17(6):391-406.
12. Milgrom P, Weinstein P. Dental fears in general practice: new guidelines for assessment and treatment. *Int Dent J*. 1993 Jun;43(3 Suppl 1):288-93
13. Luoto A, Lahti S, Nevanperä T, et al. Oral-health-related quality of life among children with and without dental fear. *Int J Paediatr Dent*. 2009 Mar;19(2):115-20. doi: 10.1111/j.1365-263X.2008.00943.x
14. Bedi R, Sutcliffe P, Donna PT, et al. The prevalence of dental anxiety in a group of 13 and 14 year old Scottish children. *Int J Paediatr Dent*. 1992 Apr; 2(1):17-24.
15. Taylor MH, Moyer IN, Peterson DS. Effect of appointment time, age, and gender on children's behavior in a dental setting. *ASDC J Dent Child*. 1983 Mar-Apr;50(2):106-10.
16. Folayan MO, Idehen EE, Ojo OO. The modulating effect of culture on the expression of dental anxiety in children: a literature review. *Int J Paediatr Dent*. 2004 Jul;14(4):241-5.
17. American Academy of Pediatrics. Committee on Psychosocial Aspects of Child and Family Health; Task Force on Pain in Infants, Children, and Adolescents. The assessment and management of acute pain in infants, children, and adolescents. *Pediatrics*. 2001 Sep;108(3):793-7.
18. Townsend JA. Behavior Guidance of the Pediatric Dental Patient - Pediatric Dentistry Infancy through Adolescence, 5th edition. Paul S Casamassimo (Ed). St. Louis, MO. Elsevier/Saunders. 2013;352-370.
19. Adair SM, Waller JL, Schafer TE, et al. A survey of members of the American Academy of Pediatric Dentistry on their use of behavior management techniques. *Pediatr Dent*. 2004 Mar-Apr;26(2):159-66.
20. Shroff S, Hughes C, Mobley C. Attitudes and preferences of parents about being present in the dental operatory. *Pediatr Dent*. 2015 Jan-Feb;37(1):51-5.

## Additional Resources

- No Additional Resources Available.



## About the Authors

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*The P&G team wishes to express its sadness over the loss of our colleague and friend, Dr. Steven Schwartz, who passed away on October 25, 2018. He was a tremendous help on impacting thousands of dental professionals through CE, making dentalcare.com one of the best CE providers in the world. He was a wonderful person! We will miss him.*

Dr. Steven Schwartz was the former director of the Pediatric Dental Residency Program at Staten Island University Hospital and was a Diplomate of the American Board of Pediatric Dentistry.

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