I. CALCULATING THE CORRECT DOSE

The table below shows the current recommended American Dental Association's (ADA) Dietary Fluoride Supplement Dosing Schedule for children at **high risk** for developing dental decay.

Current Schedule

	Parts per million (ppm) fluoride in water supply		
Age of Child	Less than 0.3 ppm	0.3 to 0.6 ppm	Greater than 0.6 ppm
Birth to 6 months	0	0	0
6 months to 3 years	0.25 mg	0	0
3 to 6 years	0.50 mg	0.25 mg	0
6 to 16 years	1.0 mg	0.50 mg	0

The American Dental Association recommends this schedule for your use when you determine that a fluoride supplement is appropriate**.** The following steps should help you determine the need and dosage for each child for whom you are considering supplements:

A. CONDUCT A CARIES RISK ASSESSMENT: Fluoride supplementation is **only appropriate for high risk children**. To determine a child's risk for dental decay, the health care provider should conduct a caries risk assessment. There are several tools available, including those developed by the ADA and the American Academy of Pediatric Dentistry (AAPD). The ADA has two risk assessment tools; one for patients 0-6 years of age and another for patients over 6 years of age. Both can be accessed along with accompanying instructions at:
http://www.ada.org/sections/professionalResources/pdfs/topics_caries_instructions.pdf

The AAPD risk assessment tool (CAT) can be accessed at:
http://www.aapd.org/media/policies_guidelines/p_cariesriskassess.pdf

B. ANALYZE HOME WATER: You may contact the family's water system operator to ask if they add fluoride to their water, or if the water is naturally fluoridated at the recommended level. If the child's home water source is not a fluoridated community system or is unknown**, always have a sample of the home water analyzed for the fluoride content before prescribing a fluoride supplement** (See Section III for details). If the child drinks significant amounts of water from more than one source of unknown fluoride content, the other source(s) should be analyzed as well.

C. ESTIMATE OTHER SOURCES OF FLUORIDE: If the child is drinking water from multiple sources that contain various amounts of fluoride, one must estimate the percent of the daily water intake from each source and adjust the dose accordingly. For example, if a five-year-old child consumes well water at home with no fluoride, but goes to day school in town where the water is fluoridated at one ppm fluoride, one must estimate the water consumption from each source. If it appears that the child consumes about half his water from each source, the net result would be the same as if the child were drinking water containing 0.50 ppm. One should then refer to the chart to determine the correct dose (0.25 mg/day). A variety of similar circumstances can occur. In any case, it is important to **thoroughly understand** the child's total systemic fluoride exposure and to use sound judgment in calculating the dose.

Keep in mind that many soft drinks and reconstituted juices are often processed with fluoridated water, and this may lead to significant fluoride intake. If you are unable to make an assessment of the child's daily fluoride intake, it is better not to prescribe supplements at all. Inappropriate supplementation carries a high risk of dental fluorosis.

D. DETERMINE DOSAGE FROM SCHEDULE: For high risk children, when the fluoride content of the water has been determined, that value and the child's age should be matched on the above chart to arrive at the correct supplement dose.

E. PRESCRIBE FOR SIBLING(S): The results obtained from water fluoride assaying may also be utilized in determining the proper fluoride supplement dosage for the patient's siblings under the age of 16, as long as the siblings are also determined to be at high risk for dental decay and spend their time at the same locations. This is an excellent opportunity to provide caries preventive benefits to other family members without the parent incurring additional costs.

F. MONITOR PERIODICALLY: It is important to periodically monitor patients and siblings on fluoride supplements. The following items should be reviewed every six months:

- Risk status for each individual;
- Proper dosage relative to current age;
- Change in fluoride intake that might result through changes in community water fluoridation status, home well construction, and prescriptions for fluoride supplements from other health professionals; and
- Changes in where the child spends portions of his or her waking hours, and the fluoridation status of the water consumed at each place.

Remember, since fluoride supplementation is only recommended for children at high risk for dental decay, it is important for health care providers to regularly conduct a caries risk assessment and evaluate all potential fluoride sources before prescribing fluoride supplements to minimize the risk of fluorosis.