

TABLE OF CONTENTS

Bright Futures Children’s Health Charter	.v
<i>Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents</i>	.vi
Building Bright Futures	.vii
Creating a Lifelong Foundation for Oral Health	.viii
<i>Bright Futures in Practice: Oral Health Contributors</i>	.ix
Acknowledgments	.x

Introduction

1	Dental Professionals as Partners in Prevention	.2
	Four Innovations in Oral Health Supervision	.3
	<i>Bright Futures in Practice: Oral Health Vision and Goals</i>	.4
	How This Guide Is Organized	.5
	Adapting <i>Bright Futures in Practice: Oral Health</i> for Individual Use	.7

Oral Health Supervision Guidelines

9	Components of Oral Health Supervision	.10
	Developmental Sections	.15
	Prenatal	.15
	Infancy	.21
	Early Childhood	.31
	Middle Childhood	.43
	Adolescence	.55

Risk Assessment

67	How To Do Risk Assessment	.69
	Risk and Protective Factors	.70
	Dental Caries	.70
	Periodontal Disease	.72
	Malocclusion	.74
	Injury	.76

Measuring Outcomes

81	How To Use Outcomes	.81
	A Model for Outcome Measurement	.82
	Educational Oral Health Outcomes	.83
	Behavioral Oral Health Outcomes	.84
	Physical Oral Health Outcomes	.84

Making Oral Health Supervision Accessible

87	Financing Oral Health Supervision . . . . .	.88
	Providing Culturally Competent Care . . . . .	.89
	Assuring Children’s Comfort and Cooperation . . . . .	.89
	Children with Special Health Needs . . . . .	.90
	Infection Control Procedures . . . . .	.91

Essentials of Oral Health

95	Oral Development . . . . .	.95
	Dental Caries . . . . .	.97
	Baby Bottle Tooth Decay and Early Childhood Caries . . . . .	.98
	Eating Disorders and Dental Caries . . . . .	.100
	Periodontal Disease . . . . .	.100
	Control of Caries and Periodontal Disease . . . . .	.101
	Oral Hygiene . . . . .	.102
	Fluoride . . . . .	.103
	Dental Sealants . . . . .	.106
	Dietary Habits and Oral Health . . . . .	.107
	Malocclusion . . . . .	.108
	Nonnutritive Sucking Habits . . . . .	.110
	Tobacco Use and Oral Health . . . . .	.111
	Smoking . . . . .	.111
	Spit Tobacco . . . . .	.112
	Injury . . . . .	.113
	Prevention . . . . .	.113
	Trauma Management . . . . .	.115

Appendices

117	Appendix A: Organizations That Support <i>Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents</i> . . . . .	.118
	Appendix B: Glossary . . . . .	.119
	Appendix C: Fluoride Supplementation Schedule . . . . .	.122
	Appendix D: Infection Control References . . . . .	.123
	Appendix E: Resources . . . . .	.124
	Appendix F: Bibliography . . . . .	.125
	Index . . . . .	.128
	Art Credits . . . . .	.129

BRIGHT FUTURES CHILDREN'S HEALTH CHARTER

Throughout this century, principles developed by advocates for children have been the foundation for initiatives to improve children's lives. Bright Futures participants have adopted these principles in order to guide their work and meet the unique needs of children and families into the 21st century.

Every child deserves to be born well, to be physically fit, and to achieve self-responsibility for good health habits.

Every child and adolescent deserves ready access to coordinated and comprehensive preventive, health-promoting, therapeutic, and rehabilitative medical, mental health, and dental care. Such care is best provided through a continuing relationship with a primary health professional or team, and ready access to secondary and tertiary levels of care.

Every child and adolescent deserves a nurturing family and supportive relationships with other significant persons who provide security, positive role models, warmth, love, and unconditional acceptance.
A child's health begins with the health of his parents.

Every child and adolescent deserves to grow and develop in a physically and psychologically safe home and school environment free of undue risk of injury, abuse, violence, or exposure to environmental toxins.

Every child and adolescent deserves satisfactory housing, good nutrition, a quality education, an adequate family income, a supportive social network, and access to community resources.

Every child deserves quality child care when her parents are working outside the home.

Every child and adolescent deserves the opportunity to develop ways to cope with stressful life experiences.

Every child and adolescent deserves the opportunity to be prepared for parenthood.

Every child and adolescent deserves the opportunity to develop positive values and become a responsible citizen in his community.

Every child and adolescent deserves to experience joy, have high self-esteem, have friends, acquire a sense of efficacy, and believe that she can succeed in life. She should help the next generation develop the motivation and habits necessary for similar achievement.

BRIGHT FUTURES:

Guidelines for Health Supervision of Infants, Children, and Adolescents

Health is a basic human right. Every child deserves the best possible health—every child deserves comprehensive health-promoting care, nurturing and support during physical and emotional development, and guidance in achieving personal responsibility for lifelong healthy habits. With these guiding principles, set forth in the Bright Futures Children’s Health Charter, the Bright Futures project was initiated in 1990 to help health professionals, families, and others who care for children become more effective in promoting health and preventing disease. Sponsored by the Maternal and Child Health Bureau of the Health Resources and Services Administration, and by the Medicaid Bureau of the Health Care Financing Administration, the Bright Futures project examined the needs of children, from birth through 21 years of age. Under the leadership of Morris Green, M.D., four multidisciplinary panels were convened to discuss health supervision issues for infancy, early childhood, middle childhood, and adolescence. After a review of the literature and extensive dialogue, the panels drafted the *Bright Futures* guidelines.

The expert panels based their work on the belief that health supervision is:

- A developmental process that promotes a partnership and shared agenda between the health professional, the child, and the family.
- Personalized to fit the individual.
- Contextual, viewing the child in the context of the family and the community.
- Supportive of the child’s self-esteem, sense of competence, and mastery.
- Based on a health diagnosis.
- Focused on the strengths as well as the issues of the child, the family, and the community.
- Part of a seamless system that includes community-based health, education, and human services.
- Complementary to health promotion and disease prevention efforts in the family, the school, the community, and the media.

After the guidelines were drafted, they were sent to more than 1,000 health professionals for review. National experts and organizational officials serving on the board of directors also provided guidance and suggestions. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents* was published in December 1994. More than 20 national organizations (see Appendix A) have expressed their support for the *Bright Futures* guidelines, which are being incorporated into policies, programs, and health practice throughout the United States.

BUILDING BRIGHT FUTURES

If the *Bright Futures* guidelines are to revolutionize preventive services for children, they must be adopted and adapted by professionals and families for use in their communities. Recognizing this critical need for implementation, in 1995 the Maternal and Child Health Bureau initiated a multiyear project: Building Bright Futures.

Using the *Bright Futures* guidelines as a cornerstone, Building Bright Futures is developing a series of implementation guides that focus on key areas within child health, and provide health professionals and families with specific tools and strategies to bring the Bright Futures recommendations “home”—to the health care setting, to the family, and to the community.

The *Bright Futures* guidelines are currently being used nationwide by physicians, nurses, dentists, teachers, nutritionists, mental health professionals, child advocacy groups, policy-makers, families, and others. Over the next few years, the *Bright Futures in Practice* series will be providing these Bright Futures partners with implementation tools to broaden this movement for a new health supervision.

It is particularly fitting that the first of the *Bright Futures in Practice* series be devoted to oral health. In the last quarter of this century, health promotion for children has taken giant steps, especially in oral health. Preventive strategies—fluoridation, frequent monitoring, prevention of inappropriate bottlefeeding habits, and early intervention for caries—have had dramatic benefits for children.

The focus on partnerships in this guide echoes the basic principles of the larger Bright Futures project. The most crucial partnership exists between the dental professional and the family. As the child grows, the partnership between the developing child and the dental professional grows stronger. This guide offers information about preparing for the visit, trigger questions, and anticipatory guidance to ensure active participation by families and children in all aspects of oral health.

This guide also encourages all health professionals to work together as partners in prevention. The dental professional is a member of a larger team that is interested in the child’s growth, nutrition, and safety and is cognizant of special health or emotional concerns.

Bright Futures in Practice: Oral Health is the lead publication for the *Bright Futures in Practice* series. Other planned guides will address nutrition, mental health, and family health. Each guide will present specific health promotion/disease prevention guidelines, but will reach beyond its specific focus to serve as a translator to others, describing what can be done, and, therefore, what should be expected. As we build Bright Futures together, the *Bright Futures in Practice* series will serve as guidance for those in the field, as curricula for those entering the field, and as benchmarks for those concerned about the well-being of children.

Judith S. Palfrey, M.D.
Chair, Building Bright Futures

CREATING A LIFELONG FOUNDATION FOR ORAL HEALTH

In May 1994, a panel of dental professionals including clinicians, dental health educators, and public health officials began the work of transforming the oral health guidelines in *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents* into a practical tool for pediatric oral health supervision. The goal of the panel was to create a document that would take the concepts of Bright Futures and make them easier to apply.

The task of creating a clinically useful instrument that would address the individual needs of each child within a broad set of guidelines required innovation, a comprehensive view of oral health, and departure from the traditional emphasis on disease. *Bright Futures in Practice: Oral Health* introduces the concepts of risk assessment and measurable health outcomes as integral to oral health supervision. To establish oral wellness early in childhood, early dental intervention is emphasized.

Taking the lead from the *Bright Futures* guidelines, this document emphasizes the opportunity for partnership between dental professionals, other health professionals, and families. Designed for use by a wide array of health and education professionals, *Bright Futures in Practice: Oral Health* presents specific guidelines, strategies, and tools that dentists, physicians, nurses, dental hygienists, educators, and child care providers can apply in their work. This guide can also serve as an information resource for families, though material may need to be condensed and adapted to be helpful in a family's busy life. We hope this guide will serve as a bridge across specialties and as a tool for creating partnerships with families so that, together, we can all work to improve the oral health of our nation's children.

The panel also shares with me their hope that *Bright Futures in Practice: Oral Health* will encourage the current generation of dental and other health professionals to tailor oral health supervision to the strengths and needs of each child and family, to address the needs and enhance the strengths of individual children, and to build a foundation for lifelong oral health through continuity of care, early intervention, and achievement of important health outcomes.

Paul Casamassimo, D.D.S., M.S.
Chair, Bright Futures in Practice: Oral Health

BRIGHT FUTURES IN PRACTICE: ORAL HEALTH

Contributors

Paul Casamassimo, D.D.S., M.S.
Chair, Bright Futures in Practice: Oral Health
Chair, Section of Pediatric Dentistry,
Children's Hospital of Columbus
Ohio State University College of Dentistry

Judith S. Palfrey, M.D.
Chair, Building Bright Futures
Chief, Division of General Pediatrics,
Children's Hospital, Boston

M. Ann Drum, D.D.S., M.P.H.
Senior Program Manager,
Maternal and Child Health Bureau, HRSA

John Bogert, D.D.S.
Executive Director,
American Academy of Pediatric Dentistry

Joseph Doherty, D.D.S., M.P.H.
Former Director, Division of Dental Health,
Virginia State Health Department

Burton Edelstein, D.D.S., M.P.H.
Trustee, District I,
American Academy of Pediatric Dentistry
Assistant Clinical Professor,
Harvard School of Dental Medicine

David Johnsen, D.D.S., M.S.
Dean, The University of Iowa College of Dentistry

William Lieberman, D.D.S.
Trustee, District II,
American Academy of Pediatric Dentistry
Private Practice, Red Bank, New Jersey

Dennis McTigue, D.D.S., M.S.
President, American Academy of Pediatric Dentistry
Associate Dean, Academic Affairs
Professor, Section of Pediatric Dentistry,
Ohio State University College of Dentistry

Arthur Nowak, D.M.D., M.A.
Professor, Departments of Pediatric Dentistry and
Pediatrics, The University of Iowa
Colleges of Dentistry and Medicine

John Rossetti, D.D.S., M.P.H.
Chief Dental Officer,
Maternal and Child Health Bureau, HRSA

Meri McCoy-Thompson, M.A.L.D.
Project Director,
NCEMCH

Pamela B. Mangu, M.A.
Senior Project Director,
NCEMCH

Rebecca Selengut
Former Project Associate,
NCEMCH

Angelica Dirtadian, Ed.M.
Former Fellow,
NCEMCH

ACKNOWLEDGMENTS

Through its support and guidance, the Maternal and Child Health Bureau (MCHB), Health Resources and Services Administration (HRSA), has brought together many child health leaders and inspired them to contribute to the Bright Futures project and to its successor, Building Bright Futures. The long-standing valuation of oral health demonstrated by MCHB, HRSA, and Morris Green, M.D., chair of the Bright Futures project, encouraged its integration throughout the original Bright Futures project and led to the development of these oral health supervision guidelines.

I would especially like to thank Ciro V. Sumaya, M.D., administrator of HRSA, Audrey H. Nora, M.D., M.P.H., director of MCHB, and Woodie Kessel, M.D., and David Heppel, M.D., division directors, for providing expert counsel and commitment during the evolution of these projects. John Rossetti, D.D.S., and M. Ann Drum, D.D.S., provided enormous help in channeling the content and direction of the expert panel in crafting a document that is both visionary and pragmatic, and consistent with national initiatives in maternal and child health.

On behalf of the panel of experts, I extend my deep appreciation to the staff of the National Center for Education in Maternal and Child Health (NCEMCH), particularly Pamela B. Mangu, Meri McCoy-Thompson, Becky Selengut, Angelica Dirdadian, and Shelley Stark, for providing the linkage to the *Bright Futures* guidelines that ensures the usefulness of these oral health guidelines. Their creativity, insight, and global perspectives can be seen in the strong associations between the foundation document and this first implementation guide. I would also like to recognize the editorial and artistic contributions of NCEMCH—especially Carol Adams, director of communications; Jeanne Anastasi, editor; Kenna French, graphic designer and illustrator; and Oliver Green, senior graphic designer.

Special thanks go to Candace Jones, who was extremely helpful with the Alaskan Native vignette, generously volunteering many hours writing and rewriting it to complement the format of the book. Thoughtful and significant suggestions were also contributed by many reviewers, including Esha Bhatia, Claire Brindis, Stephanie Bryn, Diane Burkholder, Albert Chang, Pam Cornelio, Catherine Cowell, Isabelle Garcia, Valerie Gwinner, Katrina Holt, Beverly Isman, Kristin Langlykke, Fernando Maravi, Lynn Mouden, Mark Nehring, Carol Palmer, Kevin Phelps, Habib Shariat, Mark Siegal, and Mary Story.

Finally, I gratefully acknowledge the panel of experts—John Bogert, Joseph Doherty, Burton Edelstein, David Johnsen, William Lieberman, Dennis McTigue, Arthur Nowak, and John Rossetti—who worked with me in drafting this document, for contributing countless hours to the development of a far-reaching instrument to improve the oral health of children.

Paul Casamassimo, D.D.S., M.S.



